



VAJIRAM & RAVI

Institute for Civil Services Examination



CURRENT AFFAIRS 'QUICK REVISION'

PRELIMS 2020

(PART 1)

June to December 2019

JUNE-DECEMBER 2019 - PRELIMS QUICK REVISION
TABLE OF CONTENTS**HISTORY AND CULTURE**

- Chaukhandi Stupa
- National Maritime Heritage Museum
- Girish Karnad
- Kartarpur Sahib
- Amrita Pritam
- Geographical Indication (GI)
- Aadi Mahotsav (National Tribal Festival)
- Kondapalli Toys
- Prabhakar Barwe
- Sadikpur Sinauli
- Geet Ramayana
- Maharaja Ranjit Singh
- Iron Age Settlement At Phupgaon
- UNESCO World Heritage Tag
- Maharaja Suraj Mal
- Saptamatikas
- Gandhi Encyclopedia
- Vivekananda Rock Memorial
- Jallianwala Bagh National Memorial (Amendment) Bill, 2019
- Kittur Rani Chennamma
- Taanaji Malusare
- Kukis
- Jayachamarajendra Wadiyar
- Muhammad Iqbal
- 500 Years Of Magellan's Voyage
- Kamini Roy
- Udham Singh
- Kempegowda
- Gottiprolu
- Tudor Architectural Style; Jayakar Bungalow
- Shondol
- Firoz Shah Tughlaq
- 5th International Ramayan Festival
- Hindi Divas
- Kiran Nagarkar
- Gundecha Brothers
- Kung Fu Nuns (Drukpa Order)
- Thiruvalluvar
- 125th Birth Anniversary Of Paramahansa Yogananda
- UNESCO Creative Cities Network (UCCN)
- Govardhan Mutt Of Puri
- Kadri Gopalnath
- Khon Ramlila
- Rembrandt
- Ganjifa
- Digital Bharat Digital Sanskriti
- Skandagupta Vikramaditya
- Ik Onkar
- Zubin Mehta
- International Film Festival Of India (IFFI) 2019
- Sabarimala Verdict
- Ma Gridhah Kasyasvidhanam

GEOGRAPHY & DISASTER MANAGEMENT

- Gogabeel
- International Coalition For Disaster Resilient Infrastructure (CDRI)
- Okjokull Glacier

- Mula-Mutha River
- Golden Butterfly Tea
- Dibang Multipurpose Project
- Godavari-Penna Linking Project
- Rewa Ultra Mega Solar Park
- Ethanol Biorefinery, Bhandara
- Classification Of Tropical Cyclones
- Hypoxic Zones
- Kaleshwaram Lift Irrigation Project (KLIP)
- Polavaram
- Omega Block
- Annular Solar Eclipse
- Cold-Day Condition
- Acqua Alta
- Uluru
- 150 Years Of Suez Canal
- Maps Of UTs Of Jammu & Kashmir And Ladakh
- Paleochannel
- Atlantic Meridional Overturning Current
- Saffir-Simpson Hurricane Wind Scale
- Black Spots
- Mid-Monsoon 2019 Lightning Report
- Road Accidents In India-2018
- Post Disaster Needs Assessment
- Location In News
- Tidewater Glaciers
- Kajin Sara Lake
- Carmichael Coal Mine Project

POLITY & GOVERNANCE

- Inter-State River Water Disputes (Amendment) Bill, 2019
- Arbitration And Conciliation (Amendment) Bill, 2019
- New Delhi International Arbitration Centre Bill, 2019
- Consumer Protection Bill, 2019
- National Party
- Speaker Protem
- Cabinet Committees
- Autonomous District Councils (ADCs)
- Foreigners Tribunals
- Section 129 Of The Motor Vehicles Act, 1988
- Systematic Voters' Education And Electoral Participation Program (SVEEP)
- Section 69(1), RPA, 1951
- Aadhaar And Other Laws (Amendment) Bill, 2019
- Lapsing Of Bills
- Constructive Vote Of No-Confidence
- Inner Line Permit (ILP) System
- Parole
- Register Of Indigenous Inhabitants Of Nagaland (RIIN)
- Free Legal Aid
- Short Duration Discussion
- Compulsory Retirement Of Government Officials
- Protection Of Human Rights (Amendment) Bill, 2019
- Right To Information (Amendment) Bill, 2019
- Electronically Transmitted Postal Ballot System (ETPBS)
- Abetment Of Suicide

- Article 370
- Dixon Plan Of 1950
- Supreme Court Regional Benches
- 'D' Voter
- Good Governance Index (GGI)
- Citizenship (Amendment) Act 2019
- Bengal Eastern Frontier Regulations, 1873
- Detention Centres
- National Population Register (NPR)
- Constitution (126th Amendment) Bill, 2019
- Section 144 Of CrPC
- Oath Taken By A Minister
- NCT Of Delhi (Recognition Of Property Rights Of Residents In Unauthorised Colonies) Bill, 2019
- Destruction Of Public Property
- Right To Protest
- Minority Educational Institutions
- Lok Sabha Strength
- Political Parties Registration Tracking Management System
- Ayodhya Land Dispute Verdict
- Adverse Possession
- Acquisition Of Certain Area At Ayodhya Act, 1993
- Places Of Worship (Special Provisions) Act Of 1991
- Article 142
- Review Petition
- The Dadra And Nagar Haveli And Daman And Diu (Merger Of Union Territories) Bill, 2019
- Parliament Disruptions
- President's Rule In Maharashtra
- President's Rule
- Rule 12 Of Government Of India (Transaction Of Business) Rules, 1961
- Floor Test
- Nagrik Kartavya Paalan Abhiyan
- Rule 56(J) Of Central Civil Services (Pension) Rules, 1972
- The Citizenship Act, 1955: Sections 5(1)(F) And 10(2)
- Rajya Sabha Marshals
- 250th Session Of Rajya Sabha
- Visiting Chair On Interdisciplinary Approach To Electoral Studies
- Union Territories Of J&K And Ladakh
- Chief Justice Of India (CJI)
- Arbitration And Conciliation (Amendment) Act, 2019
- Right To Information (RTI)
- Trace Bribery Matrix
- National Register Of Citizens (NRC), Assam
- Section 11 Of Representation Of People Act, 1951
- Animal Rights
- Right To Access Internet
- Indian Penal Code 1860
- Absentee Voter
- Sixth Schedule
- Electoral Literacy Clubs
- Public Premises (Eviction Of Unauthorised Occupants) Amendment Act, 2019

SOCIAL ISSUES

- Progress On Drinking Water, Sanitation And Hygiene: 2000-2017
- World Population Prospects 2019
- 2nd Global Disability Summit
- Padho-Badho Awareness Campaign
- Kapu Community
- Eklavya Model Residential Schools
- India Child Well-Being Index
- Repeat Rape Offenders: 376 (E) Of The Indian Penal Code (IPC)

- Traffic Index 2018
- Angikaar Campaign
- Investigation Tracking System For Sexual Offences (ITSSO)
- Swachh Bharat (Urban)
- Drinking Water For All
- E-Governance Initiatives For St Welfare Schemes
- Trafficking In Persons (TIP) Report, 2019
- Maratha Reservation
- Go Tribal Campaign
- Children With Disabilities
- Migration (Census 2011 Data)
- 2019 Global Multidimensional Poverty Index (MPI)
- Muslim Women (Protection Of Rights On Marriage) Bill 2019
- Global Housing Technology Challenge
- Surrogacy (Regulation) Bill, 2019
- SDG Gender Index
- Protection Of Children From Sexual Offences (Amendment) Bill, POCSO, 2019
- Human Development Report (HDR) 2019
- Global Gender Gap Report 2020
- Irretrievable Breakdown Of Marriage
- Pradhan Mantri Matru Vandana Yojana (PMMVY)
- Disha Act
- SDG India Index 2019
- Religion And Living Arrangements Around The World
- Transgender Persons (Protection Of Rights) Bill, 2019
- Global Liveability Index 2019
- Nehru Yuva Kendra Sangathan (NYKS)
- Rural Sanitation Strategy (2019-2029)
- Saharias
- Sentinelese Tribe
- Beti Bachao Beti Padhao (BBBP)
- SC & ST (Prevention Of Atrocities) Act, 1989
- National Sample Survey (NSS) Report No. 583: Persons With Disabilities In India. NSS 76th Round (July – Dec 2018) - Key Findings
- South Asia Safety Summit
- OCSAE Prevention/Investigation Unit
- AHTUs; WHDs
- National Sample Survey (NSS) Report No.584: Drinking Water, Sanitation, Hygiene And Housing Condition In India, NSS 76th Round (July –Dec 2018) – Key Findings
- Hunar Haat
- Going Online As Leaders (GOAL)
- Female Representation In Senior Management
- Vayoshreshtha Samman
- 'Stations' Cleanliness Survey Report'
- Open-Defecation Free (ODF)
- Bru Refugees
- Two Child Norm

EDUCATION

- QS World University Rankings
- Education Quality Upgradation And Inclusion Programme (EQUIP)
- Deeksharambh
- Paramarsh
- Jan Shikshan Sansthan (JSS)
- Integrated National School Education Treasury (INSET)
- Central Universities (Amendment) Bill, 2019
- Draft National Education Policy, 2019
- Scheme For Trans-Disciplinary Research For India's Developing Economy (STRIDE)
- Shagun
- Early Childhood Care And Education (ECCE)
- National Yoga Olympiad

- Institutions Of Eminence
- Samagra Shiksha-Jal Suraksha
- Nishtha
- The Central Educational Institutions (Reservation In Teachers' Cadre) Bill, 2019
- Quality Mandate In Higher Education
- M.M. Salunkhe Panel (On-Demand Examinations)
- School Education Quality Index (SEQI)
- National Institute Of Design (Amendment) Bill, 2019
- Program For International Student Assessment (PISA)
- Leadership For Academicians Programme (LEAP)
- Shodh Shuddhi
- All India Survey On Higher Education (AISHE) 2018-19
- NSS 75th Round Survey (July 2017- June 2018) On Household Social Consumption: Education
- Initiatives To Boost Research And Innovation
- Curriculum For Life Skills (Jeevan Kaushal)
- National Educational Alliance For Technology (NEAT)
- Facilitation Through Margadarshan And Margadarshak
- The Gandhian Challenge
- YuWaah
- Pradhan Mantri Innovative Learning Programme (PMILP)- 'Dhruv'
- Mahatma Gandhi National Fellowship Programme
- Preschool Curriculum
- Shaala Darpan
- National Teacher Awards 2018
- Annual Refresher Programme In Teaching (ARPIT)
- QS Indian University Rankings

- QS World University Rankings For Asia 2020

HEALTH

- Encephalitis
- Sexually Transmitted Infections (STIs)
- Nipah Virus
- Merck's Vaccine
- Remdesivir
- National Essential Diagnostics List (NEDL)
- Pretomanid
- Gestational Diabetes
- Foot And Mouth Disease (FMD) And Brucellosis
- Fit India Movement
- Notifiable Disease
- "Healthy States, Progressive India" Report
- Fixed Dose Combination (FDC) Drugs
- First-Ever World Food Safety Day
- Diphtheria
- Dastak Campaign
- The State Of Food Security And Nutrition In The World
- Public Health Emergency Of International Concern
- Chikungunya
- Dolutegravir (DTG)
- Immuvac; Vpm1002
- National Medical Commission Bill, 2019
- Measles
- Prohibition Of Electronic Cigarettes Bill, 2019
- World Malaria Report 2019
- Mission Indradhanush 2.0
- Measles
- Indian Pharmacopoeia
- Tuberculosis
- Global Hunger Index
- National Animal Disease Control Programme

- Global Fund For Aids, Tb And Malaria
 - Eat Right India Movement
 - WHO's Report On Suicide
 - Measles, Rubella
 - National Survey On Coverage Of Iodised Salt
 - Vaccine Hesitancy
 - Wild Poliovirus Type 3 (WPV3)
 - Bharatiya Poshan Krishi Kosh (BPKK)
 - UMMID (Unique Methods Of Management And Treatment Of Inherited Disorders)
 - Maternal Mortality Ratio (MMR)
 - National Anti-Microbial Resistance Hub, Kolkata
 - Acute Respiratory Infections (ARI)
 - National Milk Sample Safety Quality Survey
 - State Of The World's Children Report For 2019
 - Global Antimicrobial Resistance (AMR) Research And Development (R&D) Hub
 - Surakshit Matritva Aashwasan (SUMAN)
 - National Institute Of Sowa Rigpa (NISR)
 - World Vision Report
 - National Blindness And Visual Impairment Survey Of India (2015-19)
 - Household Social Consumption In India: Health NSS 75th Round (July, 2017 – June, 2018)
 - Avian Botulism
 - Acupressure
 - Comprehensive National Nutrition Survey
 - Plague
 - Bombay Blood Group
 - Rashtriya Poshan Maah
 - IDF Diabetes Atlas
 - Shanghai Cooperation Organisation (SCO) Summit, Bishkek
 - Regional Cooperation Agreement On Combating Piracy And Armed Robbery Against Ships In Asia (ReCAAP)
 - World Refugee Day
 - Kimberley Process
 - Conference On Interaction And Confidence-Building Measures In Asia (CICA)
 - African Union (AU)
 - India-Un Development Partnership Fund
 - Feni Bridge
 - 'Gold Card' Residence Permit Programme
 - G7, Biarritz Summit
 - Generalized System Of Preferences (GSP)
 - 301 Probe (United States)
 - Anita Bhatia; Un Women
 - Know India Programme (KIP)
 - Goaml
 - Council Of Europe
 - UNSC Non-Permanent Seat
 - Mahatma Gandhi It & Biotechnology Park (MGIT-BP)
 - Five Eyes
 - Ream Naval Base
 - World Hindu Economic Forum
 - Intermediate-Range Nuclear Forces (INF) Treaty
 - Mekong Ganga Cooperation (MGC)
 - Henley Passport Index
 - Asia/Pacific Group On Money Laundering
 - India – UAE Relations
 - India Bhutan Ties
 - Joint Exercises In News
 - Bougainville
 - North Atlantic Treaty Organization (NATO)
 - Global Refugee Forum (GRF)
-
- INTERNATIONAL**
-
- Financial Action Task Force (FATF)

- United States-Mexico-Canada Agreement
- Instrument In Support Of Trade Exchanges
- Global Migration Film Festival
- Mamallapuram Summit: Key Takeaways
- LOTUS-HR
- Countering America's Adversaries Through Sanctions Act (CAATSA)
- Letwin Amendment
- Interpol General Assembly
- The United Nations' Universal Postal Union
- RCEP (Regional Comprehensive Economic Partnership)
- International Criminal Court (ICC)
- India Germany Relations
- 11th BRICS Summit
- India Bangladesh Relations
- Operation Kayla Mueller / Barisha Raid
- Budapest Convention
- India – Saudi Arabia Relations
- Kurds
- Framework On Currency Swap Arrangement For SAARC
- G5 Sahel
- Future Investment Initiative
- Commission For The Conservation Of Antarctic Marine Living Resources (CCAMLR)
- International Atomic Energy Agency (IAEA)
- Pacific Small Island Developing States (PSIDS)
- Caribbean Community And Common Market (CARICOM)
- Doxxing
- Global Migration Report 2020
- International Migrant Stock 2019
- Chagos Archipelago Sovereignty Dispute
- India-Russia Annual Summit, Vladivostok
- Eastern Economic Forum

- India South Korea Defence Relations
- H-1B, H-4 Visas
- EB-5 US Visa
- Post-Study Work Visa (U.K.)
- Taiwan
- Commonwealth Youth Parliament
- Non Aligned Movement (NAM)
- Article 35 & 51 Of UN Charter

ECONOMY

- Project Su.Re
- Sugar Sector: FRP; Buffer Stock
- Bonds Yield Curve
- Government E-Marketplace (GeM)
- The Code On Wages, 2019 Passed By Lok Sabha
- Companies (Amendment) Bill, 2019
- Insolvency And Bankruptcy Code (Amendment) Bill, 2019
- Review Of FDI Policy
- Khanij Bidesh India Ltd.
- PMGSY Phase III
- Bimal Jalan Panel
- 35th GST Council
- Money In Swiss Banks
- Turnover Ratio (Stock Market)
- Cryptocurrency
- High Powered Committee Of CMs For 'Transformation Of Indian Agriculture'
- World Investment Report 2019
- Employees' State Insurance (ESI)
- Multilateral Convention To Prevent Base Erosion And Profit Shifting
- Prudential Framework For Resolution Of Stressed Assets
- Leverage Ratio

- Pradhan Mantri Laghu Vyapari Maan-Dhan, Yojana 2019
- Pension Scheme For Farmers
- Pradhan Mantri Kisan Samman Nidhi (PM-Kisan)
- Nandan Nilekani Committee
- Special Moral Rights
- Task Force On Offshore Rupee Markets
- Enabling Framework For Regulatory Sandbox
- Principle Of 'Significant Economic Presence (SEP)'
- Competition Law Review Committee
- High Level Committee On Corporate Social Responsibility (CSR)
- NNFCs/ HFCs
- RBI Deputy Governor
- Economic Indicators
- Bank Consolidation
- Draft Plan For Power Distribution Sector
- The Airports Economic Regulatory Authority Of India (Amendment) Bill, 2019
- Start-Up Cell
- National Laboratory Directory
- Differential Voting Rights (DVRs)
- Priority Sector Lending (PSL) – Lending By Banks To NBFCs For On-Lending
- World Skills Kazan Competition, 2019
- Sabka Vishwas-Legacy Dispute Resolution Scheme, 2019
- Special Economic Zones (Amendment) Bill, 2019
- Special Data Dissemination Standard (SDDS)
- Fugitive Economic Offender
- U.K. Sinha Committee On MSMEs
- Utkarsh 2022
- Time Release Study
- 'Fit And Proper' Criteria For Directors Of PSBs
- Navarro Recession
- Non-Banking Finance Companies (NBFCs)
- Ramesh Chand Working Group
- World Biofuel Day
- Banning Of Unregulated Deposit Schemes Bill 2019
- Motor Vehicles (Amendment) Bill, 2019
- Advisory Board For Banking Frauds
- Fisheries And Aquaculture Infrastructure Development Fund
- Semi-Closed Prepaid Payment Instrument
- Recycling Of Ships Bill, 2019
- International Financial Services Centres (IFSC) Authority Bill, 2019
- Bharat Bond Exchange Traded Fund (ETF)
- World Economic League Table 2020
- Insolvency And Bankruptcy Code (Amendment) Ordinance, 2019
- Chartered Designs Of India (CDI); Design Education Quality Mark (DEQM)
- Pashu Kisan Credit Cards
- Independent Director's Databank
- एबक्रय
- Rating Shopping
- Central Repository Of Information On Large Credits (CRILC)
- Silver Line Project
- Stagflation
- Operation Twist
- Standing Committee On Statistics
- Interest Rate Options
- Small Finance Banks (SFBs)
- Centre Of Excellence For Next Generation Transportation Systems
- 20th Livestock Census
- Handbook On Fisheries Statistics – 2018

- Doing Business Report 2020
- Global Competitiveness Index
- World Intellectual Property Indicators (WIPI) 2019
- IMD World Talent Ranking
- Nomura's Food Vulnerability Index
- Economic Advisory Council To The Prime Minister
- Coalbed Methane
- Special Non-Resident Rupee Account
- Strategic Disinvestment
- Green Channel Combination
- Named Driver Policy; Telematics
- Chit Funds (Amendment) Bill, 2019
- Deposit Insurance
- AGRIDEX
- 6th World Congress On Rural And Agricultural Finance
- Special Window For Funding Stalled Housing Project
- HS Code
- Documentation Identification Number (DIN)
- Global Microscope For Financial Inclusion 2019
- Tapan Ray Working Group
- Depositor Education And Awareness Fund
- National Pension Scheme For Traders And Self Employed Persons
- Pradhan Mantri Kisan Maan Dhan Yojana
- Golden Chariot Train
- 2019 Driving Cities Index
- Development Council For Bicycle
- CNG Port Terminal, Bhavnagar
- ICEDASH & ATITHI
- Skills Build Platform
- Elephant Bonds
- Melbourne Mercer Global Pension Index 2019
- Mochi Swabhimaan Initiative
- T. N. Manoharan Task Force
- NIRVIK
- Travel And Tourism Competitive Report
- Volfefe Index
- Gold Reserves
- Indian Institute Of Skills, Mumbai
- Section 35A Of The Banking Regulation Act, 1949
- Dividend Distribution Tax
- Corporate Tax Rate For Domestic Investors
- Liquid Funds
- Prompt Corrective Action (PCA)
- Negative Interest Rates
- Hurun Global Unicorn List 2019
- 'On Tap' Authorisation Of Payment Systems
- Credit Suisse's Global Wealth Report 2019
- Start-Ups
- Framework For Issue Of Depository Receipts
- Youth Co:Lab
- Further Fund Offer 2 Of Bharat 22 ETF
- Prakash Portal
- Market Transportation Fuels
- Electric Vehicle (EV) Charging Guidelines
- External Benchmark-Based Lending
- Apprenticeship (Amendment) Rules, 2019
- New Measures To Boost Exports And Housing Sector
- India Urban Data Exchange (IUDX)

INTERNAL SECURITY

- Chinook Helicopters
- Prevention Of Money Laundering Act (PMLA)
- Promotion Of MSMEs In Defence
- Stockholm International Peace Research Institute (SIPRI) Yearbook 2019

- Crime Criminal Tracking Network System (CCTNS)
- Defence Space Research Agency (DSRO)
- National Security Advisor (NSA)
- Swatantrata Sainik Samman Yojana
- National Defence Fund
- Ordnance Factory Board (OFB)
- Commandos For Railway Security (CoRaS)
- Status Of Policing In India Report 2019
- Special Protection Group (SPG)
- Hypersonic Technology Demonstrator Vehicle
- Strategic Partnership Model
- Operation Sankalp
- Operation Bandar
- World Drug Report 2019
- Isalex19; International Security Alliance (ISA)
- Kalu Police Station
- Annual Piracy Report
- Indian Railway Protection Force (RPF) Service
- Witness Protection Scheme
- Mission Raksha Gyan Shakti
- Defence Institute Of Physiology And Allied Sciences (DIPAS)
- Revamp Of Army Headquarters
- Bhabha Kavach
- Securitypedia
- Retirement In Central Armed Police Forces (CAPFs)
- Unlawful Activities (Prevention) Amendment Bill, 2019
- National Investigative Agency (Amendment) Bill, 2019
- Chief Of Defence Staff (Cds)
- The Sipri Top 100 Arms-Producing And Military Services Companies, 2018
- Arms (Amendment) Bill, 2019
- Spike
- India's Top 10 Police Stations, 2019
- Women In Armed Forces
- Blue Water Force
- Mig-27
- Pinaka Missile System
- Khanderi
- Data On Police Organizations (Dopo 2018)
- 'Make In India' In Defence
- Open General Export Licences
- Agni-II
- Army Battle Casualties Welfare Fund
- No Money For Terror' Ministerial Conference
- High Energy Materials Research Laboratory
- Special Protection Group (Amendment) Bill, 2019
- Prison Statistics India-2017
- Crime In India Report 2017
- National Security Guard (NSG)
- Private Security Agency Licensing Portal
- Prakhar Van
- R.K.S. Bhadauria
- Bulletproof Jackets
- Rafale
- Olden Arrows
- Centralised Technology Vertical
- Largest Dry Dock Of Indian Navy
- President's Colours Award
- War Casualties' Housing Limit
- ICGS Varaha
- Sainik Schools
- Dilli Series' Sea Power Seminar
- Innovations For Defence Excellence
- Adverse List
- Shore Based Test Facility

- AH-64E Apache Attack Helicopter
- INS 'Nilgiri'
- AFSPA In J&K, Ladakh

ENVIRONMENT

- Earth Overshoot Day
- The World Resources Report: Creating A Sustainable Food Future
- Kusum
- Draft National Resource Efficiency Policy
- Composite Water Management Index 2.0
- Ground Water Year Book - India 2017-18
- Plant To Convert Plastic Waste Into Diesel
- Dispute Resolution Mechanism For Solar/Wind Sector
- Indian Grey Wolf
- Coringa Mangroves
- Black Softshell Turtle
- Desertification
- Asiatic Golden Cat
- Sustainable Livelihoods And Adaptation To Climate Change
- Green Rating For Integrated Habitat Assessment (GRIHA)
- Fruit Bat
- State Rooftop Solar Attractiveness Index (SARAL)
- Illegal Trade In Tiger
- Ocean Energy
- Ocean Plastics Charter
- Flygskam
- Golden Langur
- Groundwater Meets Oceans
- #Selfiewithsapling
- Blue Whale
- Heracles Inexpectatus
- Study To Check Antibiotic Resistance In Ganga
- Orchids Of India
- Draft Environmental And Social Management Framework
- Pet Bottles
- Microplastics In The Arctic
- Stubble Burning
- Vikramshila Gangetic Dolphin Sanctuary
- Impressed Tortoise
- Tamizh Maravan
- Special Rhino Protection Force
- Whaling
- Working On A Warmer Planet
- Earth Alliance
- Arctic Fox
- Desert Locust
- Elektorornis Chenguangi
- Lesser Florican; Great Indian Bustard
- Dracaena Cambodiana
- All India Tiger Estimation – 2018
- 4th Cycle Of MEETR
- IPCC Report: Land And Climate Change
- Nematodes
- Tardigrades
- Clouded Leopards
- Convention On International Trade In Endangered Species Of Wild Fauna And Flora (CITES)
- Bangkok Declaration
- WMO Archive Of Weather And Climate Extremes
- Adratiklit Boulahfa
- Microplastics In Drinking Water
- Jal Shakti Abhiyan
- India State Of Forest Report 2019
- Climate Change Performance Index

- Global Sulphur Cap Compliant Fuel Oil
- Atal Jal
- Jal Jeevan Mission
- CoP25
- Global Carbon Budget 2019
- Operation 'Clean Art'
- Torrefaction Technology
- Health And Pollution
- Wildlife Crimes
- Trachischium Aptei
- Peregrine Falcon
- UNCCD CoP14
- 4P1000 Initiative; TICD
- UN Climate Action Summit, New York
- Gandhi Solar Park
- Wind Augmentation Purifying Unit (WAYU)
- Mihir Shah Committee
- Wastelands Atlas – 2019
- Indian Air Quality Interactive Repository (Indair)
- Fridays For Future Movement
- Nelloptodes Greta
- Ozone Hole
- White Bellbird
- India Plans First-Ever Snow Leopard Survey
- Saharan Silver Ant
- mHariyali
- Plogging
- C40 Cities Climate Leadership Group (C40)
- Ganga Aamantran Abhiyan
- Green Crackers
- Clownfish
- Immersion Of Idols In Ganga
- Emissions Gap Report 2019
- IPCC Report On Oceans And Cryosphere
- E-Waste Clinic
- Leadership Group For Industry Transition
- Water Quality Report For State Capitals & Delhi
- The Zero-Carbon Act (New Zealand)
- Ethanol From B-Heavy Molasses
- Second Assembly Of International Solar Alliance (ISA)
- Ecological Flow Notification
- Global Tiger Forum (GTF)
- Gill-Oxygen Limitation Theory
- Maradu Flats

SCIENCE & TECH

- Scientific And Useful Profound Research Advancement (SUPRA)
- Ramanujan Machine
- Broadband Readiness Index (BrRI)
- Vibrational Optical Coherence Tomography (VOCT)
- Yuva Vigyani Karyakram (Yuvika) – Young Scientist Programme
- Pressurised Intraperitoneal Aerosol Chemotherapy (PIPAC)
- CCR5
- COSPAS-SARSAT
- Parthenogenesis
- Gravitational Lensing
- Nomenclature Of Lunar Features
- C-Sat-Fi; XGSPON And CiSTB
- McrBC
- Biometric Seafarer Identity Document (BSID)
- Jiofiber
- Next Generation Sequencing (NGS) Facility
- Internet Saathi
- Perseids Meteor Shower
- Ransomware
- MRD

- Coprolite
- Mars Solar Conjunction
- Flying Cars
- L 98-59b
- Titan; Dragonfly Mission
- Fast Radio Bursts (FRBs)
- Punch Mission
- Artificial Gravity
- Vikram Sarabhai
- Interplanetary Shock
- Mosaic Mission
- NAPRT1
- Deep Learning For Galaxy Cluster Extraction And Evaluation (Deep-Cee)
- Ploonet
- Algobat
- Apollo 11
- Thirty Meter Telescope
- Global Innovation Index-2019
- India's R&D Expenditure Eco-System Report
- New Space India Limited
- Fedor
- Akademik Lomonosov
- Deep Ocean Mission
- Microdot Technology
- PSLV-C48/Risat-2br1
- Interconnect Usage Charge
- National Broadband Mission
- Core Catcher
- Sharjah; Barjeel
- Jeholbaatar Kielanae
- Hypersonic Weapons
- Wi-Fi Calling
- Virtopsy
- Electro-Kinetic Streaming Potential
- Strandhogg
- Extra Neutral Alcohol
- GSLV-Mk III - M1 / Chandrayaan-2 Mission
- Geotail
- India Innovation Index 2019
- Yank
- Quantum Supremacy
- 2I/Borisov
- First Indigenous Fuel Cell System
- Gemini
- Saturn's Moon
- Planet Nine
- Minor Planet
- Einstein Challenge
- PSLV-C47 / Cartosat-3 Mission
- Golden Ratio
- Interdisciplinary Cyber Physical Systems
- Train-The-Trainer (TTT) Program In Artificial Intelligence
- National Centre For Clean Coal Research And Development (NCCR&D)
- Contract For The Web
- Indigen Genome Project
- Interdisciplinary Centre For Energy Research
- Milasen
- India International Science Festival
- Arrokoth
- Global Cooling Prize
- Makgadikgadi-Okavango
- Mastodon
- Hygiea
- Edge Computing
- Pegasus
- Goldschmidtite
- Rough And Smooth Sounds
- Central Equipment Identity Register
- Winter-Grade Diesel

MISCELLANEOUS: AWARDS, PERSON IN NEWS etc.

Awards

- Ramon Magsaysay Award 2019
- Bal Sahitya Puraskar And Yuva Puraskar 2019
- National Sports Awards-2019
- Maharshi Badrayan Vyas Samman
- Gallantry Awards
- PM's Awards For Outstanding Contribution For Promotion & Development Of Yoga 2019
- 55th Jnanpith Award
- Gandhi Citizenship Education Prize
- DSC Prize For South Asian Literature
- Sahitya Akademi Awards
- Booker Prize
- Right Livelihood Award
- Sardar Patel National Unity Award
- Asia Environmental Enforcement Award 2019
- Shanti Swarup Bhatnagar Prizes 2019
- Sastra-Ramanujan Award
- Dadasaheb Phalke Award
- Vyas Samman

- Dr. Kalam Smriti International Excellence Award
- Global Goalkeepers Goals Award 2019
- Swachh Survekshan Grameen Awards 2019
- 11th International Hrant Dink Award
- Guru Nanak Dev Ji Award For Promotion Of Peace
- Nobel Prize-2019

Sports

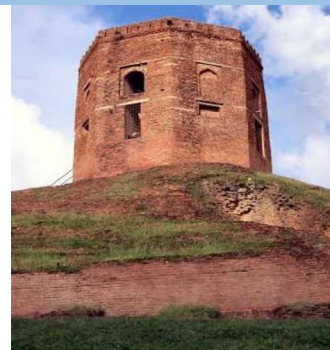
- Concussion
- World Anti-Doping Agency (WADA)
- UN Olympic Truce Resolution
- Eliud Kipchoge
- Wushu
- Pink Ball Cricket
- Sourav Ganguly And BCCI
- Criminalising Match-Fixing
- Super Over Rule

Person In News**Committees**

CULTURE

CHAUKHANDI STUPA

- An ancient Buddhist site in Uttar Pradesh's Sarnath, known as Chaukhandi Stupa, has been declared to be a "protected area of national importance" by the Archaeological Survey of India.
- **Structure:** It is a lofty mound of brick, whose square edifice is surrounded by an octagonal tower.
- **Timeline:** The Chaukhandi Stupa is said to be originally a terraced temple constructed during the Gupta period (4th to 6th Century). Govardhan, the son of Raja Todarmal, gave the present shape to the Chaukhandi Stupa. He built an octagonal tower to commemorate the visit of Mughal emperor Humayun.
- **Significance in Buddhism:** Chaukhandi Stupa was built to mark the place where Lord Buddha met his first disciples as he travelled from Bodh Gaya to Sarnath.



Archaeological Survey of India (ASI)

- **Governance:** The Archaeological Survey of India is an attached office of the Ministry of Culture.
- **History:** Founded in 1861 by Alexander Cunningham who also became its first Director-General.
- **Headquarters:** New Delhi.
- **Functions:** Under the provisions of Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act) of 1958, the ASI administers more than 3650 ancient monuments, archaeological sites and remains of national importance.

NATIONAL MARITIME HERITAGE MUSEUM

- India and Portugal will cooperate in the setting up of a national maritime heritage museum at Lothal in Gujarat. The project is being implemented by the Ministry of Shipping through its Sagarmala programme, with the involvement of the ASI, the State govt and other stakeholders.
- **Objective:** It will showcase and preserve India's **rich and diverse maritime heritage**. It also intends to highlight the ancient shipbuilding and navigational technologies developed by India.
- **Lothal**, an Indus valley site, is one of the oldest man-made dockyards in India. Rigveda and Puranic Texts have several references to **naval and commercial expeditions**.

Sagarmala Project:

- The Sagarmala Programme is the flagship programme of Ministry of Shipping.
- The concept of Sagarmala was approved by the Union Cabinet in 2015. As part of the programme, a National Perspective Plan (NPP) for the comprehensive development of India's 7,500 km coastline, 14,500 km of potentially navigable waterways and maritime sector has been prepared.
- **The National Sagarmala Apex Committee (NSAC)** is composed of the Minister of Shipping with Cabinet Ministers from stakeholder ministries and ministers in charge of ports in India's maritime states.

VAJIRAM & RAVI

- **The Sagarmala Development Company Limited (SDCL)** was incorporated in 2016 for providing funding support to project SPVs and projects in-line with Sagarmala objectives.

GIRISH KARNAD

- Veteran playwright and actor Girish Karnad (1938 – 2019) passed away at the age of 81. He was an Indian actor, film director, Kannada writer and playwright. He was an eminent playwright with works such as "Nagmandala", "Yayati" and "Tughlaq" to his credit.
- Karnad served as the **director of Film and Television Institute of India** from 1974–1975 and **chairman of Sangeet Natak Academy** from 1988–1993.
- **Honours:** He was a recipient of Jnanpith Award In 1998, the highest literary honour conferred in India. He was also conferred the Padma Shri in 1974 and the Padma Bhushan in 1992.



Sangeet Natak Academy:

- Sangeet Natak Akademi (The National Academy of Music, Dance and Drama) is the national level academy for performing arts set up by the Government of India.
- **Established in:** 1952.
- **Headquarters:** New Delhi.
- **Parent organisation:** Ministry of Culture.

Film and Television Institute of India (FTII), Pune:

- FTII is India's premier film and television institute, with its alumni becoming technicians, actors and directors in the film and television industry.
- **Established in:** 1960.
- **Status:** It is an autonomous institute under the Ministry of Information and Broadcasting.

KARTARPUR SAHIB

- Pakistan has agreed to give year-long visa-free access for Indian pilgrims to the holy Gurdwara of Kartarpur Sahib.
- **Location:** Gurdwara Darbar Sahib is located at Kartarpur in Pakistan's Narowal district. It stands on the bank of the River Ravi, about 120 km northeast of Lahore.
- **Significance:** It was here that the First Sikh Guru (Nanak Dev) assembled a Sikh community and lived for 18 years until his death in 1539. It is the final resting place of Guru Nanak.
- **Background:** The gurdwara was opened to pilgrims after PM Atal Bihari Vajpayee paid a visit to Pakistan in 1999. Since then Sikh Pilgrims are visiting the shrine regularly.

AMRITA PRITAM

- Google celebrated the 100th birth anniversary of Punjabi poet and author Amrita Pritam with a doodle.
- In 1956, she became the **first woman to win the Sahitya Akademi Award** for her long poem, 'Sunehade'.
- In 1981, she won the Bharatiya Jnanpith for the novel 'Kagaz Te Canvas'.
- In 1969, she was awarded the Padma Shri and in 2004 the Padma Vibhushan.
- She was also bestowed the highest honour conferred by the Sahitya Akademi - 'Immortals of Literature' in 2005.

GEOGRAPHICAL INDICATION (GI)

The following new GI has been recently registered under the *Department for Promotion of Industry and Internal Trade* under Geographical Indication of Goods (Registration and Protection) Act 1999:

- **Palani Panchamirtham**, an abishega Prasadam, is one of the main offerings in the Abisegam of Lord Dhandayuthapani Swamy, the presiding deity of Arulmigu Dhandayuthapaniswamy Temple, situated in palani Hills in Dindigul District of Tamil Nadu.
- **Tawlhlohpuan** is a medium to heavy, compactly woven, good quality fabric from Mizoram.
- **Mizo Puanchei** is a colourful Mizo shawl/textile from Mizoram. It is an essential possession for every Mizo lady and an important marriage outfit in the state.
- **Tirur Betel leaf** from Kerala, which is mainly cultivated in Malappuram District, is valued both for its mild stimulant action and medicinal properties.
- **Kandangi sarees** are manufactured in the entire Karaikudi taluk in Sivaganga district. These cotton sarees are characterised by large contrast borders.
- **Dindigul locks** are known throughout the world for their superior quality and durability.
- **Odisha Rasagola** is a sweet from the state of Odisha made of chhena (cottage cheese) cooked in sugar syrup, which is very soft to feel, juicy and non- chewy.

Geographical Indication (GI):

- GIs have been defined under **Article 22 (1) of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement**.
- A GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- India has enacted the **Geographical Indications of Goods (Registration and Protection) Act, 1999**. **Darjeeling tea** is the first GI tagged product in India.

AADI MAHOTSAV (NATIONAL TRIBAL FESTIVAL)

- The 9-Day “Aadi Mahotsav” was held in August, 2019 at Leh-Ladakh with the theme “A celebration of the spirit of Tribal Craft, Culture and Commerce”.
- Aadi Mahotsav is a joint initiative of Ministry of Tribal Affairs and TRIFED where Tribal artisans from more than 20 states across the country showcased their masterpieces.
- The event saw two reputed local cultural troupes presenting Ladakhi folk dances: **Jabro Dance** (a nomadic dance and song of people inhabiting eastern Ladakh) and **Spawo dance** (a heroic song and dance associated with a legendary hero of Himalayan region called K’sar).

KONDAPALLI TOYS

- According to reports, while Kondapalli toys are growing in popularity, its creators are neglected.
- **Location:** Kondapalli Toys are made in Kondapalli village of Krishna district, Andhra Pradesh.
- **Recognition:** It is registered under GI of Goods (Registration and Protection) Act, 1999.
- **Depiction:** The artisans mainly work on producing figures of mythology, animals, birds, bullock carts, rural life etc., and the most notable one is Dasavataram, dancing dolls etc.
- **Aryakhastriyas:** The artisans who make the toys are referred as Aryakhastriyas (also known as Nakarshalu), who have their mention in the Brahmanda Purana.
- **Toy crafting:** The toys are made from soft wood known as Tella Poniki found in Kondapalli Hills.

PRABHAKAR BARWE

- Union Culture Minister inaugurated an exhibition on Prabhakar Barwe in New Delhi.
- Prabhakar Barwe (1936 – 1995) from Maharashtra was a pioneer of Modern Indian painting. Influenced by the **esoteric tradition of Tantric painting**, Barwe along with G. R. Santosh, K.C.S. Paniker and Biren De was considered part of the **modernist movement Neo-Tantra**.
- He was awarded the Lalit Kala Akademi Award in 1976.
- Tantra denotes the esoteric traditions of Hinduism and Buddhism that co-developed most likely about the middle of the 1st millennium AD. In Sanskrit tantra means “loom” or “weave,” but also “treatise.” The paintings date back to the handwritten Tantra treatises that have been copied over many generations, at least until the seventeenth century.

SADIKPUR SINAULI

- The ASI has started the process of declaring the site at Sadikpur Sinauli of national importance, issuing a notification on June 6 seeking objections, if any, from the public for a period of two months.
- The ancient site at Sadikpur Sinauli is spread over 28 hectares in UP's Baghpat district. The site was the **“largest necropolis of the late Harappan period of the early 2nd millennium BCE”**.
- Among the treasures unearthed are three chariots, legged coffins, swords and helmets – all which point towards a warrior class that must have existed around 2,000 BCE.

GEET RAMAYANA

- Union Ministry of Information and Broadcasting announced that Publications Division will bring out the Hindi adaptation of 'Geet Ramayana' by Shri Datta Prasad Jog.
- Geet Ramayana is a collection of **56 Marathi language songs** chronologically describing events from the Indian Hindu epic, the Ramayana.
- It was broadcast by All India Radio, Pune in 1955–1956. Written by *G. D. Madgulkar* and the songs composed by *Sudhir Phadke*, it is considered a "milestone of Marathi light music" and the "most popular" Marathi version of Ramayana.

MAHARAJA RANJIT SINGH

- Pakistan unveiled a life-size sculpture of Maharaja Ranjit Singh on June 27, on the eve of 180th death anniversary of the Sikh ruler, in Lahore.
- Popularly known as Sher-e-Punjab Singh, Maharaja Ranjit Singh ruled over Punjab for close to 40 years in the early 19th century from 1801-1839. Lahore was the capital of the Sikh Empire under the leadership of Ranjit Singh and is also his final resting place.
- He captured Lahore in the year 1799 and unified all the warring misls into one empire. He also protected Lahore from invading Afghans and was responsible for the restoration of Mughal architecture in the city.

IRON AGE SETTLEMENT AT PHUPGAON

- The recent excavation carried out by ASI at Maharashtra's Phupgaon has revealed evidence of an Iron Age settlement in the Vidarbha region.
- The team of ASI took up an intensive survey in the region between Chandur Bazar to Dariyapur of Purna basin at Phupgaon, Amravati district of Maharashtra.
- The site is situated in the vast meander of the river Purna, a major tributary of Tapi, which used to be a perennial river, but at present is completely dried-up due to the dam construction in the upper stream.

UNESCO WORLD HERITAGE TAG

- India got its UNESCO World Heritage Site as Pink City Jaipur. With this India has **38 world heritage sites** (30 Cultural properties, 7 Natural properties and 1 mixed site).
- Unlike other medieval cities of the region, Jaipur was deliberately planned as a new city on the plains open for trade as opposed to hilly terrain and military cities of past.
- Its iconic monuments such as the Govind Dev temple, City Palace, Jantar Mantar and Hawa Mahal excel in artistic and architectural craftsmanship of the period.

UNESCO World Heritage Site

- A World Heritage Site is a landmark or area which is chosen by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as having cultural, historical, scientific or other form of significance, and is legally protected by international treaties.
- This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972.
- The list is maintained by **international World Heritage Program** administered by **UNESCO World Heritage Committee**, composed of 21 "states parties" that are elected by their General Assembly.
- 38 sites in India have world heritage tag status.

MAHARAJA SURAJ MAL

- Members of the Jat community in Rajasthan opposed the release of the movie Panipat – directed by Ashutosh Gowariker & based on the third Battle of Panipat –accusing its makers of wrongly portraying Maharaja Suraj Mal. The film shows Maharaja Surajmal as having denied help to the Maratha army.
- Maharaja Suraj Mal (1707 – 1763) or Sujan Singh was a Jat ruler of Bharatpur in Rajasthan. The Jats, under Suraj Mal, overran Mughal garrison at Agra and plundered the city taking with them two great silver doors of the entrance of Taj Mahal which were then melted down by Suraj Mal in 1763.

Third Battle Of Panipat:

- The Third Battle of Panipat took place on 14 January 1761 and lasted for several days. It took place at Panipat, in present-day Haryana.
- It was fought between a Maratha forces led by **Sadashivrao 'Bhau'** and invading forces of Ahmad Shah Abdali, supported by two Indian allies—the Rohillas Najib-ud-daulah, Afghans of the Doab region and Shuja-ud-Daula-the Nawab of Awadh.
- The Marathas were defeated in the battle. Bangali Poet Kaykobad wrote a long poem **Mashmashan** based on this battle.
- Ahmed Shah Abdali, the Afghan general, invaded India nine times between 1747 and 1769. He is regarded as the founder of modern-day Afghanistan.

Earlier Battles at Panipat?

- **The First Battle of Panipat, in 1526**, laid the foundation of the Mughal Empire in India after its first ruler, Babur, ended the Delhi Sultanate led by the Lodi dynasty.
- **The Second Battle of Panipat, in 1556**, cemented Mughal rule when Akbar fought off a threat from the king Hemu 'Vikramaditya'.

SAPTAMATRIKAS

- The Epigraphy Branch of the Archaeological Survey of India (ASI) has discovered the earliest epigraphic evidence so far for the Saptamatrika cult.

- Saptamatrikas are a group of seven female deities worshipped in Hinduism as personifying the energy of their respective consorts.
- The inscription is in Sanskrit and in Brahmi characters and was issued by Satavahana king Vijaya in 207 A.D. It was discovered in Chebrolu village in Guntur district of Andhra Pradesh.
- It is also the earliest Sanskrit inscription to have been discovered in South India as on date.

GANDHI ENCYCLOPEDIA

- Ministry of Culture has approved a project for development of Gandhi Encyclopedia or Gandhi Pedia by **National Council of Science Museums, Kolkata**.
- It is being developed for promotion of appropriate Gandhian philosophy and thoughts through social media platforms under 150th birth anniversary of Mahatma Gandhi commemoration

VIVEKANANDA ROCK MEMORIAL

- President Ramnath Kovind addressed the Golden Jubilee celebrations of the Vivekananda Rock Memorial, a monument in Vavathurai, Kanyakumari, Tamil Nadu at the Tri-junction of Indian ocean, Bay of Bengal and Arabian sea.
- It was built in 1970 in honour of Swami Vivekananda who is said to have attained enlightenment on the rock where he mediated in 1892.
- He spent three days in meditation in Kanyakumari, before embarking on his famous trip to Chicago for addressing the World Conference of Religions.

JALLIANWALA BAGH NATIONAL MEMORIAL (AMENDMENT) BILL, 2019

- **Jallianwala Bagh National Memorial (Amendment) Bill, 2019 was passed by the Parliament.**
- **It amends the Jallianwala Bagh National Memorial Act, 1951** which provides for the erection and management of a National Memorial to perpetuate the memory of those killed or wounded on the 13th day of April, 1919, in Jallianwala Bagh, Amritsar.
- It seeks to make apolitical the trust that runs Jallianwala Bagh National Memorial by **removing the clause pertaining to the President of Congress Party as a permanent member of the trust.**
- The Bill also amends to **include the Leader of Opposition** recognised as such in the House of the People (Lok Sabha) or where there is no such Leader of Opposition, then the Leader of the single largest Opposition Party in that House as a member of the trust.
- The Bill also amends that a **nominated trustee may be terminated before the expiry of the period of five years** by the Central Government, without assigning any reason.

KITTUR RANI CHENNAMMA

- Karnataka Chief Minister inaugurated Kittur Utsav in Kittur. The three-day festivities included sports, cultural programmes and lectures on the kingdom of Rani Channamma.
- Kittur Chennamma (1778 – 1829) was an Indian freedom fighter and Rani of the Kittur, a former princely state in Karnataka.
- She led an armed force against the British East India Company in 1824 in defiance of the **doctrine of lapse**. She was defeated in the third war and died in 1829.

Doctrine of Lapse

- The doctrine of lapse was an annexation policy applied by the British East India Company in India until 1859. The doctrine was based on the idea that in case the ruler of an independent state died childless, the right of ruling the State reverted or 'lapsed' to the sovereign.

VAJIRAM & RAVI

- **Dalhousie** applied the doctrine of lapse vigorously for annexing Indian princely states between 1848 and 1856, but the policy was not solely his invention.
- The East India Company annexed Kittur in 1824, Mandvi in 1839, Kolaba and Jalaun in 1840 and Surat in 1842 by imposing 'doctrine of lapse'.

TAANAJI MALUSARE

- Bollywood actor Ajay Devgn shared the first look of his upcoming period drama film “**Tanhaji: The unsung warrior**”. The film is based on the life of Subedar Taanaji Malusare.
- Taanaji Malusare was a Maratha military leader and a close aide of Chhatrapati Shivaji. Taanaji is popularly remembered for the **Battle of Singhagad** that took place in the year 1670.
- In the year 1665, the **Treaty of Purandar** was signed between Jai Singh and Shivaji, which required the Maratha ruler to give up Fort Kondhana to the Mughals. Later, Shivaji entrusted Taanaji the task of reconquering the fort Kondhana at any cost.
- In the battle, Taanaji fought against Udaybhan Rathore who was put in charge of Fort Kondhana by Jai Singh. The fort was renamed as Singhagad (Lion's Fort) by Shivaji to honour Tanaji.

KUKIS

- Kuki militants sought the intervention of PM Modi to subdue the rising tension between the Kukis and the Nagas in Manipur.
- The Kukis constitute one of several hill tribes within India, Bangladesh, and Myanmar. In Northeast India, they are present in all states **except Arunachal Pradesh**.
- Some fifty tribes of Kuki peoples in India are recognised as **scheduled tribes**.
- **The majority of Kukis are Christians**. Traditionally, the Kukis were animists.

Tensions Between Nagas and Kukis

- Kukis came to Manipur in the late 18th/early 19th century from neighbouring Myanmar. While some of the Kukis settled next to the Myanmar border, others settled in Naga villages, which ultimately became a contentious issue between the two tribes.
- The latest trigger is a decision by the Manipur government to take down stone memorials installed by the Kukis to mark the centenary of the Anglo-Kuki War.
- October 17 marked the culmination of a three-year observation of a centenary since the “**Anglo-Kuki War**” (1917-1919) in Kangpokpi district of Manipur. The Anglo-Kuki War began when the Britishers asked the Kukis to get enrolled in their labour corps in France and the latter resisted.
- The Naga bodies objected to the Kukis installing stone memorials to commemorate the war on the Naga's ancestral land. The **Nagas claimed that the Kukis have been trying to distort history as there has been no “Anglo-Kuki War” but a “Kuki Rebellion”**.

JAYACHAMARAJENDRA WADIYAR

- The President of India addressed the birth centenary celebrations of **Maharaja Jayachamaraja Wadiyar (1919 – 1974), the 25th maharaja of the Kingdom of Mysore**.
- He actively encouraged the establishment of an industrial facility in Bengaluru by a company called Hindustan Aircraft in 1940 which become **Hindustan Aeronautics**.
- His donations helped the government set up the Central Food Technological Research Institute (CFTRI) in Mysore, the **National Tuberculosis Institute** in Bangalore and the **All India Institute of Speech and Hearing** at Mysore.

VAJIRAM & RAVI

- He was the **first president of the Philharmonia Concert Society, London in 1948; President of Sangeet Natak Academy, New Delhi, 1966; First Chairman of the Indian Wild Life Board and Founder-president of the Vishwa Hindu Parishad.**

MUHAMMAD IQBAL

- A headmaster of a government school in Uttar Pradesh was suspended after his students recited a poem written by Muhammad Iqbal in 1902 titled, **"Lab pe aati hai dua"**.
- Muhammad Iqbal (1877 – 1938), widely known as Allama Iqbal, was a poet-philosopher in British India. His best known Urdu works are **The Call of the Marching Bell, Gabriel's Wing, The Rod of Moses and a part of Gift from Hijaz.**
- **"Sare Jahan se Accha"**, formally known as "Tarānah-e-Hindi", is an Urdu language patriotic song for children written by him in the ghazal style of Urdu poetry. The poem was published in 1904.
- He has **inspired the Pakistan Movement.** In 1930, during the 25th Session of the All-India Muslim League in Allahabad, he delivered his most famous presidential speech known as the Allahabad Address in which he pushed for the creation of a Muslim state in north-west India.

500 YEARS OF MAGELLAN'S VOYAGE

- Ferdinand Magellan (1480 – 1521) was a **Portuguese explorer.** 500 years ago, he sailed from Spain to find a western passage to the Indies.
- Magellan navigated through the strait at the southern point of South America which was later named after him (**Strait of Magellan**). He reached the Philippines in 1521, however he was killed after becoming involved in a Battle of Mactan.
- The **Victoria**, the only remaining ship from the original fleet, eventually returned to Spain in September 1522 under the command of Juan Sebastian Elcano, having completed the **first ever circumnavigation of the globe.**

KAMINI ROY

- **Google Doodle celebrated the birth anniversary of Kamini Roy (1864 – 1933), a leading Bengali poet and feminist in British India. She was the first woman honours graduate in British India.**
- **She was one of the leaders of the Bangiya Nari Samaj**, an organization formed to fight for woman's suffrage. This forced Bengal Legislative Council to grant limited suffrage to Bengali women in 1925. She was a member of the **Female Labour Investigation Commission (1922–23).**

UDHAM SINGH

- BJP MP Pragya Singh Thakur raked up a storm in the Lok Sabha after she praised Mahatma Gandhi's assassin Nathuram Godse. Later, in her defence, she claimed her remark was meant for Udhham Singh, and not Godse.
- Udhham Singh, born in Punjab in 1899, was a political activist who got associated with the Ghadar Party while in the US. On March 13, 1940, he assassinated **Michael O'Dwyer, who in 1919 was the Lieutenant Governor of Punjab** at the time of Jallianwala Bagh massacre.
- **Instead of Dyer**, who instructed his men to open fire at the crowd gathered in Jallianwala Bagh, **O'Dwyer** is considered to be the actual perpetrator, since Dyer could not have executed it without his permission.
- At the court he referred to himself as **Mohamed Singh Azad** to symbolise Hindu-Sikh-Muslim unity. He was hanged on July 31, 1940.

KEMPEGOWDA

- Karnataka CM announced a plan to construct a **101-foot-tall Kempegowda bronze statue at the Bengaluru airport**, also known as the Kempegowda International Airport.
- Nadaprabhu Hiriya Kempe Gowda (1510 - 1569), also known as Kempe Gowda was an Indian ruler under the **Vijayanagara Empire**. The city of Bengaluru was **founded by him in 1537**.
- He prohibited the custom of amputating the last two fingers of the left hand of the unmarried women during "Bandi Devaru", an important custom of Morasu Vokkaligas.
- He is a political icon for the dominant agricultural **Vokkaliga community** in south Karnataka.

GOTTIPROLU

- Excavation by the Archaeological Survey of India (ASI) at Gottiprolu, Andhra Pradesh has unearthed a trade centre of early historic period.
- The site of Gottiprolu lies on the **right bank of a tributary of river Swarnamukhi**, about 17 km east of Naidupet and 80 km from Tirupati and Nellore. One life size Vishnu sculpture and a wide variety of pottery of the early centuries of current era have been unearthed.

TUDOR ARCHITECTURAL STYLE And JAYAKAR BUNGALOW

- Union Minister for I&B inaugurated the renovated Jayakar Bungalow, **a classic heritage site situated inside the premises of National Film Archives of India (NFAI), Pune**.
- This grade I heritage structure was built in **1945**. It was once home to **Mukundrao Ramrao Jayakar, a barrister and the first vice-chancellor of the University of Pune**.
- It has a distinct **Tudor style of architecture**, one of its kind in Pune.

Tudor Architecture Style

- It was developed in England between 1485 and 1558 during the first part of the reign of Tudor monarchs, including Henry VII and Henry VIII.
- It was characterised with **'black and white' construction**. Black and white meant half-timber houses with white-washed wall segments between the dark timbers.

SHONDOL

- Ladakhi Shondol dance has created history by breaking into the **Guinness book of world records as the largest Ladakhi dance** when 408 women artists performed the Shondol dance on the occasion of the **Annual Naropa Festival**.
- Shondol, which is known as the royal dance of Ladakh, is performed by Takshoma or women dancers to praise the King of Ladakh on special occasion.

FIROZ SHAH TUGHLAQ

- **Delhi's Feroz Shah Kotla stadium was renamed Arun Jaitley Stadium** after the former Finance Minister, who passed away recently.
- Firoz Shah Tughlaq (1309 – 1388) of the Tughlaq Dynasty ruled over the Sultanate of Delhi from 1351 to 1388. He succeeded his cousin Muhammad bin Tughlaq.
- **He built Feroz Shah Kotla**, the fortress, on the banks of the Yamuna and called it Firozabad. Firoz Shah was the first ruler to build a fortress next to river Yamuna.
- **Emperor Ashoka's pillar**, erected near Ambala in 250 BC, was transported to Delhi and placed in Firozabad.

VAJIRAM & RAVI

- Under his patronage, **premakhyan** which is Sufi poetry written in Awadhi, grew. It was a new genre of literature. His autobiography is **Futuh-i-Firozshahi**.

5th INTERNATIONAL RAMAYAN FESTIVAL

- Union Minister for Home Affairs presided as Chief Guest over the 5th International Ramayan Festival in New Delhi, organized by **Indian Council for Cultural Relations (ICCR)**.
- Indian Council for Cultural Relations (ICCR) was founded in 1950 at New Delhi.
- It is an autonomous organisation of the Government of India to implement programmes pertaining to India's external cultural relations and to promote cultural exchanges with other countries and people, and to develop relations with nations.

HINDI DIVAS

- Union Home Minister awarded **Rajbhasha Gaurav Puraskar and Rajbhasha Kirti Puraskar** on the occasion of Hindi Divas Samaroh 2019.
- Rajbhasha Kirti Puraskar** is given for outstanding work in promoting the progressive use of official language to Ministries, Departments, PSUs, banks and in-house Hindi magazines.
- Rajbhasha Gaurav Puraskar** comprises following three awards:
 - Rajbhasha Gaurav Puraskar to **Citizens of India** for writing original book in Hindi on knowledge and science-based subjects.
 - Rajbhasha Gaurav Puraskar to **Central Government Employees** (including retired one) for writing original book in Hindi.
 - Rajbhasha Gaurav Puraskar to **Central Government Employees** (including retired one) for writing excellent article in Hindi.

Hindi Divas is an annual day celebrated on 14 September. On this day in 1949, Hindi was **first adopted by the Constituent Assembly of India as the official language of India**.

KIRAN NAGARKAR

- Kiran Nagarkar (1942 – 2019), a noted novelist and playwright in Marathi and English, **passed away**.
- For His historical fiction, *Cuckold* (1997), he was awarded the 2001 Sahitya Akademi Award in English. *Cuckold's* protagonist is the unknown spouse of the 16th century poet-saint Meera devoted to the god Krishna.

GUNDECHA BROTHERS

- Ramakant Gundecha, the younger one of the Gundecha brothers, passed away.
- The Gundecha Brothers are Indian classical singers of the **dhrupad genre of the Dagar vani**. They have been awarded Padma Shri by Government of India in 2012 and Sangeet Natak Akademi Award in 2017.

Dhrupad

- Dhrupad is the oldest surviving classical style of Hindustani vocal music.
- Its name is derived from dhruva-pada, simply meaning "refrain," and today denotes both a form of poetry and a style of music in which the poetry is sung.
- Dhrupad music traditionally has three major parts - **alap, jor-jhala, and composition**. A dhrupad is introduced by a slow tempo-ed, rather somber and controlled, recurrent set of syllables (non-words) known as an alap.

KUNG FU NUNS (DRUKPA ORDER)

- The Kung Fu Nuns of the Drukpa Order received the Asia Society's prestigious Game Changer Award in New York for their path-breaking work to empower women and dismantle gender stereotypes in the Himalayas.
- Past recipients of Asia Society's Game Changer Award: Indra Nooyi, Mukesh Ambani.
- Kung Fu Nuns are an order of Buddhist nuns who belong to the Drukpa Lineage. Most of them stay and train at Druk Amitabha Mountain Nunnery in Nepal, Ladakh and Delhi.
- Their name comes from the order's proficiency in Chinese martial arts, which they began learning in 2008 after the 12th Gyalwang Drukpa authorized a training program for them.

THIRUVALLUVAR

- Dravidian and Left parties protested after BJP tweeted a picture of Thiruvalluvar, whose white robes had been replaced with saffron.
- Thiruvalluvar, commonly known as Valluvar, was a Tamil poet and philosopher.
- The period when he lived is debated. Some place him in the third or fourth century; others put him in the eighth or ninth.
- Dravidian groups count him as a saint with no religious identifiers. He was the **author of Thirukkural**, a collection of couplets on ethics, political and economical matters.

125th BIRTH ANNIVERSARY OF PARAMAHANSA YOGANANDA

- Paramahansa Yogananda (1893 –1952) was an Indian monk who introduced millions to the teachings of meditation and **Kriya Yoga** through his organization Self-Realization Fellowship (SRF) / Yogoda Satsanga Society (YSS) of India.
- Yogananda was the first major Indian Yoga teacher to settle in America. He is called as the **"Father of Yoga in West."**
- In 1946, he published his life story, **Autobiography of a Yogi**.

Kriya Yoga, the "Yoga of Action", is the ancient Yoga system which consists of a number of levels of pranayama, mantra, and mudra based on techniques intended to rapidly accelerate spiritual development and engender a profound state of tranquillity.

UNESCO CREATIVE CITIES NETWORK (UCCN)

- UNESCO has designated **Mumbai** as a member of UNESCO Creative Cities Network (UCCN) in the field of FILM and **Hyderabad** in the field of GASTRONOMY.
- UCCN, created in 2004, is a network of cities which are thriving, active centres of cultural activities in their respective countries.
- **The 7 categories for recognition under UCCN are:** (1) Crafts and Folk Arts, (2) Design, (3) Film, (4) Gastronomy, (5) Music, (6) Media Arts and (7) Literature.
- Previously, **3 Indian cities** were recognized as members of UCCN, namely (1) Jaipur, (2) Varanasi and (3) Chennai.

GOVARDHAN MUTT OF PURI

- The Odisha Hindu Religious Endowment (Amendment) Bill, 2019 was passed by the Odisha State Assembly. The bill excludes the Govardhan Mutt from the purview of the **Odisha government i.e.** Odisha Hindu Religious Endowment Act, 1951.
- The Govardhan Mutt is one of the four key mutts established by Adi Shankara, the prominent Hindu saint. It is the only such mutt currently controlled by a State Act.

VAJIRAM & RAVI

- The three others — **Sharada Mutt (at Sringeri in Karnataka), Dwarka Mutt (in Gujarat) and Jyotir Mutt (at Joshimath in Uttarakhand)** — function autonomously. The management of these mutts has been vested with the respective Shankaracharyas.

KADRI GOPALNATH

- **Kadri Gopalnath (1949 – 2019)**, also known as **Saxophone Charkravathy**, passed away. He was one of the pioneers of Carnatic music on the saxophone.
- Awarded Padma Shri and Sangeet Natak Akademi Award for Carnatic Music - Instrumental (Saxophone) in 2004.
- He was the first Carnatic musician to be invited in the BBC Promenade concert in Royal Albert Hall at London in 1994.

KHON RAMLILA

- Uttar Pradesh government organised the country's first performance of KHON Ramlila in collaboration with Thailand government.
- KHON Ramlila of Thailand is a form of masked dance depicting the scenes of Ramlila. It has no dialogues and background voices narrate the whole story of Ramayana.
- It is included in the list of **UNESCO's Intangible cultural heritage**.
- **The Ramakien** is Thailand's national epic, derived from the Hindu epic Ramayana.

REMBRANDT

- **India and the Netherlands commemorated Rembrandt's 350th death anniversary.**
- Rembrandt Harmenszoon van Rijn (1606 – 1669) was a Dutch painter, considered one of the greatest visual artists in the history of art.
- His painting, **The Night Watch** is one of the most famous Dutch Golden Age paintings.
- Rembrandt made 25 drawings based on **Mughal miniatures** from India during 1656 to 1661. This is in spite of the fact that the Dutch artist never set foot on Indian soil. These miniatures include paintings of **Shah Jahan, Akbar, Jahangir and Dara Shikoh**.

GANJIFA

- Bengaluru's **Karnataka Chitrakala Parishath (CKP)** released the book, Splendours of Ganjifa Art. This is considered the first detailed documentation of the art form with contributions from practising artists and art scholars.
- The Persian word, Ganjifeh, means **playing cards**. Ganjifa, an ancient card game, is believed to have been brought to India during the Mughal period.
- These cards, mainly circular, were used by kings and noblemen across the country.
- Some of the variants are Moghul Ganjifa (Odisha), Dashavatara Ganjifa (Sawantwadi in Maharashtra), Mysore Chad Ganjifa, Ramayan Ganjifa, Akbar's Ganjifa etc.

DIGITAL BHARAT DIGITAL SANSKRITI

- Union Minister for Culture & Tourism (IC) launched the E-Portal of CCRT '**Digital Bharat Digital Sanskriti**'. This will enable dissemination of cultural education through digital interactive medium into the classrooms all over the country.
- The **Centre for Cultural Resources and Training (CCRT)** is autonomous organisation under Union Ministry of Culture. It was established in 1979 to support cultural education.

SKANDAGUPTA VIKRAMADITYA

- Union Home Minister inaugurated a two-day international seminar at Banaras Hindu University on the role of 'Skandagupta.'
- Skandagupta is considered the last of the great Gupta Emperors of northern India.
- He ruled from 455 AD till 467 AD. He was son of Kumaragupta I.
- By defeating Pushyamitras during his initial years of ascendancy, Skandagupta proved his ability to rule and took upon himself the title of **Vikramaditya**. He also defeated the Huns, who had invaded India from the north west.

IK ONKAR

- To mark 550th birth anniversary of Sri Guru Nanak Dev ji, Air India depicted Sikh religious symbol 'Ik Onkar' on the tail of one of its aircraft.
- Ik Onkar is the symbol that represents the unity of God in Sikhism, meaning **God is One or One God**. It is found in the Gurmukhi script and is a central tenet of Sikhism.
- It is the opening phrase of the Mul Mantar and the opening words of the Sri Guru Granth Sahib. It is consequently also part of the Sikh morning prayer, Japji Sahib.

ZUBIN MEHTA

- Zubin Mehta (born 1936), an Indian conductor of Western and Eastern classical music, **retired after a 50-year-tenure**. He is one of the greatest music conductors in the world. He is the music director for Life of the Israel Philharmonic Orchestra (IPO).
- **Awards received:** Padma Bhushan; Padma Vibhushan; In 2013, President of India awarded him the Tagore Award 2013 for his contribution towards cultural harmony.

INTERNATIONAL FILM FESTIVAL OF INDIA (IFFI) 2019

- The Golden Jubilee edition of the International Film Festival of India (IFFI) was held in **Panaji, Goa**. Actor Rajnikanth received the ICON of the Golden Jubilee Award.
- IFFI was founded in 1952 and is held annually during the months of November and December in Goa.
- The festival is conducted jointly by the Ministry of Information and Broadcasting, Directorate of Film Festivals and the Government of Goa.
- During the festival, **ICFT-UNESCO Gandhi Medal**, instituted by International Council for Film & Television, Paris and UNESCO will be given to a film that portrays Gandhian values of peace & harmony.

SABARIMALA VERDICT

- Supreme Court, in a 3:2 ruling, has deferred its decision on review of 2018 Sabarimala verdict until a larger Bench examines broader issues such as essentiality of religious practices etc.
- The Sabarimala temple is a temple complex located at Sabarimala inside the Periyar Tiger Reserve in Pathanamthitta district, Kerala.
- The temple is dedicated to the Hindu celibate deity Ayyappan also known as Dharma Sastha, who according to belief is the son of Shiva and Mohini, the feminine incarnation of Vishnu.

MA GRIDHAH KASYASVIDHANAM

- Lokpal Chairman launched the new motto for the apex anti-corruption ombudsman which is 'Ma Gridhah Kasyasvidhanam' which in English means "**Do not be greedy for anyone's wealth.**" It has been taken from a sloka of '**Ishabaso upanishad**'.
- The Lokpal became functional after the appointment of its Chairman and members in March 2019.

GEOGRAPHY AND DISASTER MANAGEMENT

GOGABEEL

- Gogabeel, an ox-bow lake in Bihar's Katihar district, has been declared as the state's first 'Community Reserve', a category of protected areas which was introduced in the Wildlife (Protection) Amendment Act of 2002.
- Gogabeel is formed from the flow of the rivers Mahananda and Kankhar in the north and the Ganga in the south and east. It is the fifteenth Protected Area (PA) in Bihar.
- In 2004, Gogabeel, including the neighbouring Baghar Beel and Baldia Chaur, were given the status of an IBA (Important Bird Area of India) by the IBCN.

INTERNATIONAL COALITION FOR DISASTER RESILIENT INFRASTRUCTURE (CDRI)

- The Union Cabinet approved the establishment of an International Coalition for Disaster Resilient Infrastructure (CDRI). *It was later launched at the UN Climate Action Summit in New York, in September 2019.*
- *The fledgling partnership has a secretariat in Delhi, supported by the UN Office for Disaster Risk Reduction (UNDRR), to enable knowledge exchange, technical support and capacity building.*
- This partnership of national governments, UN agencies and programmes, multilateral development banks, financing mechanisms, private sector, and knowledge institutions will promote the resilience of new and existing infrastructure systems to climate and disaster risks, thereby ensuring sustainable development.
- *There are 12 founding members of CDRI : Australia, Bhutan, Fiji, Indonesia, Italy, Japan, Maldives, Mexico, Mongolia, Rwanda, Sri Lanka and the UK. Developed through consultations with more than 35 countries, CDRI envisions enabling measurable reduction in infrastructure losses from disasters, including extreme climate events.*
- Government of India will support it with Rs. 480 crore from 2019-20 to 2023-24.

OKJOKULL GLACIER

- In Iceland, the loss of Okjokull glacier was commemorated by people with a plaque.
- The Okjokull glacier was officially declared dead in 2014 at the age of 700 by the Icelandic Meteorological Office when it was no longer thick enough to move. What was once a glacier has been reduced to a small patch of ice atop a volcano.
- Okjokull is the first Icelandic glacier to lose its status as glacier. The plaque is also labelled "**415 ppm CO₂**", referring to the record level of carbon dioxide measured in the atmosphere last May.

MULA-MUTHA RIVER

- **Mula-Mutha river cleaning project** is a joint project of Union Government and Pune Municipal Corporation. Government of India has signed a loan agreement with the Japan International Cooperation Agency (JICA) under the National River Conservation Plan (NRCP) in the year 2015.
- Union Minister for Environment held a review meeting of pollution Abatement of Mula - Mutha River. It is formed by the Mula and Mutha rivers coming together, courses through the Pune.

VAJIRAM & RAVI

- **Pollution status:** Sections of the river are among the 351 most critically polluted stretches identified by the Central Pollution Control Board, thus being one of India's most polluted rivers.

GOLDEN BUTTERFLY TEA

- A kilogram of a speciality Assam tea called "Golden Butterfly" was sold for Rs 75,000 at the Guwahati Tea Auction Centre (GTAC), setting a new record. The tea is named such because only "the soft golden tips go into making this exceptionally rare and special tea".
- **India has six tea auction centres — Kolkata (the oldest, set up in 1861),** Guwahati (1970), Siliguri, Kochi, Coimbatore and Coonoor.

TIDEWATER GLACIERS

- According to a study published in the journal 'Science', underwater melting of tidewater glaciers is occurring 100 times faster than previously thought.
- Tidewater glaciers are valley glaciers that flow all the way down to the ocean. They often calve numerous small icebergs, which can sometimes pose problems for shipping lanes.
- Most glaciers flowing from Greenland, Antarctica, Baffin and Ellesmere Islands in Canada, Southeast Alaska are Tidewater glaciers.

CARMICHAEL COAL MINE PROJECT

- The Adani Group has commenced work on its controversy-hit Carmichael coal mine project in Australia with the Queensland State authorities approving its groundwater management plan.
- Carmichael coal mine is a proposed thermal coal mine in the **Galilee Basin** in Queensland, Australia. It would be the largest coal mine in Australia and one of the largest in the world.
- The mine has drawn immense controversy about its potential damaging environmental impacts upon the Great Barrier Reef, groundwater at its site and its carbon emissions.

KAJIN SARA LAKE

- This newly-discovered lake in Manang district of Nepal, is likely to set a new record of being the world's highest lake. It is located at an altitude of **5,200 m**, which is yet to be officially verified.
- Currently **Tilicho Lake in Nepal (4,919 m)** holds the title of the world's highest lake.

DIBANG MULTIPURPOSE PROJECT

- Union Cabinet has approved various clearances for Dibang Multipurpose Project (MPP). This is the largest ever Hydro Electric Project to be constructed in India.
- The Project is located on river Dibang, in Arunachal Pradesh. It envisages construction of a 278 m high **Concrete Gravity Dam**. It will be the highest dam in India once completed.

Dibang River

- Dibang River is also known as Sikang in Adi and Talon in Idu.
- It originates and flows through the Mishmi Hills & northeast India from the state of Arunachal Pradesh. It enters the River Lohit north of the Dibru-Saikhowa sanctuary near the Assamese town of Sadiya.
- It is a tributary river of the Brahmaputra. The Sisar, Mathun, Tangon, Dri, Ithun and Emra are the major tributaries of the Dibang.

GODAVARI-PENNA LINKING PROJECT

- The NGT has stayed the Andhra Pradesh govt's Godavari-Penna interlinking projects due to lack of environmental clearance from the Central Water Commission (CWC) and the Ministry of Environment.

- The project will interlink the two major rivers, Godavari and Penna, to solve drinking water and irrigation problems in south coastal Andhra.

Penna River

- **Names:** It is also known as Pennar, Penner, Penneru or North Pinakini.
- **Course:** The 597 km long river rises in Nandi Hills in Chikballapur District of Karnataka and enters Andhra Pradesh to empty into the Bay of Bengal.
- **Tributaries:** The major tributaries of the Penna are the Jayamangali, Kunderu and Sagileru from the north, and Chitravathi, Papagni and Cheyyeru from the south.

REWA ULTRA MEGA SOLAR PARK

- Continuous rain has damaged Rewa Ultra Mega Solar park in the Rewa district of Madhya Pradesh. The project was commissioned with 750 MW capacity in July 2018.
- It is Asia's largest solar Power project. It is the first project to get funding from Clean Technology Fund (CTF) in India. It is also the first solar park in India to get World Bank funding
- Rewa Ultra Mega Solar Limited (RUMSL) is the implementing agency of the project.

ETHANOL BIOREFINERY, BHANDARA

- Bharat Petroleum Corporation Limited (BPCL) will set up ***Maharashtra's first ever ethanol biorefinery*** in Makardhokda village in Vidarbha's Bhandara district.
- This project is one among the 12 such refineries planned in different States.
- The National Policy on Biofuels, 2018 has set a target of 20% of ethanol in petrol and 5% of biodiesel in diesel is proposed by 2030.

Ethanol Blending

- Ethanol, which is sometimes known as ethyl alcohol, is a kind of alcohol derived from corn, sugarcane, and grain or indirectly from paper waste.
- The most common use of Ethanol fuel is by blending it with gasoline. Doing so creates a mix that releases fewer emissions into the environment and is considered cleaner in nature. It also keeps the car in a better shape by increasing the octane rating of the fuel.

CLASSIFICATION OF TROPICAL CYCLONES

- **Vayu** was a strong tropical cyclone that caused moderate damage in India during June 2019. Indian Meteorological Department (IMD) categorised 'VAYU' as a Very Severe Cyclonic Storm.
- Vayu originated near the northern Maldives and tracked slowly north-northwestward over the eastern Arabian Sea. It was the strongest tropical cyclone to affect the Saurashtra Peninsula of northwestern India since the 1998 Gujarat cyclone.

Criteria followed by IMD to classify the low pressure systems in the Bay of Bengal and in the Arabian Sea as adopted by World Meteorological Organisation (WMO) is:

- **Low pressure Area:** Less than 17 knots (<31 kmph)
- **Depression:** 17 to 27 knots (31 to 49 kmph)
- **Deep Depression:** 28 to 33 knots (50 to 61 kmph)
- **Cyclonic Storm:** 34 to 47 knots (62 to 88 kmph)
- **Severe Cyclonic Storm:** 48 to 63 knots (89 to 118 kmph)
- **Very Severe Cyclonic Storm:** 64 to 119 knots (119 to 221 kmph)



- **Super Cyclonic Storm:** 119 knots and above (221 kmph and above)

HYPOXIC ZONES

- Scientists say this year's oceanic 'dead zone' in the Gulf of Mexico will be one of the largest in its recorded history. **Dead zone in the Gulf of the Mexico is the world's second largest. The world's largest dead zone is in the Baltic Sea.**
- **Hypoxic zones** are areas in the ocean of such low oxygen concentration that animal life suffocates and dies, and as a result are sometimes called "**dead zones.**"
- Hypoxic zones can occur naturally, but scientists are concerned about the areas created or enhanced by human activity due to Nutrient pollution.

KALESHWARAM LIFT IRRIGATION PROJECT (KLIP)

- KLIP was inaugurated by Telangana Chief Minister at Medigadda, in Jayashankar-Bhupalapally district. KLIP is claimed to be the world's largest multi-stage and multi-purpose **lift irrigation scheme.**
- It is located at the confluence point of **Pranhita River and Godavari River** i.e, at Kaleshwaram village in Telangana. Pranahita river in itself is a confluence of various other smaller tributaries like Wardha, Penganga and Wainganga Rivers.
- **Lift irrigation** is a method of irrigation in which water instead of being transported by natural flow (as in gravity-fed canal systems) requires external energy through animal, fuel based or electric power using pumps or other mechanical means.

POLAVARAM

- The Union Environment Ministry gave two years of extension to construction works related to Polavaram Project, an under-construction multi-purpose irrigation project.
- The Project envisages construction of **Earth-cum-Rock fill dam across the Godavari River** in Andhra Pradesh. Its reservoir spreads into Chhattisgarh and Odisha States also.
- In the year 2014, the Government of India declared the **Polavaram project a National project.** The Polavaram Project Authority was constituted by the Union Cabinet in 2014.

OMEGA BLOCK

- Belgium, Germany and Netherlands have recorded their highest ever temperatures as the second extreme heatwave in as many months to be linked by scientists to the climate emergency grips the continent.
- The latest heatwave, caused by an "omega block" – a high-pressure pattern that blocks and diverts the jet stream, allowing a mass of hot air to flow up from northern Africa and the Iberian peninsula – follows a similar extreme weather event last month that made it the hottest June on record.
- Western Europe's weather is largely governed by the jet stream. This high-altitude, high-velocity river of air meanders around the globe and is constantly changing position.
- When an omega-shaped wave is present on the jet stream which arcs over Europe, warm dry air from southern Europe and Africa can be pulled north, pushing temperatures higher than normal. If this upper level feature coincides with high pressure at the surface with relatively low pressure to the east and west an omega block is formed.

SOLAR ECLIPSE

- On July 2, people in South America congregated near the La Silla Observatory, operated by the European Southern Observatory to witness the so-called "Great South American Eclipse", the only total solar eclipse of 2019.

- The Last Solar Eclipse of the decade, an annular solar eclipse, was also observed in India.
- An eclipse happens when the moon while orbiting the Earth, comes in between the sun and the Earth, due to which the moon blocks the sun's light from reaching the Earth, causing an eclipse of the sun or a solar eclipse. There are three types of eclipses.
 - **Total solar eclipse** happens when the sun, moon and Earth are in a direct line. The dark silhouette of the Moon completely covers the intense bright light of the Sun. Only the much fainter solar corona is visible during a total eclipse which is known as a **Totality**. Total solar eclipses are rare, happening only **once every 18 months**.
 - **Partial solar eclipse** happens when the shadow of the moon appears on a small part of the sun.
 - **Annular solar eclipse**, which happens when the moon is farthest from the Earth, which is why it seems smaller. In this type of an eclipse, the moon does not block the sun completely, but looks like a "dark disk on top of a larger sun-colored disk" forming a "ring of fire".



COLD-DAY CONDITION

- During late December 2019, much of the north India fell under the 'cold day' classification.
- A cold-day condition is said to prevail when the maximum temperature during the day is at least 4.5°C below normal. If the maximum temperature is at least 6.5°C below normal, it is classified as a severe cold day.
- The cold wave usually arrives from the west, through the Western Disturbance wind system. This system is also responsible for causing rains in northern and northwestern parts, after having picked up moisture on its way from the Mediterranean Sea.

ACQUA ALTA

- Italy has declared a state of emergency in Venice after the Italian city was engulfed by 1.87m (6ft) high water levels. More than 80% of the city, a UNESCO world heritage site, was under water when tides were at their highest.
- Acqua alta is the term used in Veneto for the exceptional tide peaks that occur periodically in the northern Adriatic Sea. The peaks reach their maximum in the Venetian Lagoon, where they cause partial flooding of Venice and Chioggia.
- The phenomenon occurs mainly between autumn and spring, when the astronomical tides are reinforced by the prevailing seasonal winds that hamper the usual reflux. The main winds involved are the
 - **sirocco**, which blows northbound along the Adriatic Sea, and
 - **bora**, which has a specific local effect due to the shape and location of the Venetian lagoon.

ULURU

- From October 26, 2019, climbing Uluru, Australia's famous **desert rock**, considered sacred by the local **Anangu people**, has been banned.
- Uluru, also known as **Ayers Rock**, is a large **sandstone rock formation**. It is dominantly composed of coarse-grained arkose (a type of sandstone characterised by an

Uluru is an inselberg, literally "island mountain". An inselberg is a prominent isolated residual knob or hill that rises abruptly from and is surrounded by extensive and relatively flat erosion lowlands in a hot, dry region.

abundance of feldspar) and some conglomerate. Average composition is 50% feldspar, 25–35% quartz and up to 25% rock fragments.

- It is sacred to the **Anangu people**, the Aboriginal people of the **central Australia**.
- It is listed as a **UNESCO World Heritage Site**.
- It is notable for **appearing to change colour** at different times of the day and year, most notably when it glows red at dawn and sunset.

150 YEARS OF SUEZ CANAL

- **Location:** The Suez Canal is a sea-level waterway in Egypt, connecting the **Mediterranean Sea to the Red Sea** through the Isthmus of Suez. It extends from the northern terminus of Port Said to the southern terminus of Port Tewfik at the city of Suez.
- **The canal is owned and maintained by** the Suez Canal Authority (SCA) of Egypt.
- **Under the Convention of Constantinople**, it may be used "in time of war as in time of peace, by every vessel of commerce or of war, without distinction of flag".
- **Timeline:** Constructed by the Suez Canal Company between 1859 and 1869, it officially opened on 17 November 1869. The United Kingdom and France owned the canal until July 1956, when the President of Egypt, Gamal Abdel Nasser, nationalized it - an event which led to the **Suez Crisis of October-November 1956**.

MAPS OF UTs OF JAMMU & KASHMIR AND LADAKH

- **The Survey General of India released maps depicting the new Union Territories of Jammu & Kashmir and Ladakh, as created on 31 October 2019.**
- The new Union Territory of Ladakh consists of two districts of Kargil and Leh. The rest of the former State of Jammu and Kashmir is in the new Union Territory of Jammu and Kashmir with 28 districts.
- In the map, the new Leh district includes the areas of the districts of Gilgit, Gilgit Wazarat, Chilhas and Tribal Territory of 1947, in addition to the remaining areas of Leh and Ladakh districts of 1947, after carving out the Kargil District.



Survey of India

- The Survey of India is India's central engineering agency in charge of mapping and surveying. it is also responsible for the naming convention and spellings of names of geographical features of India.
- Its members are from **Survey of India Service cadre of Civil Services** and from the **Indian Army Corps of Engineers**. It is headed by the Surveyor General of India.
- **Established in:** 1767; **HQ:** Dehradun, Uttarakhand; **Parent department:** Department of Science and Technology.

PALEOCHANNEL

- The Union Water Ministry has excavated an old, dried-up river in Prayagraj (formerly Allahabad) that linked the Ganga and Yamuna rivers. The aim is to develop it as a potential groundwater recharge source.
- The newly discovered river was a "buried paleochannel that joins the Yamuna river at Durgapur village, about 26 km south of the current Ganga-Yamuna confluence at Prayagraj. Evidence from palaeochannels suggested that the mythological Saraswati river did indeed exist.

Palaeochannel

- A palaeochannel is a remnant of an inactive river or stream channel that has been filled or buried by younger sediment. It is distinct from the overbank deposits of currently-active river channels, including ephemeral water courses that do not regularly flow.
- Paleochannels typically act as pathways for groundwater movement and provide a potential source of groundwater. Their presence can be helpful in identifying areas suitable for recharge.

ATLANTIC MERIDIONAL OVERTURNING CURRENT (AMOC)

- **A new study suggests that Atlantic Meridional Overturning Current (AMOC) is getting help from the Indian Ocean.**
- Atlantic Meridional Overturning Current (AMOC) is a large system of ocean currents operating in the Atlantic, which circulates the waters between the north and the south.
- It is characterized by a northward flow of warm, salty water in the upper layers of the Atlantic, and a southward flow of colder, deep waters.
- As warm water flows northwards in the Atlantic, it cools, while evaporation increases its salt content. Low temperature and a high salt content raise the density of the water, causing it to sink deep into the ocean.
- The cold, dense water deep below slowly spreads southward. Eventually, it gets pulled back to the surface and warms again, and the circulation is complete. AMOC ensures the oceans are continually mixed, and heat and energy are distributed around Earth.

SAFFIR-SIMPSON HURRICANE WIND SCALE (SSHWS)

- **Hurricane Dorian strengthened into a catastrophic Category 5 storm and pounded the Bahamas. The category five Dorian is the second-strongest Atlantic hurricane on record.**
- The Saffir-Simpson Hurricane Wind Scale (SSHWS) is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage.
- To be classified as a hurricane, a tropical cyclone must have one-minute maximum sustained winds of at least 74 mph (33 m/s; 64 kn; 119 km/h) (Category 1).
- The highest classification in the scale, Category 5, consists of storms with sustained winds over 156 mph (70 m/s; 136 kn; 251 km/h).
- Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage.

BLACK SPOTS

- **The Ministry of Road Transport and Highways has issued new guidelines to State governments for identifying accident 'black spots' on national highways.**
- A black spot is defined as a stretch not more than 500m in length where five accidents have taken place or where ten fatalities have happened in the last three years.
- Black spots account for 90% of road accidents in the country and short- and long-term measures chalked out by the Union Ministry of Road Transport and Highways (MoRTH) to curb accidents in such spots assume significance.
- Recently, Minister for Road Transport and Highways Nitin Gadkari said the government had prepared a ₹14,000-crore plan to identify black spots. The Ministry has reached out to the World Bank for funds after approval from the Ministry of Finance.

MID-MONSOON 2019 LIGHTNING REPORT

- The “**Mid-Monsoon 2019 Lightning Report**” was published by Climate Resilient Observing Systems Promotion Council (CROPC), a non-profit organisation that works closely with India Meteorological Department (IMD).
- This is for the first time, a report has mapped lightning strikes across the country, and the lives they have claimed.
- The report counted 65.55 lakh lightning strikes in India during **April – July 2019**. Odisha recorded the maximum incidents of lightning and Uttar Pradesh recorded maximum deaths due to lightning during this period.

MARADU FLATS

- **Supreme Court has ordered the demolition of illegal flats in Maradu, Kochi that violate coastal regulation zone norms and ordered the Kerala state government to give each flat owner Rs 25 lakh as interim compensation.**
- The case of the demolition of more than 300 flats in Kerala’s Kochi for flouting the Coastal Regulation Zone (CRZ) guidelines dates back to 2006 and the issue came to the Supreme Court in 2016.
- **According to CRZ III, if an area is notified it should be relatively undisturbed and untouched. In CRZ-III area, no construction is allowed within 200 metres from the coast.**

ROAD ACCIDENTS IN INDIA-2018

- **Ministry of Road Transport released the ‘Road Accidents in India, 2018’.**
- **Road accidents** in the country have increased marginally by 0.46 % during 2018 over 2017. **The fatalities** during the same period have also risen by about 2.37%.
- **Road accident injuries** have however showed a decrease of 0.33% in 2018 as compared to 2017.
- As in 2017, the State of **Tamil Nadu** recorded the highest number of road accidents in 2018. Similarly, as in 2017, the number of persons killed in road accident was the highest in **Uttar Pradesh** in 2018.
- **National Highways** accounted for 30.2 % of total road accidents and 35.7 % of deaths in 2018. **State Highways** accounted for 25.2 % and 26.8 % of accidents and deaths respectively. **Other Roads** were responsible for the balance 45 % of accidents and 38% deaths respectively.
- **Accident related killings by type of road user:** the number of Pedestrians killed accounted for 15%, the share of cyclists was 2.4% and that of Two wheelers was 36.5%.
- **Adults of 18 - 45 years** accounted for 69.6 % of road accident victims.
- **The share of males** in number of total accident deaths was 86% while the share of females hovered around 14% in 2018.
- **Over speeding is a major killer, accounting for 64.4% of the persons killed** followed by driving on the wrong side of the road which accounted for 5.8% of the deaths.

POST DISASTER NEEDS ASSESSMENT (PDNA)

- The National Institute of Disaster Management (NIDM) organized a National workshop on Post Disaster Needs Assessment (PDNA).
- The PDNA tool has been developed by the UN Development Group, the World Bank and the European Union to assess the full extent of a disaster’s impact, define the needs for recovery, so as to design a recovery strategy and guide donors’ funding.

LOCATION IN NEWS

Sultanpur Lodhi	Minister of Railways launched Sarbat Da Bhala Express to connect New Delhi with Sultanpur Lodhi, a city in Punjab, located on the south bank of a seasonal rivulet called Kali Bein. It is at Sultanpur Lodhi, that the first Sikh Guru, Nanak Dev received enlightenment. The town is named after its founder, Sultan Khan Lodhi, who was a general of Mahmud of Ghazni in 1103 AD.
Syama Prasad Mookerjee Tunnel	Centre renamed Chenani Nashri Tunnel on NH 44 in J&K as Syama Prasad Mookerjee Tunnel , Named after Syama Prasad Mukherjee who in 1951 founded the Bharatiya Jana Sangh, predecessor to BJP. It is the longest tunnel in India, connecting Udhampur to Ramban in Jammu.
Marawah Island	The oldest known natural pearl in the world was discovered on Marawah Island, located off the coast of Abu Dhabi, UAE.
Chewang rinchen setu	Defence Minister inaugurated Chewang Rinchen Setu in Ladakh. It is named after Colonel Chewang Rinchen (1931 – 1997), one of only six Indian service personnel to have twice won the Maha Vir Chakra (MVC).
Suranga Bawadi	The World Monuments Fund, a New York-based NGO has included Suranga Bawadi in the World Monument Watch list for 2020. Suranga Bawadi, an ancient Karez system (Underground canals to supply water), was built by Adil Shahi era in Karnataka.
Mount Paektu	North Korea's leader Kim Jong Un visited Paektu Mountain, also known as Baekdu Mountain and Changbai Mountain. It is situated at the border between North Korea and China. This active stratovolcano is the highest peak in the Korean peninsula. It is considered sacred by the Koreans.
Kalimantan	Indonesia's president announced that national capital will move from Jakarta, on the island of Java, to Kalimantan the Indonesian portion of the island of Borneo.
Longest Electrified Rail Tunnel	The longest electrified tunnel in India was commissioned by South Central Railway (SCR) on the Venkatachalam-Obulavaripalle railway line between Cherlopalli and Rapuru stations.
Guayaquil	Ecuador, a country in South America, moved its government from the capital in Quito to the coastal city of Guayaquil amid violent protests over the end of fuel subsidies.
Tulagi Island	Solomon Islands signed an agreement with China to lease Tulagi island for the development of the special economic zone.
Siachen Glacier	Centre announced that Siachen Glacier will be open for tourists. The Siachen Glacier lies between the Saltoro Ridge and Karakoram range. Glacier's melting waters are the main source of the Nubra River in the Indian region of Ladakh, which drains into the Shyok River. At 76 km long, it is the longest glacier in the Karakoram and second-longest in the world's non-polar areas.
Motihari-Amlekhganj Pipeline	Motihari-Amlekhganj petroleum pipeline, the first ever cross-border petroleum products pipeline in South Asia was inaugurated.

VAJIRAM & RAVI

	The 69-km pipeline will transport fuel from Barauni refinery in Bihar's Begusarai district to Amalekhgunj in Nepal.
Kunduz	Taliban fighters have attacked the strategic city of Kunduz in Afghanistan. It is located at confluence of Kunduz and Khanabad River.
Kalapani	New political map of India shows Kalapani as part of Uttarakhand, India, which was protested by Nepal. It borders Nepal and Tibet.
Ghumar And Al-Baquora	Jordan terminated annexes of 'Baquoura and Ghumar' under the 1994 Wadi Araba Peace Treaty signed between Jordan and the Israel . Under it, Jordan leased Baqura and Ghumar areas, formally under Jordanian sovereignty, to Israel for a period of 25 years.
Danakil Depression	Researchers have found that any form of microbial life was absent in the hot, saline, hyperacid ponds of the Dallol geothermal field in Ethiopia. Dallol lies in the evaporitic plain of the Danakil depression at the Afar Triangle, in the prolongation of the Erta Ale basaltic volcanic range.
Tummalapalle	The Andhra Pradesh government ordered inquiry into complaints about groundwater pollution caused by the uranium processing project of the Uranium Corporation of India Limited (UCIL) at Tummalapalle in Vemula mandal of Kadapa district.
Deocha Pachami Dewanganj Harinsingha	The Central Government has allocated the Deocha Pachami Dewanganj - Harinsingha coal block, located in Birbhum district (West Bengal), to the West Bengal Power Development Corporation Limited (WBPDC). it is the second largest coal mine in the world.
Aarey Colony	Mumbai Police imposed Section 144 of the CrPC to ban unlawful assembly in Aarey Colony – situated in Goregaon, Mumbai – after activists protested against the felling of trees in the green zone for a Metro car shed.
Sisseri River Bridge	Defence Minister inaugurated the Sisseri River Bridge on the Pasighat-Ranaghat-Roing Road in East Siang District, Arunachal Pradesh.
Abqaiq Oil Processing Facility	Houthi rebels from Yemen carried out drone attacks on Abqaiq oil processing facility, operated by Saudi Aramco in Buqyaq, Saudi Arabia. It is the world's largest oil processing facility.
Whakaari	Whakaari (also known as White Island) is an active andesite stratovolcano situated in the New Zealand's Bay of Plenty. It explosively erupted in December 2019.

POLITY & GOVERNANCE

INTER-STATE RIVER WATER DISPUTES (AMENDMENT) BILL, 2019

- The Inter-State River Water Disputes (Amendment) Bill, 2019 was passed by Lok Sabha.
- It amends the Inter-State River Water Disputes Act, 1956. The Act provides for the adjudication of disputes relating to waters of inter-state rivers and river valleys.
- **Disputes Resolution Committee:**
 - Under the Bill, when a state puts in a request regarding any water dispute, the central government will set up a Disputes Resolution Committee (DRC), to resolve the dispute.
 - The DRC will comprise of a Chairperson, and experts with at least 15 years of experience in relevant sectors, to be nominated by the central government. It will also comprise one member from each state, who are party to the dispute.
- **Tribunal:**
 - If a dispute cannot be settled by the DRC within one year (extendable by six months), the central government will refer it to the Inter-State River Water Disputes Tribunal.
 - This Tribunal can have multiple benches.
 - The Tribunal will consist of a Chairperson, Vice-Chairperson, three judicial members, and three expert members who will be appointed by the central government.

ARBITRATION AND CONCILIATION (AMENDMENT) BILL, 2019

- Parliament has passed the Arbitration and Conciliation (Amendment) Bill, 2019 to amend the **Arbitration and Conciliation Act, 1996**.
- Present system of appointment of arbitrators by the Supreme Court (SC)/ High Court (HC) will be changed to a system where the arbitrators are appointed by the "**Arbitral institutions**" designated by the SC/HC.
- It establishes **Arbitration Council of India**, an independent body, for the purpose of grading of arbitral institutions and accreditation of arbitrators etc.
- It provides for **time-bound settlement of disputes** as well as **accountability of the arbitrator**.
- **Details of arbitration proceedings will be kept confidential** except for the details of the arbitral award in certain circumstances.
- It clarifies that **section 26 of the Arbitration and Conciliation (Amendment) Act, 2015**, is applicable only to the arbitral proceedings which commenced on or after 23rd October, 2015.
- The bill implements the recommendations made by the **High Level Committee (chaired by B.N. Srikrishna)** which submitted its Report in July, 2017.

What Is Arbitration

- **Arbitration** is a procedure in which a dispute is submitted, by agreement of the parties, to an arbitrator who make a binding decision on the dispute.

- Acc. to WIPO, its key characteristics are: (1) Arbitration is **consensual**, (2) The **parties choose the arbitrator**, (3) A **neutral** arbitrator is chosen, (4) Arbitration is a **confidential** procedure and (4) The **decision** of the arbitral tribunal is **final and easy to enforce**.

NEW DELHI INTERNATIONAL ARBITRATION CENTRE BILL, 2019

- Parliament has passed the New Delhi International Arbitration Centre Bill, 2019.
- **Objectives of Bill:** Creation of NDIAC as an independent and autonomous regime for institutionalized domestic and international arbitration and establishing India as an International Hub of Arbitration.
- **Status:** The bill has provision to declare the NDIAC as an institution of national importance.
- **Composition:** The NDIAC will be headed by a **Chairperson**, who has been a Judge of the Supreme Court or a Judge of a High Court or an eminent person, having experience in arbitration to be appointed by the Central Government in consultation with the Chief Justice of India.

CONSUMER PROTECTION BILL, 2019

- Parliament has passed the Consumer Protection Bill 2019. The bill aims at protecting the interests of consumers by establishing authorities for timely and effective administration and settlement of consumers' dispute.
- There is provision for central government to set up a **Central Consumer Protection Authority (CCPA)** to promote, protect and enforce the rights of consumers and will be empowered to investigate, recall, refund and impose penalties.
- It provides for an **Alternate Dispute Resolution (ADR)** mechanism. Mediation cells will be attached to Consumer Forum. It ensures ease of approaching Consumer Commission and simplification of Adjudication process.
- It provides for deterrent punishment to check **misleading advertisements and adulteration of products**.
- There are provision for rules for new age consumer issues related to **e-commerce & direct selling**. A manufacturer or product service provider or product seller will be responsible to compensate for injury or damage caused by defective product or deficiency in services.

NATIONAL PARTY

- The Election Commission of India (ECI) declared the National People's Party led by Meghalaya Chief Minister Conrad K. Sangma as a national party. This made the NPP **the first political party from the north-eastern region to get national party status**.
- **With this, NPP becomes the 8th national party in India.** Before NPP's elevation, India had seven national parties. Trinamool Congress, led by West Bengal Chief Minister Mamata Banerjee, became the seventh in September 2016.
- **Criteria:**
 - NPP was given the national party status for fulfilling conditions such as **polling more than 6% of the total votes in the last general election and being recognised as a State party in at least four States**.
 - The NPP is recognised as a State party in Arunachal Pradesh, Manipur, Meghalaya and Nagaland.

SPEAKER PROTEM

- Seven-time Lok Sabha MP Virendra Kumar took oath as Pro-tem Speaker of the Lok Sabha. President Ram Nath Kovind administered oath to him.
- **Constitutional Provisions:**

- **Article 94(2)** of the constitution of India states that the office of the Speaker becomes vacant immediately before the first meeting of the new Lok Sabha.
- **Article 95(1)** states that while the office of Speaker and deputy speaker is vacant, the duties of the office shall be performed by such member of the House of the People as the President may appoint for the purpose.
- *Similar provisions exist for the State Legislative Assembly under Article 183 (2) and Article 184 (1) of the Constitution.*
- **Who is appointed?** By tradition the senior most Member of Lok Sabha (i.e. having the most experience) is appointed.
- **Who appoints him/her?** The President himself/herself administers the oath to him/her. In the case of state legislative assembly, Governor of the State performs this task.
- **Powers and Functions:** A “Speaker Protem” is appointed to perform the duties of the Speaker from the commencement of first sitting of newly constituted Lok Sabha till the election of a new Speaker. He has all the powers of the speaker, but main duties are:
 - Administering the oath of newly elected members and
 - Presiding over the election of new Lok Sabha speaker.
- **Duration of his/her term:** When the new speaker is elected by the house, the office of the speaker pro tem ceases to exist. Hence, this is a temporary office.

CABINET COMMITTEES

- The Government of India has reconstituted six Cabinet Committees while two new Committees have been formed. **These are:** (1) Appointments Committee, (2) Committee on Accommodation, (3) Economic Affairs, (4) Parliamentary Affairs, (5) Political Affairs, (6) Security, (7) Investment & Growth and (8) Employment & Skill Development, the last
- **Underlying rules:** These have been reconstituted under the Transaction of Business Rules.
- **Chairmanship:** Defence Minister Rajnath Singh will head the Cabinet committee on Parliamentary affairs while Home Minister Amit Shah will head Committee on Accommodation. Rest all six committees will be headed by the Prime Minister.

AUTONOMOUS DISTRICT COUNCILS (ADCs)

- The 15th Finance Commission held a meeting with the representatives of the Autonomous District Councils (ADCs) of Meghalaya.
- **Constitutional provisions:**
 - According to Article 243M (1) of the constitution, nothing in the part IX of the constitutions (provisions for creating Panchayat) shall apply to the Scheduled Areas referred to in clause (1), and the tribal areas referred to in clause (2), of the Article 244.
 - The Sixth Schedule makes provision that these tribal areas will be autonomous districts and be governed by Autonomous District Councils.
- **Tenure:** Term of the District Councils is for five years from the date of their constitution.
- **Governance:** The autonomous district council is governed by an Executive Committee.
- **Functions:** The functions of ADCs as defined in schedule 6 of the constitution included making laws on land, management of forests, except reserved forests, appointment of traditional chiefs and headmen, making rules regulating the inheritance of property, marriage, divorce, constitution of village courts, to undertake development works etc.

- **There are 3 Autonomous District Councils (ADCs) in Meghalaya** namely the Khasi Hills ADC, the Garo Hills ADC and the Jaintia Hills ADC.

FOREIGNERS TRIBUNALS

Background:

- The Foreigners Tribunals are quasi-judicial bodies, unique to Assam, to determine if a person staying illegally is a “foreigner” or not.
- In other parts, once a ‘foreigner’ has been apprehended by the police for staying illegally, he or she is produced before the local court under the **Passport Act, 1920, or the Foreigners Act, 1946**, with the punishment ranging from imprisonment of three months to eight years.
- Once the accused have completed the sentence, the court orders their deportation, and they are moved to detention centres till the country of origin accepts them.

Recent Decision

- With Assam’s National Register of Citizens as the backdrop, the Ministry of Home Affairs has amended the Foreigners (Tribunals) Order, 1964 by the Foreigners (Tribunal) Order, 2019.
- **It has empowered district magistrates in all States and UTs to set up Foreigners tribunals** to decide whether a person staying illegally in India is a foreigner or not. Earlier, such powers to constitute tribunals vested with the Centre only.
- **It has also empowered individuals to approach the Tribunals.** Earlier only the State administration could move the Tribunal against a suspect.
- The amended order also allows District Magistrates to refer individuals who haven’t filed claims against their exclusion from NRC to the Tribunals to decide if they are foreigners or not.

SECTION 129 OF THE MOTOR VEHICLES ACT, 1988

- Protective headgear of prescribed standards has been made mandatory for children above 4 years while travelling on a motorcycle. The safety measures have been included in the **Motor Vehicles (Amendment) Act 2019**.
- Now section 129 of the principal Act reads “Every person, above four years of age, driving or riding or being carried on a motorcycle of any class or description shall, while in public place wear protective headgear conforming to standards prescribed by the Central government”.
- **Only Sikhs wearing turban have been exempted from the provision of Section 129.**

SYSTEMATIC VOTERS’ EDUCATION AND ELECTORAL PARTICIPATION PROGRAM (SVEEP)

- A National Conference of SVEEP Nodal Officers was organized to deliberate upon the blueprint for the next five years. **SVEEP** is the flagship program of the Election Commission of India for Voter education, spreading voter awareness and promoting voter literacy in India.
- **History:** SVEEP began with the introduction of planned IEC (Information, Education, and Communication) interventions in the Jharkhand elections of end-2009, which was subsequently revamped in 2010 and given its present name.

SECTION 69(1), RPA, 1951

- The Gujarat Congress moved the Supreme Court challenging the decision of the Election Commission (ECI) to hold separate bypolls to two Rajya Sabha seats in the state which fell vacant due to the election of BJP chief Amit Shah and Smriti Irani to Lok Sabha.
- The petition said the basic principle is that the elections shall be held together so that the system of proportional representation by means of single transferable vote can be applied.

- Challenging the ECI's reasoning of the vacancy of the two seats as 'Casual Vacancy' for conducting separate by-polls, the petition emphasised that **"Section 69(2) of the RP act read with section 67A and Section 68(4), makes it a Statutory Vacancy"**.

Section 69 in The Representation of the People Act, 1951:

- **Title:** Vacation of seats by persons already members of one House on election to other House of Parliament.
- **69(1):** If a person who is already a member of the Lok Sabha is chosen a member of the Rajya Sabha, his seat in the Lok Sabha shall, on the date on which he is so chosen, become vacant.
- **69(2):** If a person who is already a member of the Rajya Sabha is chosen a member of the Lok Sabha, his seat in the Rajya Sabha shall, on the date on which he is so chosen, become vacant.

AADHAAR AND OTHER LAWS (AMENDMENT) BILL, 2019

- Parliament has passed the Aadhaar and Other Laws (Amendment) Bill, 2019. Amendments were necessitated after the **Supreme Court's ruling on privacy**.
- **Acts amended:** The bill seeks to amend Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 and to further amend the Indian Telegraph Act, 1885 and the Prevention of Money Laundering Act, 2002.
- **Salient Features Of The Amendments:**
 - No individual will be compelled to **provide proof of possession** of Aadhaar number or undergo authentication for the purpose of establishing his identity unless it is so provided by a law made by Parliament.
 - For the convenience of general public in opening of bank accounts, it will allow the use of Aadhaar number for authentication on a **voluntary basis** as an acceptable KYC document under the Telegraph Act, 1885 and the Prevention of Money Laundering Act, 2002.
 - It gives an option to children who are Aadhaar number holders to cancel their Aadhaar number on attaining the age of eighteen years.
 - It proposes deletion of section 57 of the Aadhaar Act relating to use of Aadhaar by private entities;
 - It prevents denial of services for refusing to, or being unable to, undergo authentication.
 - It provides for establishment of **Unique Identification Authority of India Fund**.

LAPSING OF BILLS

- Vice President of India called for a debate on a Constitutional provision that provides for automatic lapsing of any Bill passed by Lok Sabha but remains pending in Rajya Sabha on the dissolution of the Lok Sabha as this will save Lok Sabha's time.
- **Under Article 107 of the Constitution** "a Bill which is pending in the House of the People, or which having been passed by the House of the People but is pending in the Council of States, shall subject to the provisions of Article 108, lapse on a dissolution of the House of the People".
- He pointed out that 22 Bills lapsed after the dissolution of the 16th Lok Sabha since these had been introduced in the Lower House first.
- He also suggested that a Bill which is not taken up for consideration and passage within five years of introduction should automatically be treated as lapsed. Since Rajya Sabha is a permanent House, Bills introduced there do not lapse, and remain pending, sometimes for decades.

CONSTRUCTIVE VOTE OF NO-CONFIDENCE

- In order to implement simultaneous elections, the ruling BJD in Odisha has proposed the idea of “constructive vote of no-confidence”, if any one of these simultaneously elected legislatures is brought down by a no-confidence motion.
- It is followed in Germany. This was also recommended by Law Commission of India in a 2018 draft report.
- Under Constitution of Germany, Bundestag (Parliament) can remove a chancellor only when it simultaneously agrees on a successor.
- This makes it harder to remove a chancellor because opponents of the chancellor not only must disagree with his or her governing but also must agree on a replacement.
- The underlying premise is that there is a fixed five-year-tenure (for the House) and that there will be a government no matter what.

INNER LINE PERMIT (ILP) SYSTEM

- A petition filed before the Supreme Court has sought a direction to the Centre and the Nagaland government to take steps for the protection of non-Nagas living in Dimapur following the imposition of the Inner Line Permit (ILP).
- Inner Line Permit (ILP) is an official travel document issued by the Government of India to allow inward travel of an Indian citizen into a protected/restricted area for a limited period. The document is an effort by the Government to regulate movement to certain areas located near the international border of India.
- ILP system is currently in operation in Mizoram, AP and Nagaland. Manipur had the system of ILP but it was abolished in 1950.
- **Section 2 of Bengal Eastern Frontier Regulation, 1873** empowers a State government to prescribe ‘Inner Line’ to prohibit citizens of India or any class of such citizens going beyond the prescribed line without a pass.

PAROLE

- Gurmeet Ram Rahim Singh, the Dera Sacha Sauda chief convicted of rape and murder, has applied to the Haryana government for parole.
- **What is it?** Parole is a system of releasing a prisoner with suspension of the sentence. The release is conditional, usually subject to behaviour, and requires periodic reporting to the authorities for a set period of time.
- **Objective:** Parole is considered a reformatory process, and was introduced with a view to humanising the prison system.
- In India, parole and furlough are covered under the **Prison Act of 1894**. Prisoners convicted of multiple murders or under the Unlawful Activities Prevention Act are not eligible for parole.

Comparison with Furlough:

- A broadly similar but subtly different concept is furlough, which is **given in case of long-term imprisonment**.
- While **furlough is seen as a matter of right**, to be granted periodically irrespective of any reason and merely to enable the prisoner to retain family and social ties, parole is not a matter of right and may be denied to a prisoner even when he makes out a sufficient case.

REGISTER OF INDIGENOUS INHABITANTS OF NAGALAND (RIIN)

- Nagaland Home Commissioner R. Ramakrishnan has issued a notification for the setting up of the Register of Indigenous Inhabitants of Nagaland (RIIN), a variant of the National Register of Citizens (NRC) that neighbouring Assam is updating.
- **Objective:** It is aimed at preparing a master list of all indigenous peoples and checking the issuance of fake Indigenous Inhabitant Certificate (IIC) to ineligible persons.
- **Methodology:**
 - It will be prepared after an extensive survey with the help of a village-wise and ward-wise list of indigenous inhabitants based on official records.
 - The survey will take into account whether an indigenous inhabitant is residing in his/her permanent residence or has moved elsewhere. Aadhar numbers, wherever applicable, will be also recorded.
- **Bodies involved:** To be monitored by the Home Commissioner, it will be prepared under the supervision of each district administration.

FREE LEGAL AID

- In 1987, the Legal Services Authorities (LSA) Act was enacted to give free and competent legal services to the poor. The Act paved the way for the constitution of National Legal Service Authority (NALSA) and other legal service institutions at the State, district and taluka level.
- Free legal services under LSA Act are available to a person belonging to Schedule Tribe and Schedule Caste, woman, child, victim of human trafficking, differently abled person, industrial workman, and person in custody in a protective home and the poor.
- According to analysis of NALSA data, a majority of the people who are entitled to the free legal aid system see the service as last-ditch option. This first-of-its-kind pan-India research has found that people don't have faith over the services of legal aid counsel (LAC) under the free legal aid services due to a variety of factors.

SHORT DURATION DISCUSSION

- Rajya Sabha took up the short duration discussion on the need for electoral reforms.
- The short duration discussion is a procedural device to enable members to raise discussion on matters of **urgent public importance without a formal motion**.
- **Notice:**
 - Notice to raise a short duration discussion is to be **given in writing**, addressed to the Secretary-General, specifying clearly and precisely the matter to be raised.
 - The notice is required to be accompanied by an **explanatory note stating reasons** for raising the discussion and supported by **signatures of at least two other members**.
 - **The Chairman decides the admissibility of the notice.** The Chairman may refuse to admit the notice.
- **Time of discussion:** The Chairman may allow such time **not exceeding two and a half hours** for holding such discussion.
- **Procedure for raising the discussion:**
 - The first member or in his absence the second one and so on, in whose name the discussion stands, makes a short statement.
 - Thereafter, members are called to speak party-wise. At the end of the discussion, the Minister concerned replies and the discussion is concluded.

- There is **no formal motion** before the House **nor is there any voting**. The member who raises the discussion has **no right of reply**.

COMPULSORY RETIREMENT OF GOVERNMENT OFFICIALS

- The Minister for Personnel informed the Lok Sabha that as per disciplinary rules, the government has right to proceed against corrupt officials on the basis of available evidence.
- The Government also has the absolute right to retire Government officials prematurely on the ground of lack of integrity and ineffectiveness, in public interest, as per the provisions of
 - Fundamental Rules (FR) 56(j)(I),
 - Rule 48 of Central Civil Services (CCS) Pension) Rules, 1972 and
 - Rule 16(3) (Amended) of All India Services (Death-cum-Retirement Benefits) [AIS(DCRB)] Rules, 1958.
- These rules lay down the policy of periodic review and premature retirement of Government servants, which is a continuous process.
- For the period July 2014-May 2019, a total of 36,756 Group-A and 82,654 Group-B officers have been reviewed under **Fundamental Rules (FR) 56(j)(I)** and other provisions. Actions under the Rules have been recommended against 125 Group A and 187 Group B officials.

PROTECTION OF HUMAN RIGHTS (AMENDMENT) BILL, 2019

Parliament passed The Protection of Human Rights (Amendment) Bill, 2019 to make National Human Rights Commission (NHRC) and the State Human Rights Commission (SHRC) more inclusive and efficient. Its **Salient Features** are:

1. A person who has been a Judge of the Supreme Court is also made eligible to be appointed as Chairperson of the Commission in addition to the person who has been the Chief Justice of India;
2. A person who has been a Judge of a High Court is also made eligible to be appointed as Chairperson of the State Commission in addition to the person who has been the Chief Justice of the High Court;
3. Increase the Members of the Commission from 2 to 3 of which, one shall be a woman;
4. Include Chairperson of the National Commission for Backward Classes, Chairperson of the National Commission for Protection of Child Rights and the Chief Commissioner for Persons with Disabilities as deemed Members of the Commission;
5. Reduce the term of the Chairperson and Members of the Commission and the State Commissions from 5 to 3 years and shall be eligible for re-appointment;
6. To confer upon State Commissions, the functions relating to human rights being discharged by the Union territories, other than the UT of Delhi, which will be dealt with by the Commission.

RIGHT TO INFORMATION (AMENDMENT) BILL, 2019

Parliament passed the Right to Information (Amendment) Bill, 2019 to amend the Right to Information Act, 2005. The Bill changes the terms and conditions of service of the CIC and Information Commissioners at the centre and in states.

- **Term:**
 - **RTI Act, 2005:** The Chief Information Commissioner (CIC) and Information Commissioners (ICs) (at the central and state level) will hold office for a term of five years.
 - **RTI (Amendment) Bill, 2019:** The central government will notify the term of office for the CIC and the ICs.
- **Quantum of Salary:**

- **RTI Act, 2005:** The salary of the CIC and ICs (at the central level) will be equivalent to the salary paid to the Chief Election Commissioner and Election Commissioners, respectively.
- **RTI (Amendment) Bill, 2019:** The salaries, allowances, and other terms and conditions of service of the central and state CIC and ICs will be determined by the central government.
- **Deductions in Salary:**
 - **RTI Act, 2005:** At the time of the appointment of the CIC and ICs (at the central and state level), if they are receiving pension or any other retirement benefits for previous government service, their salaries will be reduced by an amount equal to the pension.
 - **RTI (Amendment) Bill, 2019:** The Bill removes these provisions.

ELECTRONICALLY TRANSMITTED POSTAL BALLOT SYSTEM (ETPBS)

- Electronically Transmitted Postal Ballot System (ETPBS) recorded 60.14% turnout during the recently concluded Lok Sabha Election 2019.
- **Implementing agency:** Electronically Transmitted Postal Ballot System (ETPBS) is a Flagship IT Program of Election Commission of India (ECI).
- **What is it?** Through this system, the service voters cast their vote on an electronically received postal ballot, from anywhere outside their constituency, thus reducing the chances of losing the voting opportunity.
- **Who are service voters:** Persons working in **Central Forces** under Arms Act and Government officials **deployed in Embassies** outside the country are classified as Service Voters and are provisioned for online enrolment.
- **Features:** ETPBS is a fully secured system, having two security layers. Secrecy of voting is maintained through the use of OTP and PIN and no duplication of casted ETPB is possible due to the unique QR Code in the portal <https://www.etpbs.in>.

ABETMENT OF SUICIDE

- The body of Cafe Coffee Day owner VG Siddhartha was found in Netravati river in Karnataka, a day after a purported letter, written by him to the Board of Directors, surfaced.
- Abetment of suicide is an offence under section 306 of the Indian penal code, 1860.
- According to the 306 section of the Indian Penal Code, a person abetting the suicide of another person shall be punished with imprisonment up to 10 years and shall also be liable to fine.
- Abetting a suicide is a non-bailable charge.
- A person is guilty of abetment when:
 - He instigates someone to commit suicide (or)
 - He is part of a conspiracy to make a person commit suicide (or)
 - He intentionally helps the victim to commit suicide by doing an act or by not doing something that he was bound to do.

ARTICLE 370

Union Minister for Home Affairs, Shri Amit Shah, introduced two bills and two resolutions regarding Jammu & Kashmir (J&K) today. Both the bills were passed by Rajya Sabha unanimously.

These are as follows:

1. **Constitution (Application to Jammu & Kashmir) Order, 2019 {Ref. Article 370(1) of Constitution of India} – issued by President of India to supersede the 1954 order related to Article 370:**

2. **Resolution for Repeal of Article 370 of the Constitution of India {Ref. Article 370 (3)}:**
3. **Jammu & Kashmir (Reorganisation) Bill, 2019 {Ref. Article 3 of Constitution of India}:** It makes Jammu & Kashmir a Union territory with a Legislative Assembly, along with Union Territory status to Ladakh without a Legislative Assembly.
4. **Jammu & Kashmir Reservation (2nd Amendment) Bill, 2019:** It amends the Jammu & Kashmir Reservation Act 2004. This bill seeks to extend the 10% quota to economically weaker sections of society in J&K in jobs and educational institutions.

Repeal of Article 370:

- Government is moving a resolution which would repeal the provisions under Article 370 of the Constitution of India, which granted a special status to the state of J&K.
- Under article 370(3), there is a provision that President, on recommendation of the Parliament, has the power to amend or cease the implementation of article 370, through a public notification.
- Consequently, the Constitution of India would get applicable to J&K, on par with other states/UTs of the country, the Minister added.

DIXON PLAN OF 1950

- With Parliament adopting a Bill to make Jammu and Kashmir into two Union Territories with carving out Ladakh from the rest, the proposal of dividing the State has fructified.
- The idea of dividing Jammu and Kashmir into two or more parts traces its origin to the Dixon Plan of 1950. Owen Dixon, an Australian jurist chosen by the United Nations to mediate between India and Pakistan on the J&K issue, in his report of September 1950, suggested a package, which did not find acceptance from India.
- The Plan had assigned Ladakh to India and northern areas and Pakistan-Occupied Kashmir to Pakistan, besides splitting Jammu between the two. It had proposed a plebiscite in the Kashmir valley.

SUPREME COURT REGIONAL BENCHES

- The Vice President of India, Venkaiah Naidu has advocated the need to set up Supreme Court benches in different regions in the country, including one at Chennai, to bring the judicial system closer to people.
- The Law Commission, in its report submitted to the government in 2009, recommended that –
 - a Constitution Bench be set up in Delhi to deal with constitutional and allied issues, and
 - four Cassation Benches in Delhi (north), Chennai/Hyderabad (south), Kolkata (east) and Mumbai (west) to deal with all appellate work arising out of the orders/judgments of the High Courts.

Article 130 in The Constitution Of India:

- **Title:** Seat of Supreme Court.
- **Text:** The Supreme Court shall sit in Delhi or in such other place or places, as the Chief Justice of India may, with the approval of the President, from time to time, appoint.

‘D’ VOTER

- With few days left for the publication of the final National Register of Citizens (NRC), the Election Commission of India (ECI) is now faced with the legal question whether those excluded should be marked as ‘D’ voters.
- ‘D’ voters, sometimes also referred to as Dubious voter or Doubtful voter, are a category of voters in Assam whose citizenship is doubtful or under dispute.

- This category was introduced in 1997 at the time the Election Commission of India (ECI) was revising the state's voter list.
- While 'D' voters continue to remain on Assam's electoral roll, they cannot vote in an election unless their case is decided by a Foreigners' Tribunal. Around 1.2 lakh 'D' voters did not participate in the recently concluded Lok Sabha elections.

GOOD GOVERNANCE INDEX (GGI)

- On the occasion of Good Governance Day, the Union Minister of Personnel launched the Good Governance Index (GGI), a uniform tool across States to assess the Status of Governance and impact of various interventions taken up by the State Government and UTs.
- The Good Governance Day is observed on the birth anniversary of former Prime Minister Atal Bihari Vajpayee (December 25).
- **The GGI takes into consideration ten sectors:** 1). Agriculture and Allied Sectors, 2). Commerce & Industries, 3). Human Resource Development, 4). Public Health, 5). Public Infrastructure & Utilities, 6). Economic Governance, 7). Social Welfare & Development, 8). Judicial & Public Security, 9). Environment and 10). Citizen-Centric Governance.
- These ten Governance Sectors are measured on total 50 indicators. **The states and UTs are divided into three groups:** a). Big States, b). North-East & Hill States and c). UTs.
- The states and UTs are ranked on all indicators separately, at the same time composite ranking is also calculated for these states and UTs under their respective groups based upon these indicators.

CITIZENSHIP (AMENDMENT) ACT 2019

- Parliament passed the Citizenship (Amendment) Bill 2019 to amend the Citizenship Act, 1955 which regulates who may acquire Indian citizenship and on what grounds.
- The Bill seeks to grant Indian Citizenship to persons belonging to Hindu, Sikh, Buddhist, Jain, Parsi and Christian communities who have migrated to India after facing persecution on grounds of religion in Pakistan, Afghanistan and Bangladesh.
- The Bill make applicants belonging to the said communities from the aforesaid countries eligible for **citizenship by naturalisation** if they can establish their residency in India for 5 years instead of the existing 11 years.
- The provisions of the amendments to the Act would not apply to tribal area of Assam, Meghalaya, Mizoram or Tripura as included in the Sixth Schedule to the Constitution and the area covered under 'The Inner Line' notified under the Bengal Eastern Frontier Regulation, 1873. Manipur would be brought under the ILP regime.
- It seeks to amend section 7D of the act to empower the Central Government to cancel registration as Overseas Citizen of India (OCI) Cardholder in case of violation of any provisions of the Citizenship Act or any other law for the time being in force.

BENGAL EASTERN FRONTIER REGULATIONS (BEFR), 1873

- The Union Cabinet gave its ex-post facto approval to the Adaptation of Laws (Amendment) Order, 2019 issued by the President of India under clause (2) of article 372 of the Constitution to amend the Bengal Eastern Frontier Regulations (BEFR), 1873.
- The notification will extend BEFR to the State of Manipur to give its indigenous people protection from the provisions of Citizenship Amendment Act, 2019 and make necessary changes in the said Regulation.

Inner Line Permit (ILP)?

- Citizens of other States require the ILP to visit the protected areas as per the Bengal Eastern Frontier Regulation, 1873. 'Outsiders' can visit 'ILP' areas for limited period with special permission but are barred from buying immovable property.
- This means that the illegal migrants from the six minority communities who will become Indian citizens as per the proposed amendment will not be able to take up jobs, open businesses or settle down in these areas and will require a permit to enter the States.
- The addition of Manipur to the list of ILP-protected States means that the Citizenship Amendment Act, 2019 will only be applicable in some parts of Tripura and Assam.



DETENTION CENTRES

- Chief Minister Mamata Banerjee said she that will not allow any detention centre to operate in the State. Kerala also decided to put it on hold.
- The Centre has the power to deport foreign nationals staying illegally in the country under **Section 3(2)(c) of The Foreigners Act, 1946**. State governments have also been entrusted under **Article 258(1) of the Constitution** to take similar steps.
- In 1998, the Ministry of Home Affairs (MHA) asked all States/UTs to restrict the movement of convicted foreign nationals who had completed their jail sentence and confine them detention centres/camps, pending confirmation of their nationality from the country concerned.
- The centres are also used to hold foreigners who have been caught overstaying their visa term. In January 2019, a detailed manual on "model detention centres" was circulated to make a distinction between "jails and detention centres".

NATIONAL POPULATION REGISTER (NPR)

- The Union Cabinet approved a proposal to conduct updation of National Population Register (NPR), a register of usual residents of the country. It includes both Indian citizens as well as a foreign citizen.
- According to the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003, **a usual resident is a person** who has resided in a local area for the past 6 months or more or a person who intends to reside in that area for the next 6 months or more.
- It is being prepared at the local (Village/sub-Town), sub-District, District, State and National level under provisions of the **Citizenship Act 1955 and the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003**.

NPR vs NRC: The NPR is different from the National Register of Citizens (NRC) which excludes the foreign citizens. NRC is a register containing details of Indian Citizens living in India and outside India.

Timeline:

- The first National Population Register was prepared in 2010 and updation of this data was done during 2015 by conducting door to door survey.
- The next update of the NPR will take place next year from April to September 2020 in all the States/UTs except Assam along with the Houselisting phase of the Census 2021.

Details Required for NPR

- The demographic details of every individual are required on 21 points which includes 'date and place of birth of parents', last place of residence, PAN, Aadhar (on a voluntary basis), Voter ID card number, Driving License Number and Mobile Number.
- In the last NPR done in 2010, the data was collected on the 15 points and it **did not include 'date and place of birth of parents' and last place of residence.**

CONSTITUTION (126TH AMENDMENT) BILL, 2019

- Parliament has passed the Constitution (126th Amendment) Bill 2019.
- The Constitution provides for reservation of seats for Scheduled Castes (SCs) and Scheduled Tribes (STs) and representation of the Anglo-Indian community by nomination, in Lok Sabha and Legislative Assemblies of states.
- This has been provided for a period of 70 years since the enactment of the Constitution and will expire on January 25, 2020. The Bill seeks to extend the reservation for SCs and STs by another 10 years till January 25, 2030.
- Opposition parties supported the Bill but raised questions over the non-inclusion of Anglo-Indians from the ambit of it.

Anglo Indians

- The Anglo-Indian community in India traces its origins to an official policy of the British East India Company to encourage marriages of its officers with local women. The term Anglo-Indian first appeared in the Government of India Act, 1935.
- Article 366(2) of the Constitution Of India states: "An Anglo-Indian means a person whose father or any of whose other male progenitors in the male line is or was of European descent but who is domiciled within the territory of India and is or was born within such territory of parents habitually resident therein and not established there for temporary purposes only..."
- Provision for nomination of two Anglo-Indians to the Lok Sabha was made under Article 331 of the Constitution. Article 333 of Constitution deals with the representation of the Anglo-Indian community in the Legislative Assemblies.
- The number of people who identified themselves as Anglo-Indian was 296, according to the 2011 Census.

SECTION 144 of CrPC

- Various State governments issued prohibitory orders under Section 144 of the Code Of Criminal Procedure (CrPC), 1973 to deal with demonstrations by protesters against the Citizenship Amendment Act.
- Section 144 of the CrPC, 1973 generally prohibits public gathering. It authorises the Executive Magistrate of any state or territory to issue an order to prohibit the assembly of four or more people in an area.
- According to the law, every member of such 'unlawful assembly' can be booked for engaging in rioting. The **maximum punishment for such act is three years.** Moreover, obstructing police from breaking up an unlawful assembly is a punishable offence as well.
- Section 144 also restricts carrying any sort of weapon in that area where it has been imposed and people can be detained for violating it.
- Section 144 is imposed in urgent cases of nuisance or apprehended danger of some event that has the potential to cause trouble or damage to human life or property.

- No order under Section 144 shall remain in force for more than two months but the state government can extend the validity for two months and maximum up to six months. It can be withdrawn at any point of time if situation becomes normal.
- **Background:** Section 144 was used for the first time in 1861 by the British Raj, and thereafter became an important tool to stop all nationalist protests during the Freedom Struggle. However, the use of the section in Independent India remains controversial as very little has changed.

Section 144 vs Curfew?

- Section 144 is generally prohibitory in nature. It restricts from public gathering, but doesn't bar it all together.
- A curfew, on the other hand, orders people to stay indoors for a specific period of time. So, the authorities can impose curfew for certain period of time (However, the authorities can also extend the curfew if the need be). One also needs a prior approval from the local police for moving out during curfew.

OATH TAKEN BY A MINISTER

- Former Maharashtra CM Devendra Fadnavis alleged that the oath-taking ceremony of the new government had violated the Constitution. CM Uddhav Thackeray invoked Chattrapati Shivaji and “my parents” at the start of the oath, before reading out the text, which allegedly altered the oath itself.
- **Article 164(3) says:** “Before a Minister enters upon his office, the Governor shall administer to him the oaths of office and of secrecy according to the forms set out for the purpose in the Third Schedule.”
- **The Third Schedule requires** the taker of the oath to either “swear in the name of God” or to “solemnly affirm” to “bear true faith and allegiance to the Constitution...”.
- **Article 164** makes it clear that the text of the oath is sacrosanct, and the person taking the oath has to read it out exactly as it is, in the given format.
- **If a person wanders from the text**, it is the responsibility of the person administering the oath — in this instance the Governor — to interrupt and ask the person being sworn in to read it out correctly. If the Governor approves the oath, the matter is closed and cannot be legally challenged.

NCT OF DELHI (RECOGNITION OF PROPERTY RIGHTS OF RESIDENTS IN UNAUTHORISED COLONIES) BILL, 2019

- Parliament passed the National Capital Territory of Delhi (Recognition of Property Rights of Residents in Unauthorised Colonies) Bill, 2019.
- The Bill provides for **recognising the property rights of residents of certain unauthorised colonies** in the NCT of Delhi. The Bill provides that the central government may regularise transactions of immovable properties held by residents of certain unauthorised colonies, through notification.
- **The Bill defines a resident as a person** with physical possession of property on the basis of a registered sale deed or certain other documents. The definition includes legal heirs of residents but does not include any tenant, licensee, or persons permitted to use the property.
- **An unauthorised colony is defined as** a colony or development comprising of an adjoining area, where no permission has been obtained for the approval of layout or building plans. **The residents will be required to pay certain charges** to obtain such ownership. These charges may be notified by the central government.

DESTRUCTION OF PUBLIC PROPERTY

- Supreme Court expressed displeasure over rioting and destruction of public property.

- The Prevention of Damage to Public Property Act, 1984 punishes anyone “who commits mischief by doing any act in respect of any public property” with a jail term of up to five years and a fine or both.
- **Supreme court guidelines:** In 2009, in the case of *In Re: Destruction of Public & Private Properties v State of AP and Ors*, the Supreme Court issued guidelines based on the recommendations of the two expert Committees.
- **Thomas Committee** recommended reversing the burden of proof against protesters. Accepting the suggestion, the court said that the prosecution should be required to prove that public property had been damaged in direct action called by an organisation, and that the accused also participated in such direct action.
- **Nariman Committee’s** recommendations dealt with extracting damages for destruction. Accepting the recommendations, the court said the rioters would be made strictly liable for the damage, and compensation would be collected to “make good” the damage.

RIGHT TO PROTEST

The police action in Delhi's Jamia Millia Islamia, where the police entered the campus and employed force against students, was widely criticised as the right of citizens to protest peacefully is guaranteed by the Constitution of India.

Constitutional Provisions:

- Articles 19(1)(a) and 19(1)(b) give to all citizens the right to freedom of speech and expression, and to assemble peaceably and without arms.
- However, under Articles 19(2) and 19(3), the right to freedom of speech is subject to “reasonable restrictions in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence”.

Legal Provisions:

- Sections 129-132 of the Code of Criminal Procedure (CrPC), 1973 deal with “Dispersal of assembly by use of civil force”, use of the armed forces in situations of civil unrest, and protection against prosecution for acts done under these sections.
- Sections 141-158 of the Indian Penal Code (IPC), 1860 deal with unlawful assembly, and the responsibilities, liabilities, and punishments related to this offence.

MINORITY EDUCATIONAL INSTITUTIONS

- The Supreme Court observed that under Article 30(1), for an institution to claim minority status, it has to be both “established and administered” by the community.
- **Article 30(1) of the Constitution of India** gives linguistic and religious minorities a fundamental right to establish and administer educational institutions of their choice.
- **The Supreme Court in T.M.A. Pai Foundation vs. State of Karnataka (2002)** held that a minority, whether linguistic or religious, is determinable only by reference to demography of the State and not by taking into consideration the population of the country as a whole.
- **The National Commission for Minority Educational Institutions Act** has been enacted to safeguard the educational rights of the minorities enshrined in Article 30(1) of the Constitution. **Section 2(g) of the Act** defines a Minority Educational Institution as a college or institution (other than a University) established or maintained by a person or group of persons from amongst the minorities.

LOK SABHA STRENGTH

- Former President Pranab Mukherjee said that the number of seats in Lok Sabha should be increased to 1,000 from the present 543, and advocated a corresponding increase in the number of MPs in Rajya Sabha and state legislatures.
- **Article 81 of the Constitution** defines the composition of the House of the People or Lok Sabha. It states that the House shall not consist of more than 550 elected members of whom not more than 20 will represent Union Territories.
- After the passage of the Constitution (126th Amendment) Bill, the strength of the Lok Sabha is 543, of which 530 have been allocated to the states, and the rest to the Union Territories. The strength of Lok Sabha hasn't always been 543 seats. Originally, Article 81 provided that the Lok Sabha shall not have more than 500 members. The first House constituted in 1952 had 497 members.
- The last time the strength of the Lok Sabha was revised was in 1977, which was based on the 1971 census that put the population at 55 crore.

POLITICAL PARTIES REGISTRATION TRACKING MANAGEMENT SYSTEM" (PPRTMS)

- The Election Commission of India (ECI) has reviewed the system and process of registration of political parties. The new guidelines will be effective from 1st January, 2020. Accordingly, the PPRTMS will be implemented through an online portal, to facilitate tracking of status of application by applicants.
- Under PPRTMS, the applicant (who is applying for party registration from 1st January, 2020 onwards) will be able to track the progress of his / her application and will get status update through SMS and email.

AYODHYA LAND DISPUTE VERDICT

- A five-judge Constitution bench of **the Supreme Court settled the long pending Ayodhya land dispute case.**
- It ruled that the 2.77 acres of the disputed land will remain with the Central government and be handed over to a Trust for the construction of a temple. The trust should be formed within three months for the construction of the temple.
- Possession of the disputed 2.77-acre land rights will be handed over to the deity 'Ram Lalla', one of the three litigants in the case. It rejected the claim on the land by the Nirmohi Akhara, saying it is not a **shebait or devotee of the deity of Lord Ram.**
- It said the faith of the Hindus that Lord Ram was born at the demolished structure is undisputed. A report by the Archaeological Survey of India (ASI) provided evidence of the remains of a building "that was not Islamic" beneath the demolished mosque.
- The bench also ruled that a suitable five-acre plot must be found for a mosque at a prominent place in the town.
- The verdict was pronounced on appeals filed against the 2010 Allahabad High Court judgment which ruled that the 2.77-acre land in Ayodhya be partitioned equally among the three parties -- the Sunni Waqf Board, the Nirmohi Akhara and 'Ram Lalla'.

Ayodhya district in Uttar Pradesh was known as Faizabad district until it was renamed in November 2018. Faizabad city is the administrative HQ of this district.

It is situated on the banks of **river Ghaghra (locally known as Saryu)**. It was the first capital of the Nawabs of Awadh.

ADVERSE POSSESSION

- **The Constitution Bench said that while Muslims never lost possession of the disputed land, they could not assert the right of adverse possession i.e.** hostile possession of a property, which has to be continuous, uninterrupted and peaceful.
- Provisions on adverse possession are made under the **Limitation Act, 1963**. In case an owner does not stake his claim over his property for 12 years, a squatter can acquire legal rights over the property.
- The prescribed period in case of for government-owned properties is 30 years.
- One of the questions before the Supreme Court was whether the Sunni Wakf Board had acquired the title of the disputed land by adverse possession. It said that Muslims cannot claim adverse possession against the said property because it was an open place and everybody was visiting including Muslims.

ACQUISITION OF CERTAIN AREA AT AYODHYA ACT, 1993

- **The Constitution bench directed the Central govt. to formulate a scheme for setting up a trust which shall be transferred the possession of the inner & outer courtyards.** The direction comes in view of the powers vested in the Central govt. under Sections 6 and 7 of the Acquisition of Certain Area at Ayodhya Act 1993.
- **The Ayodhya Act** empowered the Central Government to acquire 67.7 acres of land, in and around the disputed site of Ayodhya, in order to maintain peace and harmony between the Hindu and Muslim communities.
- **Section 3 of the Ayodhya Act** transferred the right, title and interest in relation to the area in and around the disputed land to the Central Government.
- **Section 6 of the Act** stipulated that the Central government may vest the acquired area in any authority or other body, or trustees of any trust, set up on or after the commencement of the Act, if the body is willing to comply with such terms and conditions as the Government may impose.
- Further, it prescribed that the rights of the Central Govt in relation to the area shall then be deemed to have become the rights of that authority or body or trustees of that trust, as the case may be.

Faruqui ruling: The validity of the Ayodhya Act was earlier upheld by the Supreme Court in Dr. M. Ismail Faruqui & Ors. v. Union Of India & Ors., 1994 SCC (6) 360.

PLACES OF WORSHIP (SPECIAL PROVISIONS) ACT OF 1991

- **The constitution bench commended the enactment of Places Of Worship Act, 1991 as one that preserved the constitutional value of secularism by not permitting the status of a place of worship to be changed.**
- The Act declares that the religious character of a place of worship shall continue to be the same as it was on August 15, 1947. No person shall convert any place of worship of any religious denomination into one of a different denomination or section.
- Anyone contravening the prohibition can be imprisoned for up to three years.
- **Exceptions:** These provisions will not apply to
 - the place of worship referred to as Ram Janmabhoomi-Babri Masjid in Ayodhya.
 - monuments and sites covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958;
 - a suit that has been finally settled or disposed of;
 - any dispute that has been settled by the parties or conversion of any place that took place by acquiescence before the Act commenced.

What About Other Disputed Sites

- Questions have been raised about similar campaigns being launched over disputes such as those in Varanasi and Mathura, where mosques are adjacent to the Kashi Vishwanath Temple and the Krishna Janmabhoomi, respectively.
- However, the Places of Worship (Special Provisions) Act, 1991, will ensure that Mathura or Varanasi temple disputes won't go the Ayodhya way.

ARTICLE 142

- In granting five acres of land in Ayodhya, but outside the disputed area, to Muslim parties, the Supreme Court used extraordinary powers granted to it by Article 142 of the Constitution "to ensure that a wrong committed must be remedied".
- This was the first time that the court invoked this power in a case involving a civil dispute over an immovable property, involving private parties.

Article 142 of Constitution:

- **Title:** Enforcement of decrees, orders of Supreme Court and orders as to discovery, etc.
- **Provisions:** This article has 2 provisions –
 - **142(1):** The Supreme Court may pass an order for **doing complete justice**.
 - **142(2):** It confers three different powers on the Supreme Court. They are:
 - Securing the **attendance of persons** before it.
 - Discovery and production of **documents** and
 - Investigation and punishment of **contempt of itself**.

About A-142(1): Doing Complete Justice

- The objective of Article 142(1) is that the Supreme Court must not be dependent on the executive for the enforcement of its decrees and orders.
- Such dependence would otherwise violate the principles of independence of the judiciary and separation of powers, both of which are part of Basic Structure of Constitution.
- In Supreme Court Bar Association v. Union of India (1998), it was decided that this article (i) Cannot be used to over-ride the existing law, but only to supplement the law and (ii) Can be invoked for procedure purposes only.

REVIEW PETITION

- **The Supreme Court on Thursday all the review petitions filed against its verdict in the Ram Janmabhoomi-Babri Masjid land title dispute case.**
- **Article 137 of the Constitution** gives Supreme Court the power to review any of its judgments or orders. The court has the power to review its rulings to correct a "patent error" and not "minor mistakes of inconsequential import".
- The Supreme Court has laid down three grounds for seeking a review of a verdict:
 - the discovery of new and important matter or evidence which was not within the knowledge of the petitioner or could not be produced by him;
 - mistake or error apparent on the face of the record; or
 - any other sufficient reason which means a reason that is analogous to the other two grounds.

- **Who can file a review petition?** It is not necessary that only parties to a case can seek a review of the judgment on it. Any person aggrieved by a ruling can seek a review.
- A review petition must be filed within 30 days of the date of judgment or order.

What if a review petition fails? Curative Petition

- In *Roopa Hurra v Ashok Hurra* (2002), the court itself evolved the concept of a curative petition, which can be heard after a review is dismissed to prevent abuse of its process.
- A curative petition is also entertained on very narrow grounds like a review petition, and is generally not granted an oral hearing.

THE DADRA AND NAGAR HAVELI AND DAMAN AND DIU (MERGER OF UNION TERRITORIES) BILL, 2019

- Parliament has passed the Dadra and Nagar Haveli and Daman and Diu (Merger of Union Territories) Bill, 2019.
- **The First Schedule to the Constitution** specifies the territories that come under various states and UTs. The Bill amends the First Schedule to merge the territories of the two UTs: (a) Dadra and Nagar Haveli, and (b) Daman and Diu. The merged territory will form the UT of Dadra and Nagar Haveli and Daman and Diu.
- **Article 240(1) of the Constitution** allows the President to make regulations for certain UTs, including the UTs of Dadra and Nagar Haveli, and Daman and Diu. The Bill amends the Article to replace these two UTs with the merged UT.
- **Representation in Lok Sabha:** The First Schedule to the Representation of the People Act, 1950 provides one seat in Lok Sabha to each of the two UTs. The Bill seeks to amend the Schedule to allocate two Lok Sabha seats to the merged UT.
- The jurisdiction of the High Court of Bombay will continue to extend to the merged UT.
- There will be no change in the status of Group III and IV employees under the UTs

Both the UTs are located in the western region of the country. The country currently has 9 UTs after the creation of the UTs of J&K and Ladakh. However, with the merger of Daman and Diu, and Dadra and Nagar Haveli, **the number of UTs will come down to eight.**

PARLIAMENT DISRUPTIONS

- **Lok Sabha Speaker suspended Congress members after unruly scenes in House.**
- **Rule 378 of Rules for Conduct of Business states** that the Speaker shall preserve order and shall have all powers necessary for the purpose of enforcing own decisions.
- **Rule 373 says that** the Speaker, if is of the opinion that the conduct of any member is grossly disorderly, may direct such member to withdraw immediately from the House during the remainder of the day's sitting.
- **According to Rule 374A:** In the event of a member coming into the well of the House or abusing the Rules of the House persistently and wilfully, such member shall, on being named by the Speaker, stand automatically suspended from the service of the House for five consecutive sittings or the remainder of the session, whichever is less.

PRESIDENT'S RULE IN MAHARASHTRA

President's Rule was imposed in Maharashtra which was later revoked.

1) President's Rule:

- President's Rule implies the suspension of a state government and the imposition of direct rule of the Centre. This is achieved through the invocation of **Article 356** of the Constitution by the President on the advice of the Union Council of Ministers.
- Under Article 356, this move can be taken If the President, on receipt of the report from the Governor of the State or otherwise, is satisfied that a situation has arisen in which the government of the State cannot be carried on in accordance with the provisions of this Constitution.
- **A proclamation of President's Rule can be revoked** through a subsequent proclamation in case the leader of a party produces letters of support from a majority of members of the Assembly, and stakes his claim to form a government. The revocation does not need the approval of Parliament.
- Any proclamation under Article 356 —which stands for six months — has to be approved by both Houses in the Parliament session following it. This six-month time-frame can be extended in phases, up to three years.

2) Rule 12 of Government of India (Transaction of Business) Rules, 1961:

- **To revoke President's Rule in Maharashtra, the Government used** Rule 12 of the Government of India (Transaction of Business) Rules, 1961. The rule titled "Departure from Rules", says that, "The Prime Minister may, in case or classes of cases permit or condone a departure from these rules, to the extent he deems necessary."
- The Cabinet can subsequently give post-facto approval for any decision taken under Rule 12. Rule 12 is usually not used to arrive at major decisions by the government. However, it has been used in matters such as withdrawal of an office memorandum or signing of MoUs in the past.

3) Floor Test

- **The Supreme Court ordered a floor test in the Maharashtra legislative Assembly.**
- A floor test is the determination on the floor of the House whether the Chief Minister commands the support of the majority of the MLAs. Under the Constitution, the Governor convenes the session of the legislature. But on multiple occasions in the past, the Supreme Court has ordered the convening of the Assembly to hold the floor test.
- The floor test in the assembly is presided over by the Speaker. In the absence of a Speaker, the Governor appoints one of the MLAs as the pro tem Speaker to perform the duties of the Speaker.

NAGRIK KARTAVYA PAALAN ABHIYAN

- **On the occasion of Constitution Day**, Government of India launched year-long Nagrik Kartavya Palan Abhiyan to create mass awareness about the Fundamental Duties as enshrined in Constitution.
- **Background:** The Fundamental Duties were incorporated in Part IV-A of the Constitution by the Constitution 42nd Amendment Act, 1976, during Emergency under Indira Gandhi's government. The amendment came at a time when elections stood suspended and civil liberties curbed.
- **How many?** Today, there are 11 Fundamental Duties described under Article 51-A, of which 10 were introduced by the 42nd Amendment and the 11th was added by the 86th Amendment in 2002, during Atal Bihari Vajpayee's government.
- **Status:** These are statutory duties, not enforceable by law, but a court may take them into account while adjudicating on a matter.
- **Objective:** The idea behind their incorporation was to emphasise the obligation of the citizen in exchange for the Fundamental Rights that he or she enjoys.
- **The concept of Fundamental Duties is taken from** the Constitution of Russia.

RULE 56(J) OF CENTRAL CIVIL SERVICES (PENSION) RULES, 1972

- **The Central Board of Direct Taxes (CBDT) has compulsorily retired 15 more senior tax officers on corruption and other charges under Fundamental Rule 56(J) of the Central Civil Services (Pension) Rules.**
- The Rule 56(J) of Central Civil Services (Pension) Rules, 1972 provides for periodical review of the performance of government servants with a view to ascertain whether they should be retained in service or retired in public interest.
- As per these instructions, the cases of government servants covered by FR 56(J), 56(1) or Rule 48(1) (b) of CCS (Pension) Rules, 1972 should be reviewed six months before they attain the age of 50-55 years, in cases covered by FR 56(j) and on completion of 30 years of qualifying service under FR 56(1) or Rule 48 of CCS (Pension) Rules, 1972.

THE CITIZENSHIP ACT, 1955: SECTIONS 5(1)(F) AND 10(2)

- **The Ministry of Home Affairs (MHA) on cancelled the citizenship of Chennamaneni Ramesh, a TRS MLA from Vemulawada in north Telangana on the ground that he** obtained registration of citizenship under section 5(1)(f) of the Citizenship Act, 1955 by means of fraud his action attracts provisions of section 10(2) of the Act.
- These sections deal with grant of citizenship and the authority of the government to cancel the same.
- **Section 5(1)(f) says:** The Central Government may register as a citizen of India any person if a person who, or either of his parents, was earlier citizen of independent India, and has been residing in India for one year immediately before making an application for registration.”
- **Section 10(2) says:** The Central Government may deprive any such citizen of Indian citizenship, if it is satisfied that the registration or certificate of naturalisation was obtained by means of fraud, false representation or the concealment of any material fact.
- The law, however, also provides for checks to ensure that citizenship is not cancelled arbitrarily. **Section 10(3) of the Act says,** “The Central Government shall not deprive a person of citizenship under this section unless it is satisfied that it is not conducive to the public good that person should continue to be a citizen of India.”

RAJYA SABHA MARSHALS

- **From former Army officers and Opposition leaders criticized the new uniform of Rajya Sabha marshals on the ground that** copying and wearing of military uniforms by non military personnel is illegal.
- Marshals in Rajya Sabha assist the Presiding Officers — the Chairman, Deputy Chairman and Vice Chairmen — in conducting the proceedings of the House.
- They are responsible for the safety and security of the Chairman. He has to take suo motu action to protect the Presiding Officer and act as per the directions of the Presiding Officer. **The Chairman is the authority for their appointment and service conditions.**

250th SESSION OF RAJYA SABHA

On the occasion of 250th session of Rajya Sabha, the presiding officer released a publication, titled “Rajya Sabha: The Journey since 1952” providing glimpses of various aspects of functioning of the House. Key highlights of the publication:

- **First sitting of the House** was held on 13.5.1952
- **First Bill passed :** The Indian Tariff (Second Amendment) Bill, 1952

- **First Bill concerning social change:** The Special Marriages Bill, 1952
- **First Constitution Amendment Bill passed by Rajya Sabha:** The Constitution (Second Amendment) Bill, 1953 for readjustment of representation in Lok Sabha by increasing the size of population per constituency.
- **First bill on reorganization of States:** The Andhra State Bill, 1953
- **Members:** Dr. Mahendra Prasad is serving the highest number of 7th term followed by Dr. Manmohan Singh serving 6th term.
- **The representation of women in Rajya Sabha** increased from 15 (6.94%) in 1952 increased to 31(12.76%) in 2014 and is now 26(10.83%) in 2019.
- **The first and the only time when a Presiding Officer of Rajya Sabha cast his vote** was in 1991 when the voting was tied on the Statutory Resolution moved by the opposition seeking disapproval of the Code of Criminal Procedure (Amendment) Ordinance resulting in the victory of the opposition in the House.
- **President Rule approved only by Rajya Sabha:** It happened only twice in respect of extension of President Rule in Tamil Nadu and Nagaland in 1977 and in case of Haryana in 1991 when Lok Sabha was dissolved.
- **Bill passed by Rajya Sabha but negative by Lok Sabha:** The Constitution (Sixty-fourth Amendment) Bill, 1990 seeking to amend Article 356 relating to extension of President's Rule in Punjab.

VISITING CHAIR ON INTERDISCIPLINARY APPROACH TO ELECTORAL STUDIES

- **Election Commission of India (ECI) will establish a visiting chair on Interdisciplinary Approach to Electoral Studies in memory of former Chief Election Commissioner T N Seshan (1932 – 2019).**
- The visiting chair will be established at IIIDEM, New Delhi from 2020-2025 and will be mentored by former CEC N Gopalaswami. The Visiting Chair programme will be targeted to young academics with a proven track record in fields relating to electoral studies.

In 2011, Election Commission of India (ECI), established the **India International Institute of Democracy and Election Management (IIIDEM), New Delhi** to advance its professional competence in election management.

T N Seshan

- TN Seshan was an Indian Administrative Service (IAS) officer, who served as the **18th Cabinet Secretary of India in 1989** and as a member of Planning Commission.
- He was appointed the **10th Chief Election Commissioner of India (1990–96)** and became known for election reforms such as enforcement of election code of conduct, Voter IDs for all eligible voters, limit on election candidates' expenditure, appointing election officials from states other than the one facing polls.
- He won the **Ramon Magsaysay Award** for government service in 1996.

UNION TERRITORIES OF J&K AND LADAKH

- **The state of Jammu and Kashmir has been officially bifurcated into the UT of J&K and Ladakh on October 31, the birth anniversary of Sardar Vallabhbhai Patel.**
- October 31 marks the beginning of the functioning of the two UTs at a bureaucratic level. This date was chosen after the bifurcation was announced in Parliament on August 5.

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- The two union territories of Jammu and Kashmir and Ladakh came into effect under the **Jammu and Kashmir Reorganisation Act**.
- While J&K will have an elected Assembly and council of ministers headed by a chief minister, Ladakh will be under the Lieutenant Governor's rule.
- This is **the first time that a state has been reorganised into union territories**.
- J&K Assembly will be increasing from its current strength to 114. It will have a **term of five years, instead of the state Assembly's term of six years**.
- The Legislative Council of J&K will stand abolished. J&K was one of the seven states to have a legislative council. UT of J&K will have five Lok Sabha MPs and four Rajya Sabha MPs. Ladakh will have one Lok Sabha MP.
- The Constitution of J&K and the **Ranbir Penal Code (RPC)** have also ceased to exist now from JK and Ladakh. Indian Penal Code provisions will now be applicable.
- Central probe agencies like the National Investigation Agency and the Central Bureau of Investigation will now be able to take up investigations in the state on their own.
- The two union territories will have a **common high court**. While J&K will have a Public Service Commission, Ladakh will come under the UPSC's Commission's ambit.

CHIEF JUSTICE OF INDIA (CJI)

- **Sharad Arvind Bobde has been appointed as India's 47th Chief Justice of India (CJI)**. He has been chosen following the rule of seniority and his name was recommended by former CJI Rajan Gogoi in a letter to the Centre.
- **Article 124 of the Constitution of India** provides for the manner of appointing judges to the Supreme Court (SC). But there is no specific provision in the Constitution for appointing the Chief Justice.
- CJI should be the senior most judge of the Supreme Court (SC). **Seniority at the apex court is determined not by age, but by the date a judge was appointed to the SC**.
- In case of doubt about the fitness of the senior-most Judge to hold office of CJI consultation with **other Judges under Article 124(2) to be made by** Law Minister. He has to put up recommendation to Prime Minister (PM) who will advise the President on appointment.
- **Tenure:** Once appointed, the Chief Justice remains in office until the age of 65 years. Article 124(4) of Constitution of India provides that a SC Judge including CJI can be moved only through a process of impeachment by Parliament.

ARBITRATION AND CONCILIATION (AMENDMENT) ACT, 2019

- **The Central Government has enforcement various Sections of the Arbitration and Conciliation (Amendment) Act, 2019 by notifying it in Gazette.**
- It amends the Arbitration and Conciliation Act, 1996. The Act contains provisions to deal with domestic and international arbitration, and defines the law for conducting conciliation proceedings.
- **Arbitration Council of India:** It establishes an independent body called the Arbitration Council of India (ACI) for the promotion of arbitration, mediation, conciliation and other alternative dispute redressal mechanisms.
- **Composition of the ACI:** The ACI will consist of a Chairperson who is either: (i) a Judge of the Supreme Court; or (ii) a Judge of a High Court; or (iii) Chief Justice of a High Court; or (iv) an eminent person with expert knowledge in conduct of arbitration.

- **Relaxation of time limits:** Under the original Act, arbitral tribunals are required to make their award within a period of 12 months for all arbitration proceedings. The amendment act remove this time restriction for international commercial arbitrations.
- **Completion of written submissions:** The written claim and the defence to the claim in an arbitration proceeding, should be completed within six months of the appointment of the arbitrators.
- **Confidentiality of proceedings:** All details of arbitration proceedings will be kept confidential except for the details of the arbitral award in certain circumstances.
- **Applicability of Arbitration and Conciliation Act, 2015:** It clarifies that the 2015 Act shall only apply to arbitral proceedings which started on or after October 23, 2015.

RIGHT TO INFORMATION (RTI)

1) The Supreme Court held that office of Chief Justice of India is a public authority under Right to Information (RTI) Act.

- The bench also said that only the names of judges recommended by the Collegium for appointment can be disclosed, not the reasons.
- It said that the Right to Privacy is an important aspect and it has to be balanced with transparency while deciding to give out information from the office of the Chief Justice.
- The outcome is that the office of the CJI will now entertain RTI applications.
- While the office of the CJI is now under the RTI's ambit, the CBI is exempt.

2) The Right to Information (Term of Office, Salaries, Allowances and Other Terms and Conditions of Service of Chief Information Commissioner, Information Commissioners and State Information Commissioners) Rules, 2019 were notified.

- The rules have reduced the tenure of Information Commissioners from five years to three. It gives the government the discretion to decide on "conditions of service" for which no express provisions are made in the rules.
- The Chief Information Commissioner's salary has been fixed at ₹2.5 lakh and an Information Commissioner's at ₹2.25 lakh.

3) Govt.-funded NGOs under RTI

- Supreme Court laid down that NGOs which receive considerable finances from the government or are essentially dependent on the government fall under the **category of "public authority" defined in Section 2(h) of Right to Information (RTI) Act of 2005.**
- An NGO may also include societies which are neither owned or controlled by the government, but if they are significantly funded by the government, directly or indirectly, they come under the RTI Act.
- The court defined "substantial" as a "large portion."
 - It does not necessarily have to mean a major portion or more than 50%.
 - Substantial financing can be both direct or indirect. E.g. If government gives land in a city free of cost or on heavy discount to hospitals, educational institutions or any such body, this could also be substantial financing.

4) The Delhi High Court has said that giving judgment on the policy framework of an organisation and directing change of policies are not envisaged under the Right to Information (RTI) Act.

- The observation came as the court set aside a Central Information Commission (CIC) direction to the Centre to revise the present policy for selection of meritorious students under the 'Bal Shree scheme'.
- The Court quashed the CIC's November, 2018 order to the Human Resource Development Ministry as the directions were clearly beyond the statutory framework and powers of the CIC.
- The CIC order had come on an RTI applicant's plea to the National Bal Bhawan, seeking details regarding the age limit for Bal Bhawan membership and whether it was necessary for being eligible for a 'Bal Shree award'.
- The Ministry filed an appeal, contending that the CIC order was bad in law as the direction given was beyond the scope, purview and ambit of the RTI Act.

Section 4 of the right to information (RTI) Act deals with proactive disclosure of information.

5) Jan Soochna Portal-2019

- Jan Soochna Portal-2019, **the first-ever public information portal in India**, was launched in Rajasthan.
- It would ensure compliance with **Section 4(2) of the RTI Act** mandating the public authorities to disclose information in the public domain, so that the people need not file applications under the law to obtain information.

TRACE BRIBERY MATRIX

- TRACE, a US based organisation released the **Trace Bribery Matrix**, which provides ranking to various countries in terms of the risk of bribery companies face in doing business in those countries.
- It evaluates countries under **four parameters**: (1) business interaction with the government, (2) anti-bribery deterrence, (3) transparency and (4) civil society oversight.

Key findings:

- With a total risk score of 48, India is ranked higher than neighbouring China whose score is 59. Among the BRICS, South Africa is ahead of other countries with a score of 42.
- Bangladesh has the highest business bribery risk among South Asian courtiers. Bangladesh has been placed at 178 position among 200 countries.
- Overall, Somalia presented the highest risk of bribe demands and New Zealand presented the lowest bribery risk.
- **India has been placed in a better position than neighbouring China in this year's**

NATIONAL REGISTER OF CITIZENS (NRC), ASSAM

- Final list of National Register of Citizens (NRC) was released in Assam. Names of 3.11 crore applicants have been included in the NRC, while 19.7 lakh have been excluded.
- It is for the first time since 1951 that the NRC has been updated in Assam to identify bonafide residents, a state marked by illegal migration from Bangladesh.
- NRC 1951 is a register which covers person enumerated during the 1951 Census. It includes houses or holdings in serial order and also contains the names and number of people staying in these.

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- The process of the updating NRC is being carried out by the Registrar General of India and is being closely monitored by the Supreme Court. The process started in 2013 as per the order of the apex court.
- **Objective behind updating and publishing the 1951 NRC In Assam is** to compile a list of the names of genuine Indian citizens residing in Assam and In the process, detect foreigners (esp. Bangladeshis) who illegally entered the state after March 24, 1971.
- NRC is being updated to include persons or their descendants whose names were in
 - The National Register of Citizenship 1951
 - In any of the Electoral Rolls up to the midnight of 24th March 1971
 - In any other admissible documents issued up to the midnight of 24th March 1971.

SECTION 11 IN THE REPRESENTATION OF THE PEOPLE ACT, 1951

- **The Election Commission reduced Sikkim Chief Minister Prem Singh Tamang's period of disqualification by 5 years, making him eligible to contest elections.**
- Under Chapter III of the Representation of the People Act, 1951, conviction for a wide range of offences can lead to disqualification for membership of Parliament and State Legislatures. Sections 8, 8A, 9, 9A, 10, 10A of the Act list these offences, with the period of disqualification varying from section to section.
- Section 11 in The Representation of the People Act, 1951 deals with Removal or reduction of period of disqualification. It says that the Election Commission may remove any disqualification or reduce the period of any such disqualification.

ANIMAL RIGHTS

The Tripura High Court has ordered to ban the centuries-old tradition of animals sacrifice in religious places across the state. Argument's given:

- Animals have fundamental right to life under **Article 21 of the Constitution of India.**
- **Section 28 of the Prevention of Cruelty to Animals Act** does not in any way allow sacrifice of animal in temple.
- **Part IVA of the Indian Constitution casts duty upon every citizen under Art 51A(g)** with a moral obligation to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures.
- **Article 51A(i)** mandates humanism to abjure violence not only against human, but is considered be against every living creature on this earth.

RIGHT TO ACCESS INTERNET

The Kerala High Court held that the right to have access to the Internet is part of the fundamental right to education as well as the right to privacy under Article 21 of the Constitution. Arguments by Court:

- **The Human Rights Council of the United Nations** has found that the right of access to Internet is a fundamental freedom and a tool to ensure right to education.
- **The Supreme Court in the S. Rengarajan and others v. P. Jagjivan Ram (1989) case** said that "the fundamental freedom under Article 19(1)(a) can be reasonably restricted only for the purposes mentioned in Article 19(2) and the restriction must be justified on the anvil of necessity and not the quicksand of convenience or expediency."

- In 2016, the United Nations Human Rights Council released a non-binding resolution condemning intentional disruption of internet access by governments. The resolution reaffirmed that "the same rights people have offline must also be protected online".

INDIAN PENAL CODE (IPC), 1860

- **The Home Ministry has constituted two committees to overhaul the Indian Penal Code (IPC) introduced by the British in 1860.** IPC is the official criminal code of India. It is a comprehensive code intended to cover all substantive aspects of criminal law.
- **History:** The code was drafted in 1860 on the recommendations of first law commission of India established in 1834 under the Charter Act of 1833 under the Chairmanship of **Lord Macaulay**. It was passed into law in 1860. The Code came into operation in 1862.

ABSENTEE VOTER

- **Central Government has amended electoral Rules to introduce 'absentee voter.'**
- **'Absentee voter' means** a person belonging to such class of persons as may be notified, under clause (c) of section 60 of the Act, and who is employed in essential services as mentioned in the said notification, and includes an elector belonging to the class of **senior citizen or persons with disability [rule 27 A (aa)]**.

SIXTH SCHEDULE

- **National Commission for Scheduled Tribes (NCST) wrote to Union Home Minister, recommending that UT of Ladakh be declared a tribal area under the Sixth Schedule of the Constitution of India.**
- Sixth Schedule deals with Article 244(2) and 275(1). It has provisions related to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram.
- It provides for the setting up **Autonomous District Councils (ADCs)** for administration of these tribal areas. Term of the District Councils is for five years from the date of their constitution. It is governed by an Executive Committee.

ELECTORAL LITERACY CLUBS (ELCs)

- **Election commission of India (ECI) organized Orientation Programme for Civil Society Organizations on Electoral Literacy Clubs (ELCs).**
- ECI, under its flagship programme **'Systematic Voters' Education & Electoral Participation' (SVEEP)**, envisages setting up of Electoral Literacy Club in every educational institution and Chunarv Pathshala to strengthen electoral participation.
- **ELCs were launched on 8th National Voters' Day on 25th January, 2018.**

PUBLIC PREMISES (EVICTION OF UNAUTHORISED OCCUPANTS) AMENDMENT ACT, 2019

- **The Public Premises (Eviction of Unauthorized Occupants) Amendment Bill, 2019 has come into effect.** The Bill amends the **Public Premises (Eviction of Unauthorised Occupants) Act, 1971** to facilitate smooth and speedy eviction of unauthorized occupants from Government residential accommodations.
- As per the Amendment Act, the **Estate officer will issue short Show cause notice of three days** before eviction of the unauthorized occupant from Government accommodation.
- If the person in unauthorised occupation of the residential accommodation challenges the eviction order passed by the estate officer in court, he will be **required to pay damages for every month of such occupation.**

SOCIAL ISSUES

PROGRESS ON DRINKING WATER, SANITATION AND HYGIENE: 2000-2017

A Joint Monitoring Programme report titled, "Progress on drinking water, sanitation and hygiene: 2000-2017: Special focus on inequalities", was released by the **United Nations Children's Fund (UNICEF) and the World Health Organization (WHO)**. Key findings are:

- India is responsible for single-handedly dragging the world towards achieving Sustainable Development Goal of ending open defecation. India accounts for **almost two thirds of the 650 million people globally** who stopped practising open defecation **between 2000 and 2017**.
- India has increased the percentage of its population with access to a protected drinking water source less than 30 minutes away, from 79% in 2000 to 93% in 2017.
- However, the percentage of households getting piped water has remained stagnant at 44% over the 17-year period.

WORLD POPULATION PROSPECTS 2019

- 'The World Population Prospects 2019' was published by the Population Division of the UN Department of Economic and Social Affairs.
- The global population is projected to increase from 7.7 billion in 2019 to 9.7 billion by 2050. By the end of the century, the world population is set to peak at a level of about 11 billion.
- By 2027, India's population is projected to surpass China's. India is also expected to add 273 million people by 2050 and will remain the most populated until the end of the century.
- **Declining population:** By 2050, 55 countries are estimated to see their populations shrink by at least 1%. This is due to sustained low levels of fertility and high rates of emigration. In China, the population is projected to shrink by as much as 2.2 % or 31.4 million by 2050.
- **Ageing:** Overall the world's population is ageing and by 2050, one in six people in the world will be part of the age group of 65 as compared to one in 11 in 2019.

2nd GLOBAL DISABILITY SUMMIT

- Union Social Justice and Empowerment minister participated in 2nd Global Disability Summit at Buenos Aires in Argentina.
- **Objective of the summit:** To deliberate on issues across the world concerning empowerment and inclusion of Persons with Disabilities (PwDs) and to work out a mechanism for enabling them to live an independent and dignified life.
- **Organized by:** International Alliance Disability (IDA). It was established in 1999 as a network of global and regional organisations of persons with disabilities (DPOs) and their families.
- **Background:** The '1st Global Disability Summit' was held in London in 2018.

PADHO-BADHO AWARENESS CAMPAIGN

- Union Minister for Minority Affairs announced that Padho-Badho Awareness Campaign will be launched in 60 minority concentrated districts during the first phase.

- It will encourage education especially in minority girls in those areas of the country where people do not send their children to schools due to socio-economic reasons.
- The campaign will include street plays, short films and cultural programmes.

KAPU COMMUNITY

- Kapu community in Andhra Pradesh are agitating to be included in the Backward Classes.
- Kapu literally means cultivator or agriculturist in Telugu. It is a **dominant peasant caste** found in **Telugu speaking states of Andhra Pradesh (AP) and Telangana**. They are considered to be a **Shudra** community in the Hindu varna system.

Reservation debate:

- **Mandal Commission (in the 1980s)** recommended that Kapus be included among the **Other Backward Classes (OBC)**. But the then AP government ignored the recommendation.
- In December 2017, on the recommendations made by **Manjunatha Commission**, the AP govt. announced 5% quota in education and employment to the Kapus by creating a new **Backward Classes-F category** for them. **However, it is being opposed as according to Supreme Court's order, reservation in states cannot exceed 50%.**

Inclusion in OBC list:

Backward Class Bureau of the Ministry for Social Justice and Empowerment notifies castes/communities in the Central List of OBCs for different States/Union Territories on the basis of advice tendered by National Commission for Backward Classes (NCBC) under Section 9(1) & (2) of the NCBC Act, 1993 which reads as :

- 1) The Commission shall examine requests for inclusion of any class of citizens as a backward class in the lists and hear complaints of over-inclusion or under-inclusion of any backward classes in such lists and tender such advice to the Central Government as it deems appropriate.
- 2) The advice of the Commission shall **ordinarily be binding** upon the Central Government.

EKLAVYA MODEL RESIDENTIAL SCHOOLS (EMRS)

- Central Board of Secondary Education has extended the deadline for applying affiliation to Eklavya Model Residential Schools (EMRS) for **tribal students** till June 30.
- **Background:** The scheme of EMRSs was introduced in the year 1997-98 to ensure tribal students get access to quality education in the remote tribal areas.
- **Features:** Apart from school building including hostels and staff quarters, provision for a playground, students' computer lab, teacher resource room etc. are also included in the EMRSs.
- **Implementing ministry:** Ministry of Tribal Affairs.
- **Revamp of scheme done In December 2018:**
 - EMRSs will be setup in every block with more than 50% ST population and at least 20,000 tribal persons. Thereby around 462 schools will be set up in addition to the 288 EMRSs already sanctioned.
 - There will be an Autonomous Society under the Ministry of Tribal Affairs similar to Navodaya Vidyalaya Samiti to run the EMRSs.

INDIA CHILD WELL-BEING INDEX

- The index was released by the NGO World Vision India and research institute IFMR LEAD.
- **Methodology:** It measures children's well-being on the three dimensions: (1) healthy individual development, (2) positive relationships and (3) protective contexts.

- **Key findings:** Kerala, Tamil Nadu, Himachal Pradesh and Puducherry topped the child well-being index. Meghalaya, Jharkhand and Madhya Pradesh featured at the bottom of the list.

REPEAT RAPE OFFENDERS: 376 (e) OF THE INDIAN PENAL CODE (IPC)

- Bombay High Court upheld the Constitutional validity of an amended section of the IPC under which repeat offenders in rape cases can be awarded life imprisonment or death penalty.
- The Judges observed that section 376 (e) of the IPC is not ultra vires to the Constitution and hence need not be quashed in the Shakti Mills case. Under an amendment to section 376 (e) of the IPC, repeat offenders in rape cases faced life imprisonment or a death penalty.
- The amendment was made after the Nirbhaya incident in Delhi in 2012.

TRAFFIC INDEX 2018

- A recent study has ranked **Mumbai as the most traffic-congested city in the world** for the second straight year, and Delhi at fourth place.
- **The study:** The findings are part of the Traffic Index 2018 published by TomTom, an Amsterdam-based company that offers traffic solutions and has been publishing city rankings for eight years. The latest index ranks 403 cities across 56 countries.
- **Meaning:** For this study, congestion has been defined in terms of the additional time taken to reach a destination as opposed to when the road would have been clear of traffic.

ANGIKAAR CAMPAIGN

- Union Minister for Housing and Urban Affairs announced “Angikaar”, a campaign for **social behaviour change**, focusing on water & energy conservation, waste management, health for beneficiaries of completed houses under PMAY (U), through community mobilisation.
- The campaign will be rolled out in all Pradhan Mantri Awas Yojana (Urban) **[PMAY (U)] cities**.
- It will be initiated in all target cities on 2nd October 2019 and culminate on the occasion of Human Rights Day, 10th December, 2019.

Pradhan Mantri Awas Yojana (URBAN)

- **Implementation period:** The Mission will be implemented during 2015-2022.
- **Mission:** To achieve the goal of Housing for All in Urban areas by 2022, when the Nation completes 75 years of its Independence.
- **Eligibility:** All statutory towns as per Census 2011 and towns notified subsequently would be eligible for coverage under the Mission.
- **Features:** Under it, central assistance will be provided to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs for:
 - In-situ Rehabilitation of existing slum dwellers using land as a resource through private participation
 - Credit Linked Subsidy
 - Affordable Housing in Partnership
 - Subsidy for Beneficiary-led individual house construction/enhancement.
- **Funding:** Credit linked subsidy component will be implemented as a Central Sector Scheme while other three components will be implemented as Centrally Sponsored Scheme (CSS).

INVESTIGATION TRACKING SYSTEM FOR SEXUAL OFFENCES (ITSSO)

- According to the ITSSO analysis of crime data in the 7 States, investigation into nearly half the sexual offences cases are not being completed within the stipulated 60-day period prescribed under the Criminal Law (Amendment) Act, 2018.
- In February 2019, the Union Home Ministry launched an analytics tool — Investigation Tracking System for Sexual Offences (ITSSO) to monitor and track time-bound investigation.
- ITSSO is part of the Crime and Criminal Tracking Network and System (CCTNS) that connects over 15,000 police stations across the country.

SWACHH BHARAT (URBAN)

Union Minister for Housing & Urban Affairs launched the following:

- **SBM Water PLUS Protocol:** Moving beyond ODF, ODF+ and ODF++, the Water PLUS protocol aims to provide a guideline for cities and towns to ensure that no untreated wastewater is released into the environment thereby enabling sustainability of the sanitation value chain.
- **Swachh Nagar Mobile App:** It is an integrated waste management app to tackle several issues that hinder effective waste management such as lack of monitoring, collection of segregated waste, and tracking the movement of waste vehicles and waste pickers, amongst others.
- **AI enabled mSBM App:** It has been developed by the National Informatics Centre (NIC) to facilitate the applicants of Individual Household Toilets (IHHL) under SBM-U to know the status of their application in real-time after uploading the photograph.

Swachh Bharat Mission (Urban)

- The Government of India launched “Swachh Bharat Mission (Urban)” on 2nd October, 2014. **Union Ministry for Housing & Urban Affairs** is the nodal agency for the mission.
- **Mission objectives:** (i) Eliminate open defecation, (ii) Conversion of insanitary toilets to pour flush toilets, (iii) Eradication of manual scavenging, (iv) 100% collection and scientific processing/disposal reuse/recycle of Municipal Solid Waste etc.
- **Mission components:** (i) Construction of Household Toilets, (ii) Community and Public Toilets, (iii) Solid Waste Management, (iv) Information, Education & Communication (IEC) and Public Awareness, (v) Capacity Building and Administrative & Office Expenses (A&OE).
- **The funding pattern** between the Central Government and the State Government/ Urban Local Bodies (ULBs) is 75%:25% (90:10 for North Eastern and special category states).

DRINKING WATER FOR ALL

- Jal Shakti Minister Gajendra Singh Shekhawat announced that the Government of India has set a target of providing clean drinking water to all by 2024.
- **Present Scenario:** Currently, only 18% of rural households get piped water, and State performances range widely from 99% in Sikkim to less than 5% in Uttar Pradesh, Bihar, West Bengal, Chhattisgarh, Jharkhand and Odisha.
- **Strategy:** Given that water is a State subject, it will take the exercise of “cooperative federalism” to provide piped drinking water to all households by the end of its second term.

E-GOVERNANCE INITIATIVES FOR ST WELFARE SCHEMES

- Ministry of Tribal Affairs launched the online portals namely DBT Tribal and NGO Grants Online Application & Tracking System for bringing e-Governance in implementation of schemes for STs.
- **DBT Tribal portal:** In this, there are 3 main modules for Pre-Matric & Post-Matric Scholarship.

- **NGO Grants Online Application & Tracking System:** This portal has been developed for implementing scheme of Aid to Voluntary Organizations working for the welfare of STs. The portal has been re-opened for FY 2019-20 for NGOs and States for online application.

TRAFFICKING IN PERSONS (TIP) REPORT, 2019

- The U.S. State Department has released its 2019 Trafficking in Persons (TIP) report, citing International Labour Organisation (ILO) data.
- There are 25 million adults and children suffering from labour and sex trafficking all over the world.
- In 77% of the cases, victims are trafficked within their own countries of residence, rather than across borders.
- **Palermo Protocol**
 - While much has been done since the Palermo Protocol in terms of countries building legal frameworks, more needs to be done.
 - The Palermo protocols is an international framework to tackle trafficking which was established in 2000. It comprises three protocols which fall within the jurisdiction of the United Nations Office on Drugs and Crime.
- **Indian scenario:** India continued to be placed in Tier 2 on the country trafficking scale.

MARATHA RESERVATION

- The Bombay High Court upheld the Maharashtra government's decision to provide reservation to the Maratha community under the Socially and Educationally Backward Classes (SEBC) Act, 2018.
- However, the court ruled that the 16 % quota granted by the state is not "justifiable" and reduced it to 12 % in education and 13 % in government jobs, as recommended by the Maharashtra State Backward Class Commission (MSBCC).
- The addition of 12-13 % Maratha quota will take the total reservation in the state to 64-65 %. In the Indra Sawhney case, a nine-judge bench of the Supreme Court had ruled that total reservation for backward classes could not go beyond 50 %.
- **Arguments by Court:** In exceptional circumstances, the limit of 50% reservation can be crossed without affecting the efficiency in administration. The state government had the "legislative competence" to enact the SEBC Act.

GO TRIBAL CAMPAIGN

- Tribal Affairs Ministry and TRIFED in association with Amazon Global launched the "Go Tribal Campaign" to create awareness and promote tribal arts and crafts as well as aid in socio-economic welfare of over 700 Indian tribes.
- TRIFED is an organization under Ministry of Tribal Affairs and is engaged in marketing development of tribal products including tribal art and craft under the brand name "TRIBES INDIA".

CHILDREN WITH DISABILITIES

A report titled "State of the Education Report for India-2019: Children with Disabilities" was released by **UNESCO** and the **Tata Institute of Social Sciences (TISS)**. Key findings of the report are:

- Citing 2011 census data, the report showed that there are more than 78 lakh children with disabilities in the country between 5-19 years.
- 27% of children with disabilities between ages 5 and 19 in India have never attended any educational institution, while around 75% of five-year-olds with disabilities are not in school. There are fewer girls with disabilities in school than boys.

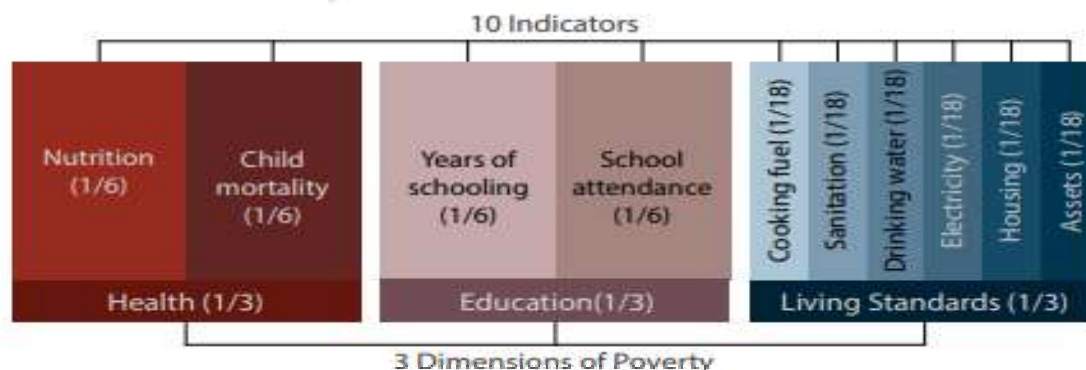
- Differences remain among various types of disabilities. Only 20% of children with visual and hearing impairments had never been in school. However, among children with multiple disabilities or mental illness, that figure rose to more than 50%.

MIGRATION (CENSUS 2011 DATA)

- The Census 2011 data on migration was released recently. Over 45.58 crore Indians were found to be “migrants” during Census 2011.
- Marriage and employment are the major reasons for migration.
- Bulk of the migration takes place within individual states — out of the total number of persons registered as “migrants” in the 2011 Census, only 11.91% had moved to one state from another.
- Maharashtra had more migrants from Madhya Pradesh than from Bihar. Among the 4.96 lakh migrants from other Indian states in Assam, those from Bihar had the largest share (1.47 lakh, or nearly 30%).

2019 GLOBAL MULTIDIMENSIONAL POVERTY INDEX (MPI)

- The 2019 global Multidimensional Poverty Index was released by the UN Development Programme, the Oxford Poverty and Human Development Initiative.



- **Global scenario:**
 - In the 101 countries studied 1.3 billion people are multidimensionally poor.
 - **India and Cambodia reduced their MPI values the fastest.** India’s MPI value reduced from 0.283 in 2005-06 to 0.123 in 2015-16.
- **Indian scenario:**
 - In 2015-16, the population in India living in multidimensional poverty stood at about 369 million people (27.9%).
 - India lifted 271 million people out of poverty between 2006 and 2016, recording the fastest reductions in the multidimensional poverty index values during the period.
 - **Jharkhand** has reduced the incidence of poverty at a faster pace than other regions (reduced the incidence of multidimensional poverty from **74.9%** in 2005-06 to **46.5%** in 2015-16).

MUSLIM WOMEN (PROTECTION OF RIGHTS ON MARRIAGE) BILL 2019

Parliament passed the Muslim Women (Protection of Rights on Marriage) Bill 2019. Salient features of the bill:

- It declares the practice of triple talaq or ‘talaq-e-biddat’ by husbands as **void and illegal**.
- It makes this offence punishable with imprisonment up to three years and fine.

- It provides for **payment of subsistence allowance** to married Muslim women & dependent children.
- It proposes to make the **offence cognizable**, if information relating to the commission of an offence is given to a police officer by the married Muslim woman upon whom talaq is pronounced or by any person related to her by blood or marriage.
- The offence is made **compoundable** with the permission of the Magistrate at the instance of the married Muslim woman upon whom talaq is pronounced.
- It further provides for hearing the married Muslim woman upon whom talaq is pronounced, before the accused is released on bail by the Magistrate.

GLOBAL HOUSING TECHNOLOGY CHALLENGE (GHTC)

- A pre-bid meeting for construction of Light House Projects under GHTC-India was organized in Delhi.
- **Objective:** GHTC was launched by the Union Ministry of Housing and Urban Affairs in January 2019 to meet the target of constructing 1.2 crore houses by 2022.
- **Parent programme:** Pradhan Mantri Awas Yojana Urban (PMAY-U).
- Under it, Centre will offer about ₹150 crore as a technology innovation grant to build 6,000 homes using alternative technologies and materials. The challenge will focus on identifying and mainstreaming proven demonstrable technologies through ASHA (Affordable Sustainable Housing Accelerators) — India.

SURROGACY (REGULATION) BILL, 2019

- Lok Sabha has passed the Surrogacy (Regulation) Bill, 2019 that **prohibits commercial surrogacy, but allows altruistic surrogacy**.
- **Surrogacy is permitted for intending couples who** suffer from proven infertility; should be Indian citizens and married for at least five years; should be between 23 to 50 years old (wife) and 26 to 55 years old (husband); and do not have any surviving child.
- **The surrogate mother has to be:** (i) a close relative of the intending couple; (ii) a married woman having a child of her own; (iii) 25 to 35 years old; and (iv) a surrogate only once in her lifetime.
- **An abortion of the surrogate child** requires the written consent of the surrogate mother and the authorisation of the appropriate authority. This authorisation must be compliant with the Medical Termination of Pregnancy Act, 1971.
- **The penalty for contraventions** of the provisions of the Bill is imprisonment up to 10 years and a fine up to 10 lakh rupees.

SDG GENDER INDEX

- The SDG Gender Index, a new index to measure global gender equality, has been developed and released by **Equal Measures 2030**, a joint effort of regional and global organisations.
- It accounts for 14 out of 17 SDGs (sustainable development goals) that cover aspects such as poverty, health, education, political representation and equality at the workplace. A score of 100 reflects the achievement of gender equality in relation to the targets set for each indicator.
- **Key Findings**
 - **No country achieved an “excellent” overall score of 90 or above.**
 - **Denmark with score of 89.3 topped the rankings followed by Finland and Sweden.**
 - India has been ranked at 95th among 129 countries. India’s highest goal scores are on health (79.9), hunger & nutrition (76.2), and energy (71.8).

- India was ranked 108th on the latest Gender Gap Index released by the World Economic Forum.

PROTECTION OF CHILDREN FROM SEXUAL OFFENCES (AMENDMENT) BILL, POCSO, 2019

- Parliament passed the Protection of Children from Sexual Offences (Amendment) Bill, POCSO, 2019 to enhance punishment for sexual offences against children.
- Those who use a **child for pornographic purposes** should be punished with imprisonment up to five years and fine. However, in the event of second or subsequent conviction, the punishment would be up to seven years and fine.
- Those committing **penetrative sexual assaults** on a child below 16 years of age would be punished with imprisonment up to 20 years, which might extend to life imprisonment as well as fine.
- In case of **aggravated penetrative sexual assault**, the bill increases the minimum punishment from ten years to 20 years, and the maximum punishment to death penalty.

HUMAN DEVELOPMENT REPORT (HDR) 2019

The United Nations Development Programme (UNDP) released the 2019 Human Development Report (HDR), entitled “Beyond income, beyond averages, beyond today: inequalities in human development in the 21st Century”.

Human Development Index (HDI):

- The HDI measures average achievement in three basic dimensions of human development — life expectancy, education and per capita income.
- India ranks 129 out of 189 countries on the 2019 HDI — up one slot from the 130th position last year. India’s HDI value increased by 50% (from 0.431 to 0.647), which places it above the average for other South Asian countries (0.642).
- For India, between 1990 and 2018, life expectancy at birth increased by 11.6 years, mean years of schooling increased by 3.5 years and expected years of schooling increased by 4.7 years. Per capita incomes rose by over 250 percent.
- Norway, Switzerland and Ireland occupied the top three positions in that order.
- Among India’s neighbours, Sri Lanka (71) and China (85) are higher up the rank scale while Bhutan (134), Bangladesh (135), Myanmar (145), Nepal (147), Pakistan (152) and Afghanistan (170) were ranked lower on the list.
- South Asia was the fastest growing region in human development progress witnessing a 46% growth over 1990-2018, followed by East Asia and the Pacific at 43%.

Ups and downs

Among India’s neighbours Sri Lanka moved up five rungs on the HDI ladder while Maldives fell three ranks. While Pakistan slipped two spots, Bangladesh moved up one

Source: Human Development Report, UN

Country	2017 Rank	2018 Rank
India	130	129
Brazil	79	79
China	86	85
Russia	49	49
South Africa	113	113
Pakistan	150	152
Afghanistan	168	170
Sri Lanka	76	71
Bhutan	134	134
Nepal	149	147
Bangladesh	136	135
Maldives	101	104

Inequality-adjusted HDI (IHDI):

- The Inequality-adjusted HDI (IHDI) indicates percentage loss in HDI due to inequalities.
- For IHDI, India’s position drops by one position to 130, losing nearly half the progress (.647 to .477) made in the past 30 years.

Gender Inequality Index (GII):

- In the Gender Inequality Index (GII), India is at 122 out of 162 countries. Neighbours China (39), Sri Lanka (86), Bhutan (99), Myanmar (106) were placed above India.
- The world is not on track to achieve gender equality by 2030 as per the UN's Sustainable Development Goals. It may take 202 years to close the gender gap in economic opportunity — one of the three indicators of the GII.

Multi-dimensional poverty:

- **Out of the 1.3 billion multidimensional poor, 661 million are in Asia and the Pacific**, which shares almost half of the multidimensional poor living in 101 countries of the world.
- South Asia alone shares more than 41 percent of the total number of multidimensional poor. Despite **India's significant progress**, it accounts for **28 percent of the 1.3 billion multidimensional poor**.

Social Norms Index:

- The Report presents a new social norms index that looks at the links between social beliefs and gender equality in multiple dimensions.
- The new “social norms index” in the Report says that in half of the countries assessed, gender bias has grown in recent years. It shows that only 14% of women and 10% of men worldwide have no gender bias.

GLOBAL GENDER GAP REPORT 2020

The annual Global Gender Gap Index for 2020 has been published by the **World Economic Forum (WEF)**. **Key findings are:**

- Iceland, Norway, and Finland occupy the top three spots in the Report. Yemen is ranked the worst (153rd), while Iraq is 152nd and Pakistan 151st.
- **India is ranked 112th among 153 countries.** India has moved down the ladder from its 108th position last year to rank below countries like China (106th), Sri Lanka (102nd), Nepal (101st), Brazil (92nd), Indonesia (85th) and Bangladesh (50th).
- **India is among countries with very low women representation on company boards (13.8%)**, while it was even worse in China (9.7%).
- Globally, the average (population-weighted) distance completed to gender parity is at 68.6%, which is an improvement since last edition.
- **The largest gender disparity is in political empowerment.** Only 25% of seats in parliaments in the world are occupied by women, and only 21% of ministers are women.
- The overall global gender gap will close in 99.5 years, on average, across the 107 countries covered continuously since the first edition of the Report.

The Report benchmarks countries on their progress towards gender parity in four dimensions: (1) Economic Participation and Opportunity, (2) Educational Attainment, (3) Health and Survival and (4) Political Empowerment.

IRRETRIEVABLE BREAKDOWN OF MARRIAGE

- The Supreme Court used extraordinary powers under Article 142 of the Constitution to grant divorce in a case of “irretrievable breakdown of marriage”.
- The Hindu Marriage Act, 1955, lays down the law for divorce, which applies to Hindus, Buddhists, Jains, and Sikhs.

- Under Section 13 of the Act, grounds for divorce include: voluntary sexual intercourse with any person other than his or her spouse; cruelty; desertion; ceas(ing) to be a Hindu by conversion to another religion; and being incurably of unsound mind. **Section 13B** provides for “divorce by mutual consent”.
- **Section 27 of The Special Marriage Act, 1954** provides the grounds for grant of divorce in the case of marriages solemnised under that Act. Thus, neither of the two Acts provide for “irretrievable breakdown of marriage” as a ground for divorce.
- The Law Commission of India in its 71st report and 217th report has recommended that “irretrievable breakdown” of marriage be included as a new ground for granting divorce to Hindus under the provisions of the Hindu Marriage Act and the Special Marriage Act.

A-142(1) of Constitution: Doing Complete Justice

- It states that the Supreme Court may pass an order for **doing complete justice**.
- This ensures that the Supreme Court must not be dependent on the executive for the enforcement of its decrees and orders.
- In Supreme Court Bar Association v. Union of India (1998), it was decided that this article
 - Cannot be used to over-ride the existing law, but only to supplement the law and
 - Can be invoked for procedure purposes only.

PRADHAN MANTRI MATRU VANDANA YOJANA (PMMVY)

- **Pradhan Mantri Matru Vandana Yojana (PMMVY) crossed one crore beneficiaries.**
- **It is a Centrally Sponsored** scheme being implemented by **the Ministry of Women and Child Development since 2017.**
- **PMMVY is a direct benefit transfer (DBT) scheme** under which cash benefits are provided to pregnant women in their bank account directly to meet enhanced nutritional needs and partially compensate for wage loss.
- Under the ‘Scheme’, Pregnant Women and Lactating Mothers (PW&LM) **receive a cash benefit of Rs. 5,000 in three installments on fulfilling the respective conditionality**, viz. early registration of pregnancy, ante-natal check-up and registration of the birth of the child and completion of first cycle of vaccination for the first living child of the family.
- **The eligible beneficiaries also receive cash incentive under Janani Suraksha Yojana (JSY).** Thus, on an average, a woman gets Rs. 6,000.

DISHA ACT

- The Andhra Pradesh Legislative Assembly passed the Andhra Pradesh Disha Bill, 2019 (Andhra Pradesh Criminal Law (Amendment) Act 2019).
- It has prescribed the death penalty for rape crimes where there is adequate conclusive evidence. Provision is given by amending Section 376 of the Indian Penal Code, 1860.
- In cases of harassment of women through social or digital media, it states two years imprisonment for the first conviction and four years for second and subsequent convictions. For this, a new Section 354 E will be added in IPC, 1860.
- It envisages the completion of investigation in seven days and trial in 14 working days, where there is adequate conclusive evidence, and reducing the total judgment time to 21 days from the existing four months.

Disha is the name given to a veterinarian who was raped and murdered in Hyderabad on November 27. On the morning of December 6, the Cyberabad police shot all four accused in an encounter.

SDG INDIA INDEX 2019

- NITI Aayog released the second edition of the Sustainable Development Goals (SDG) India Index.
- The index documents the progress made by India's States and Union Territories towards achieving the 2030 SDG targets. It has been developed by NITI Aayog in collaboration with the Ministry of Statistics, United Nations in India, and Global Green Growth Institute.
- The 2019 Index spans 16 out of 17 SDGs with a qualitative assessment on Goal 17. This marks an improvement over the 2018 Index, which covered only 13 goals.
- **Classification criteria based on SDG India Index score is as follows:** Aspirant (0–49), Performer (50–64), Front Runner (65–99) and Achiever (100).
- If a State/UT achieves a score of 100, it signifies it has achieved the 2030 national targets. The higher the score of a State/UT, the closer it is towards achieving the targets.

Key findings:

- India's composite score has improved from 57 in 2018 to 60 in 2019.
- The maximum gains been made in Goals 6 (clean water and sanitation), 9 (industry, innovation, and infrastructure) and 7 (affordable and clean energy).
- Kerala achieved the first rank in the composite SDG Index with a score of 70, followed by Himachal Pradesh at 69. The biggest improvers since 2018 are UP (which has moved from the 29th position to the 23rd), Orissa (23rd to 15th), and Sikkim (15th to 7th).

RELIGION AND LIVING ARRANGEMENTS AROUND THE WORLD

Pew Research Center analysis released a new report titled “Religion and Living Arrangements Around the World.” Key findings of the report are:

1. Worldwide, Muslims live in the biggest households. Jews are the most likely to live alone.
2. Extended-family households are the most common living arrangement around the world.
3. Christians are the most likely to live in single-parent households. Women, regardless of their religious affiliation, are more likely than men to be single parents.

TRANSGENDER PERSONS (PROTECTION OF RIGHTS) BILL, 2019

- Parliament passed the Transgender Persons (Protection of Rights) Bill, 2019.
- The term transgender person includes trans-men, trans-women, persons with intersex variations, gender-queers, persons with socio-cultural identities, such as kinnar and hijra.
- **It prohibits the discrimination against a transgender person**, including denial of service or unfair treatment in relation to education, employment, healthcare, access to, or enjoyment of goods, facilities, opportunities available to the public.
- Every transgender person shall have a **right to reside** and be included in his household.
- **Health care:** The government must provide health facilities to transgender persons including separate HIV surveillance centres, and sex reassignment surgeries.
- A transgender person may make an **application to the District Magistrate for a certificate of identity**, indicating the gender as 'transgender'.
- It imposes penalties for violation of above law.
- **National Council for Transgender persons (NCT)** chaired by Union Minister for Social Justice, will advise the central government as well as monitor the impact of policies for them. It will also redress the grievances of transgender persons.

GLOBAL LIVEABILITY INDEX 2019

- The annual Global Liveability Index of 140 cities around the world was released by the **Economist Intelligence Unit (EIU)**, the research and analysis division of The Economist group which brings out the UK's The Economist news magazine.
- The index considers more than 30 factors spanning categories like stability, healthcare, culture and environment, education, and infrastructure.
- **The Austrian capital Vienna** topped the rankings **for the second year in a row**. The least liveable city was Damascus (Syria). New Delhi was ranked at 118th (a drop of six ranks) due to "poor air quality. Mumbai was ranked 119th.
- For the first time, the index noted the effects of climate change on liveability.

NEHRU YUVA KENDRA SANGATHAN (NYKS)

- Nehru Yuva Kendra Sangathan (NYKS) **will prepare Disaster Response Teams (DRTs) for Disaster Risk Reduction (DRR) in collaboration with National Disaster Response Force (NDRF) to be launched on pilot basis in 32 Districts of 28 States/UTs.**
- **Background:** Nehru Yuva Kendras were established in the year 1972. Later in year 1987 it became Nehru Yuva Kendra Sangathan (NYKS).
- **Status:** It is an autonomous organization under Ministry of Youth Affairs and Sports.
- **What is it?** It is the largest grassroot level youth organization in the world. It channelizes the power of youth on the principles of voluntarism, self-help and community participation. Over the years, NYKS has established a network of youth volunteers through its 623 District Kendras.

RURAL SANITATION STRATEGY (2019-2029)

- **The Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti, GoI launched the 10 Year Rural Sanitation Strategy (2019-2029).**
- The strategy focuses on sustaining the sanitation behaviour change that has been achieved under the **Swachh Bharat Mission Grameen (SBM-G)** through capacity strengthening, IEC (Information, education and communication), organic waste management, plastic waste management etc.

SAHARIAS

- **Due to Acute malnutrition among Saharias, every second child under five is underweight. Also, an Indian Council of Medical Research (ICMR) study revealed that, among Saharias, TB prevalence is an alarming 1,995 per 1,00,000 persons.**
- The Saharia, Sahar, Sehariya, or Sahariya are an ethnic group mainly found in the districts of Morena, Sheopur, Bhind, Gwalior, Datia, Shivpuri, Vidisha and Guna districts of Madhya Pradesh and Baran district of Rajasthan.
- Saharias are a **Particularly vulnerable tribal group (PVTGs).**

Particularly vulnerable tribal groups (PVTGs)

- These are separately classified by government of India.
- According to 12th plan, out of the total ST population, 3 % belong to the PTVGs.
- These tribal communities have following features:
 - Pre-agricultural system of existence (i.e. practice of hunting and gathering), or
 - Zero or negative population growth, or

- Extremely low level of literacy in comparison with other tribal groups.

SENTINELESE TRIBE

- According to study by the Anthropological Survey of India (AnSI), American national John Allen Chau was killed in November 2018 by the Sentinelese after he illegally travelled to the North Sentinel island.
- The Sentinelese is a **negrito tribe** who live on the North Sentinel Island of the Andamans. Census 2001 counted 39 inhabitants.
- The Sentinelese are hunter-gatherers, likely using bows and arrows to hunt and more rudimentary methods to catch local seafood.
- They speak their own language, the Sentinelese language.
- The Sentinelese have been fiercely hostile to outside contact. They have been mostly **left alone even from colonial times, unlike other tribes such as the Onges, Jarawas and Great Andamanese**, because the land they occupy has little commercial attraction.

Protection:

- They are designated as a **Scheduled Tribe**. Access to North Sentinel Island and its buffer zone is strictly restricted under **the Protection of Aboriginal Tribe (Regulation), 1956 and Regulations under Indian Forest Act, 1927**.
- Under the **Andaman and Nicobar Islands (Protection of Aboriginal Tribes) Regulation, 1956**:
 - traditional areas occupied by the tribes have been declared as reserves,
 - Entry of persons and Photographing the tribe members is prohibited except with authorisation.
 - **Any passage within three miles** of the coastline of Island is illegal, and is enforced by Indian Navy.

BETI BACHAO BETI PADHAO (BBBP)

- The Union Minister of Women and Child Development honoured districts and states which have improved Sex Ratio at Birth (SRB) by successfully implementing the Beti Bachao Beti Padhao (BBBP) scheme.
- On this occasion, she made special mention of **Kameng District of Arunachal Pradesh which improved SRB from 807 in 2014-15 to 1039 in 2018-19**.
- She also highlighted that the **SRB at the national level has also improved by 13 points from 918 in 2014-15 to 931 in 2018-19**.

Do you know?

- The BBBP scheme was launched in 2015. It is being implemented in 640 districts and all districts are covered through advocacy and media campaign.
- Out of these districts, 405 are covered under Multi-Sectoral Intervention in which 100% Centrally Sponsored Scheme grant is provided directly to **District Magistrate/District Collector for BBBP**.

SC & ST (PREVENTION OF ATROCITIES) ACT, 1989

The Supreme Court recalled its directions in a March, 2018 verdict that had effectively diluted provisions of arrest under the Scheduled Castes & Scheduled Tribes (Prevention of Atrocities) Act, 1989.

March 2018 Judgement

Supreme Court diluted the SC and ST (Prevention of Atrocities) Act, 1989, to grant anticipatory bail to accused persons and directed that the police conduct a preliminary enquiry into whether a complaint under the law is “frivolous or motivated” before registering a case.

- Both conditions were not part of the original legislation.
- It had reasoned that members of the Scheduled Castes and the Scheduled Tribes use the 1989 law to lodge false complaints, leading to the arrest of innocent persons.
- The March 2018 judgment triggered widespread protests and compelled the government to amend the Act to negate the effect of the ruling. It also filed a review petition against the verdict.

'Review' of a Supreme Court judgment is done by the same Bench. **'Overruling'** means that the law laid down in one case is overruled in another case. When a higher court on appeal alters the judgment of a lower court, it is called **'reversal.'**

Recent Judgement:

- In its judgment on the review petition, Supreme Court said human failing and not caste is the reason for the filing of false criminal complaints.
- The court condemned its earlier judgment, saying it was against "basic human dignity" to treat all SC/ST community members as "a liar or crook".

NATIONAL SAMPLE SURVEY (NSS) REPORT NO. 583: PERSONS WITH DISABILITIES IN INDIA NSS 76TH ROUND (JULY – DECEMBER 2018) - KEY FINDINGS

- **In India prevalence of disability** (%age of persons with disability in the population) was 2.2% with 2.3% in rural and 2.0% in urban areas. Prevalence of disability was higher among males than females.
- **Incidence of disability in the population**, that is the number of persons with onset of disability (by birth or otherwise) during 365 days preceding the date of survey was 86 per 1,00,000 persons.
- Among persons with disabilities of **age 7 years and above, 52.2% were literate**. Among persons with disabilities of age 15 years & above, 19.3% had highest educational level as secondary & above.
- %age of persons with disabilities who were **living alone** was 3.7 %. Among persons with disabilities, 62.1 % had care giver.
- %age of persons with disabilities who **received aid/help from Government** was 21.8% and another 1.8% received aid/help from organisations other than Government.
- Among persons with disabilities of age 15 years and above,
 - **Labour Force Participation Rate** in usual status was 23.8%.
 - **Worker Population Ratio** in usual status was 22.8%.
 - **Unemployment Rate** in usual status was 4.2%.

SOUTH ASIA SAFETY SUMMIT

- The 2nd edition of South Asia Safety Summit was organized by the Ministry of Women and Child Development (WCD) and FACEBOOK in New Delhi. Participants from 125 civil society organizations from India, Nepal, Bangladesh, Sri Lanka, and Afghanistan attended the Summit.
- It was organized to highlight the issue of safety while individuals and communities are connected on the digital platform.
- During Summit, WCD Minister launched **"We Think Digital" website**. This website is an online education portal with interactive tutorials aimed at helping people think critically & share thoughtfully online. The topics covered include privacy, security, digital discourse and knowing your digital footprint.

OCSAE PREVENTION/INVESTIGATION UNIT

- The CBI has set up an Online Child Sexual Abuse and Exploitation (OCSAE) Prevention/Investigation Unit in New Delhi to collect and disseminate information on online child sexual abuse and exploitation.

- It will also probe such offences covered under the IPC, the Protection of Children from Sexual Offences Act and the Information Technology Act, apart from other relevant laws.
- **The territorial jurisdiction** of the Unit of CBI will be throughout India.

AHTUs; WHDs

- Government of India has decided to set up & strengthen Women Help Desks (WHDs) and Anti-Human-Trafficking-Units (AHTUs) in States Across the Country.
- **Anti-Human Trafficking Units (AHTUs)** will be set up in all districts of States & UTs at cost of Rs. 100 crores for safety and security of women and girl victims of trafficking.
- **Women Help Desks (WHDs)** would be gender sensitive desks for grievance redressal which will be set up in Police Stations in all States & UTs.
- These will be set up at cost of Rs. 100 crores each to be funded 100% by the Central Government under **Nirbhaya Fund**.

NATIONAL SAMPLE SURVEY (NSS) REPORT NO.584: DRINKING WATER, SANITATION, HYGIENE AND HOUSING CONDITION IN INDIA, NSS 76TH ROUND (JULY –DECEMBER 2018) – KEY FINDINGS

- **Drinking water facility:** 42.9% of the households in the rural areas used hand pump as the principal source of drinking water. 40.9% of the households in the urban areas used piped water into dwelling as the principal source of drinking water.
- **Bathroom and sanitation facility:**
 - About 50.3% of the households in the rural and about 75.0% in the urban areas had exclusive access to bathroom.
 - About 71.3% of the households in the rural and about 96.2% in the urban areas had access to latrine. About 50.9% of the households in rural and 48.9% in urban areas used flush/pour-flush to septic tank type of latrine.
- **Tenurial status and household characteristics:** 96.0% of the households in the rural and 63.8% in the urban areas had their own dwelling unit. 76.7% of the households in the rural and 96.0% in the urban areas had the house of pucca structure.
- Among the households living in houses, about 93.9% of the households in the rural and about 99.1% in the urban areas had **electricity for domestic use**.
- Among the households living in houses, about 48.3% of the households in the rural and about 86.6% in the urban areas used **LPG as fuel for cooking**.

GOING ONLINE AS LEADERS (GOAL)

- The second phase of Going Online as Leaders (GOAL) was announced.
- GOAL is a **Facebook program in association with Union Ministry of Tribal Affair**.
- It was **launched in March 2019** to encourage tribal girls from across India to become village-level digital young leaders for their communities.
- GOAL connects underprivileged young tribal women with senior expert mentors in the areas of business, fashion and arts to learn digital and life skills. In the second phase, **5000 young women will be digitally mentored in India's tribal dominated districts**.

FEMALE REPRESENTATION IN SENIOR MANAGEMENT

The Credit Suisse Research Institute (CSRI) released a report, titled **"The CS Gender 3000 in 2019: The changing face of companies."** Key findings are:

- Ranked 23 globally, India's female representation on boards has increased by 4.3 %age points over the past five years to 15.2% in 2019. This is significantly below the global average of 20.6%.
- India also has the third-lowest rank in the Asia Pacific with regard to female chief executive officer (CEO) representation (2%), as well as the second-lowest rank for female chief financial officer (CFO) representation (1%).
- With 15% of female CEOs, Singapore and Italy rank the highest in terms of female CEO representation globally, followed by Thailand (9%) and the Philippines (8%).

VAYOSHRESHTHA SAMMAN

- President of India conferred the "Vayoshreshtha Samman-2019".
- These are conferred every year in **13 categories to eminent senior citizens and Institutions** in recognition for their service to elderly persons.
- The series of awards were **instituted by the Ministry of Social Justice in the year 2005 and were elevated to the level of national awards in 2013.**
- Generally, the awards are **conferred on the 1st October on the occasion of International Day of Older Persons (IDOP).**

In 1990, the **UN General Assembly** by a resolution designated **1 October** as the **International Day of Older Persons (IDOP)**. The theme of the 2019 commemoration is **"The Journey to Age Equality"**.

'STATIONS' CLEANLINESS SURVEY REPORT'

- **Minister of Railways released the 'Stations' Cleanliness Survey Report' (Cleanliness assessment of Non-suburban and Suburban Stations 2019).**
- Railways have been conducting third party audit and cleanliness ranking of major stations annually since 2016. This year the survey was expanded to include 720 stations and **suburban stations were also included for the first time.**
- The total score is out of 1000 and each component (Process Evaluation, Direct Observation, Citizen Feedback) weighs 33.33% of the total score.

Key findings of the report:

- The top three cleanest railways stations are from the western state of Rajasthan. While Jaipur was on the first position, Jodhpur on second followed by Durgapura.
- North Western Railway followed by South East Central Railway and East Central Railway are the top three railway zones.

OPEN-DEFECATION FREE (ODF)

- On the occasion of 150th birth anniversary of Mahatma Gandhi, PM Modi announced that rural India and its villages have declared themselves open-defecation free (ODF).
- According to him, In 60 months, more than 60 crore people were provided with 11 crore toilets.
- Citing a UNICEF estimate, PM Modi said that "there is a positive impact, worth Rs 20 lakh crore, on the Indian economy due to the Swachh Bharat campaign. It has created opportunities of 75 lakh jobs out of which a majority have been availed by the rural population".

- He also announced a second campaign aimed at eliminating single-use plastic by 2022.

Swacch Bharat Mission- Gramin (SBM-G)

- Swacch Bharat Mission- Gramin (SBM-G) was launched on October 2, 2014 with an aim to achieve universal sanitation coverage, improve cleanliness, and eliminate open defecation in the country by October 2, 2019.
- Under SBM-G, a village is ODF when: (i) there are no visible faeces in the village, and (ii) every household as well as public/community institution uses safe technology options for faecal disposal.
- After a village declares itself ODF, states are required to carry out verification of the ODF status of such a village. This includes access to a toilet facility and its usage, and safe disposal of faecal matter through septic tanks.

BRU REFUGEES

Since October 1, six members of the Reang or Bru community have reportedly died in relief camps in Tripura, after the Centre decided to stop food supplies and cash dole. Now, the Tripura government announced that it would restore food supplies.

Bru Tribe:

- **Residence:** The Brus, also referred to as the Reangs, are spread across the north-eastern states of Tripura, Assam, Manipur, and Mizoram. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group.
- **Culture:** They speak the Reang dialect of Kokborok language which is locally referred to as **Kau Bru**. Their **Hojagiri** folk dance is well known all over the world. '**Buisu**', not 'bihu' is the most popular festival of Reang tribes.

Conflict in Mizoram:

- In 1995, Mizos, the majority tribe of the state, demanded that Brus be left out of the state's electoral rolls as they contended that they are not indigenous to Mizoram.
- In 1997, ethnic violence forced the Brus to flee the state in large numbers to neighbouring Tripura. Currently, around 35,000 Bru refugees are living in Tripura camps.

TWO CHILD NORM

- Assam Cabinet has decided that no government jobs will be given to persons having more than two children after January 1, 2021 as per the small family norm.
- In 2013, Assam recorded a Total Fertility Rate of 2.3 (source: SRS) against a target for replacement level fertility rate of 2.1.
- Rajasthan, MP and Maharashtra already have a similar policy.

Two Child Norm For Panchayat Elections:

- Last year, Assam also passed the Assam Panchayat (Amendment) Act, 2018, according to which those contesting panchayat polls cannot have more than two children.
- Other states with similar norms for local body polls include Uttarakhand, Odisha, Maharashtra, Gujarat, Telangana, Andhra Pradesh and Rajasthan.

India is a signatory to the **International Conference on Population and Development Declaration, 1994** under which India is bound to honour the individual right of the couples to decide freely the number of children they want to have and also decide spacing between the births of their kids.

EDUCATION

QS WORLD UNIVERSITY RANKINGS

- The latest QS World University Rankings was published by global higher education consultancy Quacquarelli Symonds, ranking the world's top 1,000 universities.
- Massachusetts Institute of Technology (MIT) was placed on top of the global list for the eighth consecutive year.
- **23 Indian universities are in world top 1,000. There were 24 in last year's rankings.** Out of the 23, nine are in the top 500, including seven IITs. **IIT Bombay was placed at number one in the list of Indian universities for the second consecutive year.** It was globally ranked at 152.
- The Manipal Academy of Higher Education, which falls within the 701-750 ranking band, is the top private university in the country.

EDUCATION QUALITY UPGRADATION AND INCLUSION PROGRAMME (EQUIP)

The Department of Higher Education of HRD Ministry has finalized and released a five-year vision plan named Education Quality Upgradation and Inclusion Programme (EQUIP). It sets the following goals for higher education sector –

- Double the Gross Enrolment Ratio (GER) in higher education
- Position at least 50 Indian institutions among the top-1000 global universities
- Accreditation of all institutions as an assurance of quality
- Promote Research & Innovation ecosystems for positioning India in the Top-3 countries in the world in matters of knowledge creation
- Double the employability of the students passing out of higher education

DEEKSHARAMBH

- The Union Minister of Human Resource Development (HRD) released Deeksharambh, a University Grants Commission (UGC) guide to Student Induction Programme.
- **Objectives:** To help new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, and expose them to a sense of larger purpose and self-exploration.
- The Student Induction Programme engages with the new students as soon as they come into the institution, before regular classes start.

PARAMARSH

- The Union Minister for Human Resource Development (HRD) launched the University Grants Commission (UGC) Scheme of 'Paramarsh'.
- It is a scheme for Mentoring National Accreditation and Assessment Council (NAAC) Accreditation Aspirant Institutions to promote Quality Assurance in Higher Education.
- **Coverage:** The scheme will target 1000 Higher Education Institutions for mentoring.

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- **Hub & Spoke model:** The Scheme will be operationalized through a “Hub & Spoke” model. Under it, the Mentor Institution, called the “Hub” is centralized and will have the responsibility of guiding the Mentee institution through the secondary branches the “Spoke” through the services provided to the mentee for self-improvement.

JAN SHIKSHAN SANSTHANS (JSS)

- Union Minister for Skill Development and Entrepreneurship announced that Fee for SC/ST candidates, who join vocational training under Jan Shikshan Sansthan (JSS), has been waived off.
- Currently, there are 247 JSSs working across the country imparting vocational skill training programmes and entrepreneurship benefits accessible to the underprivileged such as neo-literates, semi-literates, SCs, STs, women and girls, slum dwellers, migrant workers.
- Formerly under the Ministry of Human Resources Development, Jan Shikshan Sansthan has been **transferred to Ministry of Skill Development & Entrepreneurship** in 2018.

INTEGRATED NATIONAL SCHOOL EDUCATION TREASURY (INSET)

- Union HRD Minister announced the setting up of the INSET, a seamless information network for all parameters relating to the students, teachers, and schools in the country.
- The aim is to create an easily accessible multi-layered eco-system of information – school wise, block-wise, district-wise, constituency-wise, state-wise and region-wise.
- Using this, parents will soon be able to inform the education authorities directly in real time if a school administration provides incorrect details about its infrastructure, teachers or if the teachers are indulging in absenteeism.

CENTRAL UNIVERSITIES (AMENDMENT) BILL, 2019

- Parliament passed the **Central Universities (Amendment) Bill, 2019**. It amends the Central Universities Act, 2009.
- The Bill provides for the establishment of two central universities in Andhra Pradesh: (1) Central University of Andhra Pradesh and (2) Central Tribal University of Andhra Pradesh.
- At present, **there is no Central University in the State of Andhra Pradesh while all other States, except Goa, have one or more Central University**.
- Moreover, the establishment of a Central University and a Central Tribal University in the State of Andhra Pradesh is **obligatory under the Andhra Pradesh Reorganisation Act, 2014**.

DRAFT NATIONAL EDUCATION POLICY, 2019

Kasturirangan Committee submitted the Draft National Educational Policy to the Union HRD Minister to replace the extant National Policy on Education 1986 modified in 1992.

Recommendations on School Education:

- It recommends **extension of Right to Education Act 2009** to cover children of ages 3- 18.
- It proposes a **5+3+3+4 curricular and pedagogical structure** based on cognitive and socio-emotional developmental stages of children:
 - Foundational Stage (age 3-8 yrs): 3 years of pre-primary plus Grades 1-2;
 - Preparatory Stage (8-11 years): Grades 3-5;
 - Middle Stage (11-14 years): Grades 6-8; and
 - Secondary Stage (14-18 years): Grades 9-12.
- Schools will be re-organized into school complexes.

- It also seeks to reduce content load in school education curriculum.

Recommendations on Higher Education:

- A **restructuring of higher education institutions** into three types –
 - Type 1: Focused on world-class research and high quality teaching;
 - Type 2: Focused on high quality teaching across disciplines with significant contribution to research;
 - Type 3: High quality teaching focused on undergraduate education.
- A new apex body **Rashtriya Shiksha Ayog** is proposed to enable an integrated implementation of all educational initiatives and to coordinate efforts between the Centre and States.
- The **National Research Foundation**, an apex body, is proposed for creating a strong research culture and building research capacity across higher education.
- The four functions of **Standard setting, Funding, Accreditation and Regulation** to be separated and conducted by independent bodies:
 - National Higher Education Regulatory Authority as the only regulator for all higher education including professional education;
 - Creation of accreditation eco-system led by revamped NAAC;
 - Professional Standard Setting Bodies for each area of professional education and
 - UGC to transform to Higher Education Grants Commission (HEGC).

Other recommendations:

- The Committee has proposed to rename MHRD as Ministry of Education (MoE).
- The 4-year integrated stage-specific B.Ed. programme will eventually be the minimum degree qualification for teachers.
- The private and public institutions will be treated on par and Education will remain a 'not for profit' activity.

SCHEME FOR TRANS-DISCIPLINARY RESEARCH FOR INDIA'S DEVELOPING ECONOMY (STRIDE)

- The University Grants Commission (UGC) has approved STRIDE, a new scheme to strengthen research culture and innovation in colleges and Universities.
- An advisory Committee has been set up by the UGC under the chairmanship of Prof Bhushan Patwardhan to oversee the entire scheme.
- **STRIDE components:**
 - **Component-1:** It will endeavour to identify the motivated young talents with research and innovation aptitude in universities and colleges.
 - **Component-2:** It will encourage collaborations between universities, government, voluntary organizations and industries.
 - **Component-3:** It will fund high impact research projects in humanities through national network of eminent scientists from leading institutions.

SHAGUN

- Union HRD Minister launched 'Shagun' (URL: <http://shagun.govt.in/>) to improve school education system.

- It is an Integrated Online junction for all portals/websites relating to various activities of the Department of School Education and Literacy in the Government of India and States/UTs.
- Websites of 1200 Kendriya Vidyalayas, 600 Navodaya Vidyalayas, 18000 other CBSE affiliated schools, 30 SCERTs, 19000 organisations affiliated with NTCE among others are integrated with Shagun. The portal seeks to connect approximately 92 lakh teachers and 26 crore students.

EARLY CHILDHOOD CARE AND EDUCATION (ECCE)

Key highlights of the draft National Education Policy 2019 on ECCE:

- Right To Education Act to cover the three years of preschool before Class 1. Thus, all Indian children could soon enter the formal education system at the age of three.
- Early childhood education should be overseen and regulated by the Ministry of Human Resource Development (HRD) as part of the school system, rather than the private pre-schools and anganwadis that currently cater to the 3-to-6 years age group.
- It suggests a new integrated curricular framework for 3 to 8-year olds with a flexible system based on play, activity and discovery, and beginning exposure to three languages from age 3 onwards.

NATIONAL YOGA OLYMPIAD

- The Fourth edition of National Yoga Olympiad of school children began in New Delhi.
- It was first started in the year **2016** and is organized by **National Council of Educational Research and Training (NCERT)**.

INSTITUTIONS OF EMINENCE

- The University Grants Commission (UGC) has recommended 20 Institution for status of 'Institutions of Eminence.' The decision was taken by the UGC after considering the reports of the Empowered Expert Committee (EEC) appointed by Government under the Chairmanship of N Gopalaswami, former Chief Election Commissioner.
- **Principles used for identifying the (10) Public and (10) Private Institutions:**
 - No existing institution which has NOT figured in any of the global/national ranks shall be recommended for the IoE status.
 - Only after exhausting the above criterion, if any slot remains vacant, consideration shall be given to 'yet to be established (Greenfield)' proposals.
- **Key institutions recommended for the grant of the Institute of Eminence status:**
 - The IITs Madras and Kharagpur, Delhi University, University of Hyderabad, Amritha Vishwa Vidyapeetham and VIT are among the 20 institutions.
 - The Satya Bharti Foundation — telecom major Airtel's philanthropic arm — became the second greenfield institution to be given IoE status, after Jio Institute which is backed by the Reliance Foundation.
- The UGC's recommendations will now be submitted to the Ministry of Human Resource Development (HRD) for final grant of the status.

Background:

- **Objective:** The Institute of Eminence scheme aimed at developing 20 world-class institutions which would put India on the global education map.
- **Benefits:** Those selected will be given greater autonomy and freedom to decide fees, course durations and governance structures. The public institutions will also receive a government grant of ₹1,000 crore, while the private institutions will not get any funding under the scheme.

SAMAGRA SHIKSHA-JAL SURAKSHA

- **Launched By:** The Department of School Education & Literacy, Ministry of HRD launched 'Samagra Shiksha-Jal Suraksha' drive for School Students.
- **Major Objectives of This Drive:** To educate Students learn about conservation of water and to help every Student to save at least one litre of water per day.
- **Target:** This mega drive targets to connect more than 10 crore students with this programme.

NISHTHA

- Union Human Resource Development (HRD) Minister launched "**National Mission to Improve Learning Outcomes at the Elementary Level (NISHTHA)**" to build capacities of 42 Lakh government teachers across the country.
- Under it, teachers will develop their skills on various aspects related to Learning Outcomes, School Safety, ICT in teaching-learning including Artificial Intelligence, Environmental Concerns and School Based Assessment in a joyful learning manner.
- Training will be conducted directly by 33120 Key Resource Persons (KRP) and State Resource Persons (SRP) identified by the State and UTs, who will in turn be trained by 120 National Resource Persons identified from NCERT, NIEPA, Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), CBSE and NGO.

THE CENTRAL EDUCATIONAL INSTITUTIONS (RESERVATION IN TEACHERS' CADRE) BILL, 2019

- Parliament passed the "The Central Educational Institutions (Reservation in Teachers' Cadre) Bill, 2019".
- **Salient Features of the bill:**
 - The unit for reservation of posts in direct recruitment in teachers' cadre will be the University/Educational Institutions based on 200 point roster and not the Department.
 - It will also ensure providing of 10% reservation to Economically Weaker Sections (EWS) in direct recruitment in teachers' cadres.

QUALITY MANDATE IN HIGHER EDUCATION

HRD Minister launched the five documents developed by University Grants Commission (UGC) covering the 5 verticals of Quality Mandate in New Delhi.

1. **SATAT – the Framework for Eco-Friendly and Sustainable Campus development in Higher Educational Institutions** – encourages universities to adopt policies to enhance the environmental quality of the campus.
2. UGC has also developed a policy framework- "**MulyaPravah - Guidelines for Inculcation of Human values and Professionals Ethics in Higher Educational Institutions**".
3. Guidelines for **Guru-Dakshta - A guide to Faculty Induction Programme** will fulfil its main objective to motivate the faculty to adopt learner-centred approaches, ICT integrated learning and new pedagogic approaches to teaching-learning.
4. **The Higher Education Quality Improvement Programme Mandate** aims at evolving higher education system to equip country's next-generation with vital skills, knowledge and ethics for leading a rewarding life.
5. In order to make student assessment more meaningful, effective and linked to Learning Outcomes, the report '**Evaluation Reforms in Higher Educational Institutions in India**' is very timely and beneficial for HEIs.

M.M. SALUNKHE PANEL (ON-DEMAND EXAMINATIONS)

The University Grants Commission (UGC) panel on evaluation reforms chaired by M.M. Salunkhe submitted its report. **Its key recommendations are:**

- **On-demand examination:** establish a national board to conduct on-demand examinations at the undergraduate degree level. Starting with distance programmes for popular degree courses, on-demand examinations should be open to all, without any age or eligibility restrictions.
- **Relative grading system:** All autonomous or high-ranked institutions should start following a relative grading system, instead of the current absolute grading system, thus allowing for comparative performances among peers and reducing the stress of failures.
- Students should have the **freedom to opt for courses beyond their core specialisations.**

SCHOOL EDUCATION QUALITY INDEX (SEQI)

- **The School Education Quality Index (SEQI) was released by Niti Aayog.**
- SEQI consists of following 30 indicators to assess the delivery of quality education.
 - **Category 1: Outcomes** (Domain 1: Learning outcomes; Domain 2: Access outcomes; Domain 3: Infrastructure and facilities for outcomes and Domain 4: Equity outcomes).
 - **Category 2:** Governance processes aiding outcomes

Findings:

- **Among the large States,** Kerala bagged the top spot with 76.6 % and while Uttar Pradesh with 36.4 % scored the lowest for 2016-17. Rajasthan bagged the second position with 72 %, followed by Karnataka with 70 %.
- **Among the small States,** Manipur (68.8 %) emerged as the top performer while Arunachal Pradesh (24.6 %) came last in the category.
- **Among Union Territories,** Chandigarh (82.9 %) stood at the top position while Lakshadweep ranked lowest (31.9 %).
- Haryana, Meghalaya, Daman & Diu show most improvement.

NATIONAL INSTITUTE OF DESIGN (AMENDMENT) BILL, 2019

- **Parliament has passed the National Institute of Design (Amendment) Bill, 2019.**
- The Bill seeks to amend the National Institute of Design Act, 2014, which declares the National Institute of Design, Ahmedabad as an institution of national importance.
- The bill seeks to declare four National Institutes of Design in **Andhra Pradesh, Madhya Pradesh, Assam, and Haryana** as institutions of national importance.
- Currently, these institutes are registered as Societies under the Societies Registration Act, 1860 and do not have the power to grant degrees or diplomas.
- On being declared institutions of national importance, the four institutes will be granted the power to grant degrees and diplomas.

PROGRAM FOR INTERNATIONAL STUDENT ASSESSMENT (PISA)

- **Union HRD Ministry reviewed the preparations for the Programme for International Student Assessment (PISA) 2021. In 2018, HRD Ministry decided to participate in PISA-2021. Till date, India has participated only once in PISA in 2009.**
- PISA is a **triennial** international survey which was first administered in **2000**. It is coordinated by the Organization for Economic Cooperation and Development (**OECD**).

- **Objective:** It assesses the quality of education systems across the world by evaluating students in science, mathematics and reading.
- **Criteria:** The two-hour computer-based test focuses on **15-year-old students**. PISA requires the examinees to have finished at **least six years of formal schooling**.

LEADERSHIP FOR ACADEMICIANS PROGRAMME (LEAP)

- **Union HRD Minister launched Leadership for Academicians Programme (LEAP) - 2019 under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMNMTT) in New Delhi.**
- LEAP is a three weeks leadership development training programme for second level academic functionaries in public funded higher education institutions.
- LEAP is being implemented through the 15 higher education institutions (HEIs) like IIT Kharagpur, IIT Kanpur, Banaras Hindu University, Jamia Millia Islamia etc.
- **Eligibility conditions are:** 8 years of experience as Professor; 3 years administrative experience; High academic standing preferably 30 publications in 'SCOPUS' indexed international journals or UGC approved journals; and age below 58 years.

SHODH SHUDDHI

- **Union Minister for HRD launched the Plagiarism Detection Software (PDS) "Shodh Shuddhi".** This service is being implemented by INFLIBNET, an Inter University Centre (IUC) of UGC.
- PDS will help to improve the quality of research outcome by ensuring the originality of ideas and publication of the research scholars.
- Initially, about 1000 Universities/ Institutions are being provided with this service.

ALL INDIA SURVEY ON HIGHER EDUCATION (AISHE) 2018-19

Union Minister for HRD released the AISHE 2018-19. Key Findings are:

- **The top 5 States in terms of highest number of colleges in India are Uttar Pradesh, Maharashtra, Karnataka, Rajasthan and Haryana.**
- Bangalore Urban district tops in terms of number of colleges with 880 colleges.
- **College density**, i.e. the number of colleges per lakh eligible population varies from 7 in Bihar to 53 in Karnataka as compared to All India average of 28.
- 60.53% Colleges are located in Rural Area. 11.04% Colleges are exclusively for Female
- **77.8% Colleges are privately managed.**
- Total enrolment in higher education has been estimated to be 37.4 million. **Female constitute 48.6% of the total enrolment.**
- **Gross Enrolment Ratio (GER) in Higher education** has increased from 25.8 in 2017-18 to 26.3 in 2018-19, which is calculated for 18-23 years of age group. GER for male population is 26.3% and for females, it is 26.4%. For Scheduled Castes, it is 23% and for Scheduled Tribes, it is 17.2% as compared to the national GER of 26.3%.
- **Uttar Pradesh comes at number one with the highest student enrolment** followed by Maharashtra and Tamil Nadu.
- **Highest share of foreign students come from Nepal (26.88%).**

HRD Ministry collects online information on Universities, Colleges and other Higher Educational Institutions under the AISHE. The annual publication started in 2010-11.

NSS 75th ROUND SURVEY (JULY 2017- JUNE 2018) ON HOUSEHOLD SOCIAL CONSUMPTION: EDUCATION

National Statistical Office (NSO) has conducted a survey on Household Social Consumption: Education as part of 75th round of National Sample Survey (NSS). **Key findings are:**

- **Literacy rate among persons of age 7 years** and above was 77.7%. It was 73.5% in rural and 87.7% in the urban areas.
- Nearly 10.6 % of the persons of age 15 years and above in India had **completed level of education graduate and above**. This was 5.7% in rural and 21.7% in urban areas.
- **Among persons of age 3 to 35 years, 13.6% never enrolled**, 42.5% ever enrolled but currently not attending while 43.9% were currently attending.
- **Net Attendance Ratio (NAR)** at primary level was 86.1%. The figure was 72.2% at 'upper primary / middle level' and 89.0% at 'primary and upper primary /middle level'
- Nearly 96.1% of the students were **pursuing general courses** and 3.9% were **pursuing technical/professional courses**. Among students pursuing technical/professional courses, nearly 65.2% were male students and 34.8% were female students.
- 4.4% of the rural households and 23.4% of the urban households **had computer**. 14.9% of the rural households and 42.0% of the urban households **had internet facility**.

INITIATIVES TO BOOST RESEARCH AND INNOVATION

Union HRD Minister launched several initiatives of MHRD's Innovation Cell (MIC) and AICTE to boost research and innovation in the country.

- Establish a network of **Institution's Innovation Council (IICs) 2.0** from July 2019 – June 2020 in Higher Educational Institutes to promote innovation and start-up.
- **Launch of Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2020** to rank all major educational institutions and universities on indicators related to promotion of "Innovation and Entrepreneurship Development" amongst their students and faculties.
- **Launch of Smart India Hackathon 2020 (SIH2020)** to provide students a platform to solve some of the pressing problems we face in our daily lives.
- **Announcement of new ATAL ACADEMIES:** It is proposed to set up 10 (ten) more AICTE Training And Learning (ATAL) Academies/Centres (apart from existing 4).
- **Launch of Protsahan Mudra Scheme:** Protsahan Mudra is real time rewards Engine to give rewards to Students and teachers for the action that qualifies for the reward.
- **Announcement of AICTE – VISHWAKARMA AWARDS' 2019** to motivate young students and institutions to raise their performance in their specific domains. Theme of Vishwakarma Award 2019 is "How to enhance the income of Village".

MHRD's Innovation Cell (MIC):

In 2018, the Ministry of HRD, initiated the separate Innovation cell with support from AICTE to foster the culture of innovation.

The All India Council for Technical Education (AICTE) is the national-level council for technical education, under Department of Higher Education, MoHRD. It was established in 1945 first as an advisory body and later on in 1987 given statutory status by an Act of Parliament.

CURRICULUM FOR LIFE SKILLS (JEEVAN KAUSHAL)

- **Union Minister for Human Resource Development (HRD) launched Curriculum for Life Skills (Jeevan Kaushal) designed by University Grants Commission (UGC).**

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- The Curriculum is designed to impart and strengthen the life Skills like communication skill, time management, decision making capacity, leadership ability and integrity which play a crucial role in boosting the employability of the students.
- **The UGC** is a statutory body governed by the UGC Act 1956. It is under Ministry of Human Resource Development, and provides recognition to universities in India, and disbursements of funds to such recognised universities and colleges. Its headquarters is in New Delhi.

NATIONAL EDUCATIONAL ALLIANCE FOR TECHNOLOGY (NEAT)

- **HRD Ministry announced a new PPP Scheme, National Educational Alliance for Technology (NEAT)** to use Artificial Intelligence for making learning more personalised and customised as per the requirements of the learner.
- **AICTE** would be the implementing agency for NEAT programme. The scheme shall be administered under the guidance of an **Apex Committee constituted by MHRD**.
- **EdTech companies** would be responsible for developing solutions and manage registration of learners through the NEAT portal. They would be free to charge fees as per their policy.
- **Functioning:** EdTech companies would have to offer free coupons to the extent of 25% of the total registrations for their solution through NEAT portal. MHRD would distribute the free coupons for learning to the most socially/economically backward students.

FACILITATION THROUGH MARGADARSHAN AND MARGADARSHAK

- **Union HRD Minister launched the AICTE** initiative of Facilitation through Margadarshan and Margadarshak.
- **Margadarshan:** Institutions having good accreditation record / highly performing institutions are supposed to mentor relatively newer 10 - 12 potential institutions. These institutions are also provided funding upto Rs. 50 lakhs per institution over a period of three years for the purpose.
- **Margdarshak:** Mentor teachers or Margdarshaks who are either serving or superannuated but willing and motivated with good knowledge of accreditation will be identified. These Margdarshaks will regularly visit to the mentee institutions.

THE GANDHIAN CHALLENGE

- **On the 150th birth Anniversary of Mahatma Gandhi, Atal innovation mission (AIM), NITI Aayog's Atal Tinkering Labs (ATL) and UNICEF India, including Generation Unlimited, have launched 'The Gandhian Challenge'.**
- This innovation challenge provides a platform for every child across India to ideate innovative solutions for a sustainable India of their dreams, using Gandhi's principles.
- The contest was open for every child in India from 2 October to 20 October. The problem statement was: "Share your innovative solutions/ideas to create a futuristic and sustainable world of your dreams, following Gandhi's principles."
- Ideas and solutions to the Gandhian Challenge were expressed through: Art (Letters, poems, painting, videos and photos) and Science & Technology (Robotics, IoT, sensors and 3D printers, among others).

Generation Unlimited?

- Generation Unlimited is a new UNICEF-led global partnership that aims to ensure that every young person age 10-24 is in some form of school, learning, training, self-employment, or age-appropriate employment by 2030.

- It aims to co-create and scale up proven solutions related to secondary age-education, skills for learning, employability and decent work, and empowerment.

YUWAAH

- **UNICEF launched 'YuWaah' Generation Unlimited in India**, a multi-stakeholder alliance which aims to facilitate youth to gain relevant skills for productive lives.
- The target age group of YuWaah includes adolescent girls and boys.
- YuWaah intends to create platforms to guide youth to market opportunities (career guidance, mentorship, internships, apprenticeships) and facilitate integration of career guidance in school education.

PRADHAN MANTRI INNOVATIVE LEARNING PROGRAMME (PMILP)- 'DHRUV'

- **Union HRD Minister launched the Pradhan Mantri Innovative Learning Programme from Indian Space Research Organisation (ISRO) Headquarters at Bengaluru.**
- The programme will be called DHRUV (after the Pole Star) and every student to be called 'DHRUV TARA'. Under it, gifted children will be mentored by renowned experts in centres of excellence across the country in different areas.
- 60 outstandingly talented students from classes 9 to 12 have been selected in the first batch from across the country. This is only the first phase of the programme which will be expanded gradually to other fields like creative writing etc.

MAHATMA GANDHI NATIONAL FELLOWSHIP (MGNF) PROGRAMME

- **The Ministry of Skill Development and Entrepreneurship (MSDE) announced its partnership with Indian Institute of Management (IIM)- Bangalore to launch a new programme 'Mahatma Gandhi National Fellowship (MGNF)'.**
- It is aimed to train individuals, who will leverage the IIMB ecosystem in entrepreneurship and public policy and work with the district administration in strengthening the process of skilling to create a vibrant local district economy.
- **The programme will be launched on a pilot basis in 75 districts in 6 states** including Gujarat, Karnataka, Meghalaya, Rajasthan, Uttar Pradesh and Uttarakhand.
- Those who have a graduate degree from a recognised university and are citizens of India in the age group of 21-30 years will be **eligible to apply for it**.
- It has been Designed under **Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP)**.

Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP)?

- Launched by the Government of India in January 2018, SANKALP is a World Bank loan assisted project that aims to strengthen institutional mechanisms for skill development and increase access to quality and market-relevant training for youth across the country.
- Four areas have been identified under SANKALP viz: (i) Institutional Strengthening; (ii) Quality Assurance; (iii) Inclusion; and (iv) Expanding Skills through PPPs.

PRESCHOOL CURRICULUM

The National Council of Educational Research and Training (NCERT) released the first-ever preschool curriculum. **Its Key highlights are:**

- Pre-school education is defined as the education of 3 to 6-year-olds, whether at anganwadis, nursery schools, kindergartens, playschools or Montessori schools.

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- Children between the ages of 3 to 6 years should be taught in their own mother tongues.
- Focus should be on learning through play instead of being subjected to rote learning, tests and examinations.

Background:

- The draft National Education Policy has recommended that the Right to Education Act be extended to students in the three years of preschool before Class I.
- It also proposed that the NCERT develop a curricular and pedagogical framework for early childhood education.

SHAALA DARPAN

- **HRD Minister launched Shaala Darpan portal**, an end to end E-Governance school automation and management system for Navodaya Vidyalaya Samiti.
- It has been developed for information sharing and knowledge dissemination for the 22000 employees and over 2 lakh students across schools and offices of Navodaya Vidyalaya Samiti. It will bring transparency in Navodaya Vidyalayas.

The Navodaya Vidyalayas are co-educational residential schools established by the Navodaya Vidyalaya Samiti which is an autonomous organization under MHRD to provide quality modern education.

- The system has following components that can interact with each other. These are:
 - School Information and Management System for complete school automation
 - Bilingual Content Management Portal for information dissemination
 - Employee ERP to manage the day to day activities of all employees
 - Budget & Finance management system
 - Inventory & Store management system
 - Library management system

NATIONAL TEACHER AWARDS 2018

- **National Teacher Awards 2018** were given on the occasion of Teachers' day (5th September), as public recognition to meritorious teachers working in **primary, middle and secondary schools**.
- The award carries a **Silver Medal, Certificate and Rs. 50,000/- as award money**.
- Guidelines for the selection of Teachers for National Awards:
 - The **number of awards** per year is restricted to **45**.
 - The final selection is done by an **independent Jury**. Those teachers are selected who showed **innovation in their work and added value** to their school.
 - All regular teachers will be eligible to apply and **no minimum years of service is required**. Teachers could **nominate themselves** for the award.

ANNUAL REFRESHER PROGRAMME IN TEACHING (ARPIT)

- Union HRD Minister launched ARPIT – 2019 under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) in New Delhi.

SWAYAM or Study Webs of Active Learning for Young Aspiring Minds is a programme of the HRD Ministry that enables professors and faculties of centrally funded institutions like IITs, IIMs, Central University Of Haryana to offer online courses to citizens of India.

- ARPIT is a initiative of online professional development of 1.5 million higher education faculty using the SWAYAM.
- **For implementing ARPIT, discipline-specific National Resource Centers (NRCs)** are identified which are tasked to prepare online training material. Centers under the Ministry's PMMMNMTT located in Central Universities, IISc, IUCAA, IITs, IISERs, NITs, State Universities, NITTTRs, IIITs etc. **have been notified as NRCs.**

QS INDIAN UNIVERSITY RANKINGS

The QS Indian University Rankings were released by global higher education consultancy Quacquarelli Symonds. This is the second edition of the standalone rankings for India's higher education institutions.

- **The rankings include public, private, higher education or deemed universities.**
- 7 Indian Institutes of Technology (IITs) figure in the top ten rankings. IIT-Bombay topped the list followed by the Indian Institute of Science (IISc).
- **The methodology used following eight indicators to determine the rankings.**
 - academic reputation (weight of 30%),
 - employer reputation (20%),
 - faculty-student ratio (20%),
 - proportion of staff with a PhD (10%),
 - papers per faculty from Scopus database (10%),
 - citations per paper from Scopus database (5%),
 - proportion of international students (2.5%), and
 - proportion of international faculty (2.5%).

Do you know?

- These India rankings do not necessarily match the QS World University Rankings that were released earlier this year. In that list, IIT-Bombay has been ranked the best Indian institution and IIT-Delhi the second best.
- The two rankings use different criteria e.g. while academic reputation is given a weight of 30% in the India University Rankings, its weight is 40% in the World Rankings.

QS WORLD UNIVERSITY RANKINGS FOR ASIA 2020

- **The latest QS World University Rankings for Asia 2020 was released which uses a methodology based on 11 metrics.**
- National University of Singapore is ranked Asia's best for the second consecutive year.
- 96 Indian institutions rank among 550 for the continent. The best performing institution from India is IIT Bombay, which drops one place to 34th position.
- Only Mainland China is more represented than India, with 118 featured universities. While Mainland China has four in the top 10 this year, India does not yet have a university among the top 30.

HEALTH

ENCEPHALITIS

Government of India has constituted a multi-specialist team to assist the Bihar government in containment of the rising cases of Acute Encephalitis Syndrome (AES) in Muzaffarpur and Japanese Encephalitis (JE) in Gaya.

Encephalitis:

- It is an inflammation and swelling of the brain which is caused either by an infection invading the brain (**Infectious Encephalitis**) or through the immune system attacking the brain in error (**Post-infectious or Autoimmune Encephalitis**).
- The infection is mainly caused by **VIRUS**. Rarely bacteria, fungus and parasites can also cause it.

Acute Encephalitis Syndrome (AES):

- It is characterized by an acute onset of fever and clinical neurological manifestation that includes mental confusion, disorientation, delirium, or coma. The most common causes of acute viral encephalitis are Japanese encephalitis virus, West Nile virus (WNV), Chandipura virus (CHPV) etc.
- AES is reported mainly from **Assam, Bihar, Uttar Pradesh, Karnataka, and Tamil Nadu** which contributes approximately 80% of cases.

Japanese Encephalitis (JE):

- It is a brain infection caused by the mosquito-borne **Japanese encephalitis virus (JEV)**.
- JEV (a virus from the family **FLAVIVIRIDAE**) is transmitted to humans through bites from infected rice field breeding mosquitoes of the Culex species (mainly Culex tritaeniorhynchus).
- **There is no transmission from person to person and therefore patients do not need to be isolated.** Also one can get JE from animals other than domestic pigs & Wild birds or from insects other than mosquitoes. It primarily affects children.
- This disease is most prevalent in Southeast Asia, South Asia and East Asia.
- **Treatment:** There is no specific therapy. Intensive supportive therapy is indicated.

SEXUALLY TRANSMITTED INFECTIONS (STIs)

- The paper, Global and Regional Estimates of the Prevalence and Incidence of Four Curable Sexually Transmitted Infections in 2016, has been published in the WHO Online Bulletin.
- The data provides the baseline for monitoring progress against the **Global Health Sector Strategy on STIs, 2016–2021**. The strategy, adopted by the World Health Assembly in May 2016, proposed to **end STIs as a public health concern by 2030**.

Key Findings of the paper:

- Every day, there are more than 1 million new cases of curable sexually transmitted infections (STIs) among people aged 15-49 years. This amounts to more than 376 million new cases annually of four infections - **chlamydia, gonorrhoea, trichomoniasis, and syphilis**.
- On average, approximately 1 in 25 people globally have at least one of these STIs.

- Syphilis alone caused an estimated 200,000 stillbirths and newborn deaths in 2016, making it one of the leading causes of infant mortality globally.

NIPAH VIRUS

- A youth from Ernakulam district in Kerala has tested positive for the Nipah virus infection, a year after a similar outbreak in the state had claimed 17 lives.
- **Source:** The natural host of the Nipah virus are **fruit bats** of the Pteropodidae family and Pteropus genus, widely found in South and South East Asia.
- **Transmission:** The infection is generally transmitted from animals to human beings, mainly from bats and pigs. Human-to-human transmission is also possible, and so is transmission from contaminated food.
- **Health impact:** Nipah virus causes infection in human beings, which can sometimes be fatal. Patients either show no symptoms of the infection, thereby making it difficult to detect, or develop acute respiratory problems, or encephalitis that often becomes fatal.
- **Treatment:** There is no treatment available as of now, either for humans or animals.

MERCK'S VACCINE (VSV-EBOV)

- Acc. to WHO, preliminary data suggest that the Merck's vaccine (VSV-EBOV), an Ebola vaccine, used during the current outbreaks in Congo was 97.5% efficacious in preventing Ebola infection.
- **Working:** The vaccine is based on a virus found in animals called **vesicular stomatitis virus (VSV)** that is combined with a portion of the protein covering of the Ebola virus. When administered, it induces an immune response against the Ebola virus. It does not contain a live Ebola virus.
- **Bodies involved:** VSV-EBOV has been developed by NewLink Genetics and Merck Vaccines USA in collaboration with the Public Health Agency of Canada.

REMDESIVIR

- In a recent study published in Science Translational Medicine, Scientists have reported that Remdesivir, an experimental drug, has protected monkeys against infection with Nipah virus for which there is no approved vaccine or cure.
- Remdesivir, also known as GS-5734, is an antiviral drug, a novel nucleotide analog prodrug, which was developed by Gilead Sciences as a treatment for Ebola virus. Now, Remdesivir appears to be effective against Nipah virus.

NATIONAL ESSENTIAL DIAGNOSTICS LIST (NEDL)

- India has got its first National Essential Diagnostics List (NEDL) finalised by the Indian Council of Medical Research (ICMR).
- The NEDL aims to bridge current regulatory system's gap that do not cover all medical devices and in-vitro diagnostic device (IVD). With this, India has become the first country to compile such a list.
- **Background:** WHO released first edition of essential diagnostics list (EDL) in May 2018. Even though WHO's EDL acts as a reference point for development of national EDL, India's diagnostics list has been customised and prepared as per landscape of India's health care priorities.

PRETOMANID

- The United States Food and Drug Administration (FDA) approved Pretomanid Tablets.
- Pretomanid cured 89% of 107 patients with extensively drug-resistant TB after 6 months, when used in combination with antibiotics bedaquiline and linezolid. The three-drug regimen of **bedaquiline, pretomanid and linezolid is collectively known as the BPaL regimen.**

- This treatment lowers that dose to 5 pills/day from 30 pills/day over 6 months for TB patients.

GESTATIONAL DIABETES

- A recent paper published in the Journal of the Association of Physicians of India has stated that it is imperative to test all pregnant women for gestational diabetes.
- **Meaning:** Gestational diabetes only happens during pregnancy. It means the mother has high blood sugar levels, but those levels were normal before she was pregnant.
- **Causes:** During pregnancy, the placenta makes hormones that can lead to a buildup of glucose in blood. Usually, pancreas can make enough insulin to handle that. If not, blood sugar levels will rise and can cause gestational diabetes.
- **Impact on mothers health:** After the baby is born, gestational diabetes usually goes away. If one had gestational diabetes, then there is risk for type 2 diabetes.
- **How can GD affect a baby?** Babies born to women with GD may have problems with breathing and jaundice. These babies may have low blood sugar at birth. There also is an increased risk of stillbirth with GD.

FOOT AND MOUTH DISEASE (FMD) AND BRUCELLOSIS

- Union Cabinet has cleared a new initiative to control Foot and Mouth Disease (FMD) and Brucellosis **diseases amongst the livestock in the country in the next five years. The Central Government has decided to now bear the entire cost of the programme.**
- In case of FMD, the scheme envisages vaccination coverage to 30 crore bovines (cows-bulls and buffaloes) and 20 crore sheep/goat and 1 crore pigs at six months' interval along with primary vaccination in bovine calves. The Brucellosis control programme shall extend to cover 100% vaccination coverage of 3.6 crore female calves.

The threat of Foot and Mouth Disease (FMD) and Brucellosis:

- These diseases are very common amongst the livestock – cow-bulls, buffaloes, sheep, goats, pigs etc. If a cow/buffalo gets infected with **FMD, the milk loss is upto 100% which could last for four to six months.**
- Further, in case of **Brucellosis the milk output reduces by 30%, during the entire life cycle of animal.** Brucellosis also causes infertility amongst the animals. The infection of brucellosis can also be transmitted to the farm workers and livestock owners.

FIT INDIA MOVEMENT

- PM Modi launched the Fit India Movement on the occasion of National Sports Day for encouraging people to inculcate physical activity and sports in their day to day life.
- National Sports Day (also known as Rashtriya Khel Divas) is celebrated on **29th August** every year to mark the birth anniversary of **legendary hockey player Major Dhyan Chand.**

NOTIFIABLE DISEASE

- Union Govt. asked the Delhi government to make malaria and dengue notifiable diseases.
- A notifiable disease is any disease that is required by law to be reported to government authorities. The process helps the government keep track and formulate a plan for elimination and control. The onus of notifying any disease **lies with the state government.**
- **The World Health Organization's International Health Regulations, 1969** require disease reporting to the WHO in order to help with its global surveillance and advisory role.

“HEALTHY STATES, PROGRESSIVE INDIA” REPORT

- NITI Aayog released the second edition of “Healthy States, Progressive India” report.
- **What does it rank?** The report ranks states and Union territories on their overall performance, as well as their year-on-year incremental change in health outcomes over a two year period (2016-17 and 2017-18) in the States and UTs.
- **Methodology:** The Index is based on three indicators (1) Health Outcomes; (2) Governance and Information; and (3) Key Inputs/Processes.
- **Key Findings:**
 - **Among Larger States:** Kerala, Andhra Pradesh & Maharashtra ranked on top in terms of overall performance. Haryana, Rajasthan and Jharkhand are the top three ranking States in terms of annual incremental performance.
 - **Among Smaller States:** Mizoram ranked first followed by Manipur on overall performance, while Tripura followed by Manipur were the top ranked States in terms of annual incremental performance.
 - **Among UTs:** Chandigarh and Dadra and Nagar Haveli were ranked on top in terms of overall performance (Chandigarh-1 and Dadra and Nagar Haveli-2) as well as annual incremental performance (Dadra and Nagar Haveli-1 and Chandigarh-2).

FIXED DOSE COMBINATION (FDC) DRUGS

- A drug advisory body sub-committee has asked pharmaceutical companies to prove that 324 **Fixed Dose Combination (FDC) drugs** are safe and effective for patients to consume in order to decide whether these drugs should continue to be sold in India.
- **Fixed Dose Combination (FDC) drugs** includes two or more active pharmaceutical ingredients (APIs) combined in a single dosage form, which is manufactured and distributed in fixed doses.
- **Common examples of FDCs:** Cough syrups Phensedyl and Corex, Vicks Action 500.
- In India, FDCs were declared “irrational” by a Union Health Ministry expert committee set up in 2014 headed by former KLE University Vice-Chancellor, CK Kokate.

FIRST-EVER WORLD FOOD SAFETY DAY**World Food Safety Day:**

- **Background:** The first-ever World Food Safety Day was adopted by the United Nations General Assembly in December 2018.
- **Date of observance:** June 7.
- **Theme:** Food Safety, everyone's business.
- **Objective of the day:** To mainstream food safety in the public agenda and reduce the burden of foodborne diseases globally.

Union Minister of Health launched various initiatives on the occasion:

- **Eat Right Awards:** Food Safety and Standards Authority of India (FSSAI) has instituted the ‘Eat Right Awards’ to recognize the contribution of food companies and individuals to empower citizens to choose safe and healthy food options.
- **State Food Safety Index (SFSI):** FSSAI has developed the first SFSI to measure the performance of States on five parameters of food safety: (1) Human Resources and Institutional Arrangements, (2) Compliance, (3) Food Testing- Infrastructure and Surveillance, (4) Training & Capacity Building and (5) Consumer Empowerment.

- **Raman 1.0:** It is a hand-held battery-operated device which performs rapid detection (in less than 1 minute) of economically driven adulteration in edible oils, fats and ghee.
- **Food Safety Magic Box:** It is an innovative solution to take food safety to schools. This do-it-yourself food testing kit comprises a manual and equipment to check for food adulterants, which schoolchildren can use in their classroom laboratories.

WHO findings on food safety:

- An estimated 600 million cases of food-borne diseases occur annually around the world. This translates into one in 10 people falling ill after eating contaminated food.
- Children under 5 years of age carry 40% of the food-borne disease burden with 1,25,000 deaths every year.

DIPHTHERIA

- This season's first death due to diphtheria in Delhi has caused an alarm, with doctors assessing their preparedness.
- Diphtheria is an infectious disease caused by **Corynebacterium diphtheria, a bacterium.**
- **Health impact:** One type of diphtheria affects the throat and sometimes the tonsils. Another type causes ulcers on the skin; these are more common in the tropics (places where all 12 months have mean temperatures of at least 18 °C).
- **Vulnerable groups:** Diphtheria particularly affects children aged 1 to 5 years. In temperate climates diphtheria tends to occur during the colder months.
- **Vaccine:** The diphtheria vaccine is among the oldest vaccines in India's Universal Immunisation Programme.
- **Indian scenario:** Cases in the country have been going up over the last few years after showing a remarkable reduction in 2015. In 2015, as per WHO data, India reported 2,365 cases. However, in 2018, the numbers rose to 8,788.

DASTAK CAMPAIGN

- Uttar Pradesh launched the DASTAK campaign to eradicate deadly Acute Encephalitis Syndrome (AES) and Japanese Encephalitis (JE) disease. The campaign ran from 1st to 31st July, 2019.
- Under this state-wide campaign, teams will go door to door in every village of the 75 districts of the state to create awareness about the communicable diseases as well as Acute Encephalitis Syndrome (AES) and Japanese Encephalitis (JE).

THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

- "The State of Food Security and Nutrition in the World" was produced by the UN Food and Agriculture Organization (FAO) and other UN agencies including the World Health Organization.
- Globally, the number of people going hungry has risen for the third year running to more than 820 million. After decades of decline, food insecurity began to increase in 2015.
- Africa and Asia account for more than nine out of ten of the world's stunted children, at 39.5% and 54.9% respectively.
- The number of obese adults in India has risen by a fourth in four years, from 24.1 million in 2012 to 32.8 million in 2016.
- India's undernourished population has dropped by roughly the same fraction in 12 years, from 253.9 million in 2004-06 to 194.4 million in 2016-18.

PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN

- WHO declared Ebola outbreak in the Democratic Republic of Congo as a Public Health Emergency of International Concern. **This is the fifth such declaration in history.**
- WHO defines a global emergency as an “extraordinary event” which constitutes a risk to other countries and requires a coordinated international response.
- A declaration of a global health emergency often brings greater international attention and aid, along with concerns that nervous governments might overreact with border closures.

About Ebola

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a severe, often fatal illness in humans.
- **Virus species:** The virus family Filoviridae includes three genera: Cuevavirus, Marburgvirus, and Ebolavirus. Within the genus Ebolavirus, five species have been identified: Zaire, Bundibugyo, Sudan, Reston and Tai Forest.
- **Transmission:**
 - The virus is transmitted to people from wild animals such as chimpanzees, gorillas, fruit bats and then spreads in the human population through human-to-human transmission.
 - It is thought that fruit bats of the Pteropodidae family are natural Ebola virus hosts. People can get the virus through sexual contact as well.
- **Health impact:** The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- **Treatment:** Early supportive care with rehydration, symptomatic treatment improves survival. There is as yet no licensed treatment proven to neutralize the virus but a range of blood, immunological and drug therapies are under development.

CHIKUNGUNYA

- The Institute of Life Sciences (ILS) has successfully developed antibodies against Chikungunya viral (CHIKV) infection. With no prior antibodies reported against CHIKV, Dr. Chattopadhyay's group was the first to develop antibodies against the non-structural proteins - nsP1, nsP3 and nsP4 of CHIKV.
- Chikungunya viral (CHIKV) infection is a **viral disease (genus Alphavirus)** which is transmitted to humans by **infected mosquitoes**, most commonly, Aedes aegypti and Aedes albopictus, two species which can also transmit other mosquito-borne viruses, including dengue.
- These mosquitoes can be found biting **throughout daylight hours**, though there may be peaks of activity in the early morning and late afternoon.
- It causes fever and severe **joint pain**. The name chikungunya originates from a verb in the Kimakonde language, meaning 'to become contorted'. This refers to the **'stooped' appearance of those suffering with joint pain**.
- It occurs mainly in Africa, Asia and the Indian subcontinent.

Institute of Life Sciences (ILS)?

- **What is it?** It is an autonomous institute of higher education for research and education in life sciences established in 1989.
- **Location:** Bhubaneswar, Odisha
- **Parent body:** Department of Biotechnology, Ministry of Science & Technology, Government of India.

DOLUTEGRAVIR (DTG)

- The World Health Organisation (WHO) has recommended the use of the HIV drug dolutegravir (DTG) as the preferred first-line and second-line treatment for all populations, including pregnant women and those of childbearing potential.
- Dolutegravir (DTG), sold under the brand name Tivicay, is an antiretroviral medication used, together with other medication, to treat HIV/AIDS.
- Initial studies had highlighted a possible link between DTG and neural tube defects (birth defects of the brain and spinal cord) in infants born to women using the drug at the time of conception.
- But new studies have shown that DTG is more effective, easier to take and has fewer side effects than alternative drugs. It also has a high genetic barrier to developing drug resistance, which is important, given the rising trend of resistance.
- In 2019, 82 low- and middle-income countries reported to be transitioning to DTG-based HIV treatment. The new recommendations aim at helping more nations improve their HIV policies.

IMMUVAC; VPM1002

- On July 15, the Indian Council of Medical Research (ICMR) launched India's first large-scale trial for two new tuberculosis (TB) vaccines.
- **There are two vaccines being tested in the latest trial:**
 - **Immuvac** (also known as mycobacterium indicus pranii or MIP), which is manufactured by Cadila Pharmaceuticals in Ahmedabad, and
 - **VPM1002** manufactured by Serum Institute of India in Pune.
- **Need of new vaccines:** The Bacille Calmette-Guerin (BCG) vaccine is currently used in the routine Expanded Programme of Immunisation (EPI) across the world. However, the vaccine is over 100 years old and provides poor protection against pulmonary disease in adolescents and adults.

NATIONAL MEDICAL COMMISSION BILL, 2019

Parliament cleared the NMC Bill with a crucial amendment to increase representation of the State Medical Council from 5 members to 9 and State University representation 6 six to 10 in the new body.

Salient Features of the bill:

- The Bill seeks to repeal the Indian Medical Council Act, 1956.
- **National Medical Commission (NMC):** The Bill sets up the NMC which will replace the Medical Council of India (MCI). It will consist of 25 members, appointed by the central government.
- **Functions of the NMC include:**
 - framing policies for regulating medical institutions and medical professionals,
 - assessing the requirements of healthcare related human resources and infrastructure,
 - ensuring compliance by the State Medical Councils of the regulations, and
 - framing guidelines for determination of fees for up to 50% of the seats in private medical institutions and deemed universities which are regulated under the Bill.
- **State Medical Councils:** Within three years of the passage of the Bill, state governments will establish State Medical Councils at the state level.
- **Medical Advisory Council:** The central government will constitute a Medical Advisory Council which will be the primary platform through which the states/union territories can put forth their concerns

before the NMC. It will also advise the NMC on measures to determine and maintain minimum standards of medical education.

- **Autonomous boards:** The Bill sets up autonomous boards under supervision of NMC. Each board will consist of a President and four members, appointed by the central govt. These boards are –
 - The Under-Graduate Medical Education Board (UGMEB) and the Post-Graduate Medical Education Board (PGMEB)
 - The Medical Assessment and Rating Board (MARB)
 - The Ethics and Medical Registration Board
- **Community health providers:** The NMC may grant a limited license to certain mid-level practitioners connected with the modern medical profession to practice medicine.
- **NEET:** There will be a uniform National Eligibility-cum-Entrance Test (NEET) for admission to undergraduate and post-graduate super-speciality medical education in all medical institutions regulated under the Bill.
- **NEXT:** There will be a common final year undergraduate examination called the National Exit Test (NEXT) for the students graduating from medical institutions to obtain the license for practice. This test will also serve as the basis for admission into post-graduate courses at medical institutions under this Bill.

MEASLES

- Sri Lanka has become the **fourth country in the Asian region** — after Bhutan, Maldives and Timor-Leste — to eliminate measles. Measles is considered as eliminated when a country interrupts transmission of an indigenous virus for three years.
- Measles is a highly **contagious viral disease**.
- **Transmission:** It is transmitted via droplets from the nose, mouth or throat of infected persons.
- **Symptoms:** Initial symptoms include **high fever, a runny nose and bloodshot eyes**. Several days later, a **rash** develops, starting on the face and upper neck and gradually spreading downwards.
- **Health Impact:** It can cause life-threatening complications including encephalitis (an infection that leads to swelling of the brain), severe diarrhoea and dehydration, pneumonia, ear infections and permanent vision loss.
- **Treatment:** The disease is preventable through two doses of a safe and effective vaccine.

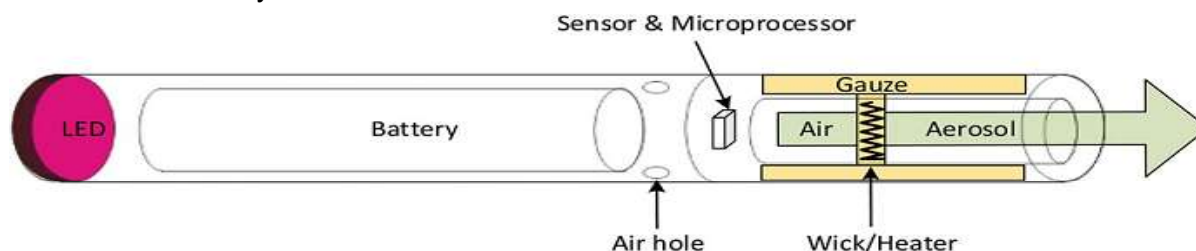
PROHIBITION OF ELECTRONIC CIGARETTES BILL, 2019

Parliament passed the Prohibition of Electronic Cigarettes Bill, 2019. Salient Features:

- **Any production, import, export, transport, sale (including online sale) or advertisement (including online advertisement) of e-cigarettes shall be a cognizable offence** punishable with an imprisonment of up to one year or fine up to Rs. 1 lakh or both for the first offence. For a subsequent offence, there will be imprisonment upto 3 years and fine upto Rs. 5 lakh.
- **Storage of electronic-cigarettes shall also be punishable** with an imprisonment up to 6 months or fine up to Rs 50,000 or both.
- The Sub-Inspector of Police has been designated as the Authorized Officer to take action under the Ordinance. The Central or State Governments may also designate any other equivalent officer(s) as Authorized Officer for enforcement of the provisions of the Ordinance.

Electronic-cigarettes

- Electronic-cigarettes are battery-operated devices that produce aerosol by heating a solution containing nicotine, which is the addictive substance in combustible cigarettes.
- These include all forms of **Electronic Nicotine Delivery Systems (ENDS)**, **Heat Not Burn Products**, **e-Hookah** and the like devices.
- Their use has increased exponentially and has acquired epidemic proportions in developed countries. These products are usually marketed as being safer alternatives for conventional cigarettes but such notions of safety are false.



WORLD MALARIA REPORT 2019

World Health Organization (WHO) released **World Malaria Report 2019**. Key findings:

Global scenario:

- **Incidence:** Globally, there were 228 million cases of malaria in 2018, down from 251 million cases in 2010. The highest estimated cases of all malaria forms were in Africa, at 93% of the cases. Nigeria had the highest burden of all malaria cases, at 24%.
- **Deaths:** In 2018 there were 4,05,000 deaths from malaria globally, compared to 4,16,000 in 2017 and 5,85,000 in 2010. More than 85% of the global malaria deaths in 2018 were **concentrated in the 20 countries of WHO's African region and India**. Africa had the highest number of deaths due to malaria in 2018, at 3,80,000.

Indian scenario:

- incidence of *P. vivax* malaria (the second most common form of the disease) was the highest in India, which accounts for 47% of all cases in 2018, or roughly 3.5 million. India had more than four times as many cases as Afghanistan, the next highest at 11%.
- Seven states account for about 90% of the burden of malaria cases in India. These are UP, Jharkhand, Chhattisgarh, West Bengal, Gujarat, Odisha and Mp.
- Compared to 2017, India reported 2.6 million fewer cases in 2018. This makes **India the country with the largest absolute reductions** among the countries that share 85% of the malaria burden.

Malaria is caused by Plasmodium parasites. The parasites are spread to people through the bites of infected female Anopheles mosquitoes, called "malaria vectors." There are 5 parasite species that cause malaria in humans, and 2 of these species – *P. falciparum* and *P. vivax* – pose the greatest threat. It is preventable and curable.

MISSION INDRADHANUSH 2.0

- Government of India launched nationwide vaccination drive under Intensified Mission Indradhanush 2.0. The scheme is aimed at immunizing **children under the age of 2 years and pregnant women** against eight vaccine preventable diseases.
- The IMI covers vaccines for **diphtheria, whooping cough, tetanus, poliomyelitis, tuberculosis, measles, meningitis and Hepatitis B**. Vaccines for Japanese encephalitis and hemophilus influenza are also being provided in selected areas.

- The IMI 2.0 aims to achieve targets of full immunization coverage in 272 districts spread over 27 States. The Immunization activity under IMI 2.0 will be carried out in 4 rounds between December 2019 and March 2020.
- Under this campaign, vaccination services will be provided free of cost to the drop out and left out children and pregnant women.

MEASLES

WHO and UNICEF published a report on global scenario of Measles in Morbidity and Mortality Weekly Report (MMWR). **Key findings are:**

- In 2018, measles caused an estimated 10 million cases and 1,42,000 deaths globally.
- There were nearly 70,000 cases of measles in India in 2018, third highest in the world.
- At 2.3 million, India has the second highest number of children under one year of age who are not vaccinated against measles. With 2.4 million, Nigeria has the most number of unvaccinated children.
- The WHO recommends 95% coverage using two doses of measles vaccine to prevent outbreaks. In 2018, only 86% of children globally received the first dose through routine immunisation. In the case of second dose, the coverage globally is just 69%.
- India accounted for 47% of the 346 million children across the world who received measles vaccine during mass-immunisation campaigns.

Measles is a contagious virus and spreads rapidly in unvaccinated children, causing symptoms from rash to pneumonia to death. Under the Global Vaccine Action Plan, measles is targeted for elimination in five WHO Regions by 2020.

INDIAN PHARMACOPOEIA (IP)

- **Afghanistan has become the first country to formally recognize Indian Pharmacopoeia (IP)**, an officially recognized book of standards as per the Drugs and Cosmetics Act, 1940 and Rules 1945 thereunder.
- The IP specifies the standards of drugs manufactured and marketed in India in terms of their identity, purity and strength as provided by Indian Pharmacopoeia Commission (IPC), an autonomous institution of the Ministry of Health.

TUBERCULOSIS (TB)**Union Health Ministry released India TB Report 2019.**

- There was a 16% increase in the number of TB cases in 2018 as compared to the previous year. 21.5 lakh TB cases were notified to the Revised National Tuberculosis Control Programme (RNTCP) in 2018.
- **Uttar Pradesh accounted for 20% of all notifications (187 cases/lakh population).**
- **Odisha witnessed a decline in the number of notified cases** from over 67,000 in 2017 to 50,244 in 2018, or about 25%. **Odisha was the only such state; the UTs of Lakshadweep and Andaman & Nicobar Islands too witnessed a drop.**
- **The two UTs of Delhi and Chandigarh had the highest number of notified patients per lakh population**, at 417 and 468, respectively.

Tuberculosis (TB) is caused by **bacteria (Mycobacterium tuberculosis)** that most often affect the lungs. TB is curable and preventable. TB is spread from person to person through the air. **Multidrug-resistant TB (MDR-TB)** is a form of TB caused by bacteria that do not respond to isoniazid and rifampicin, the 2 most powerful first-line anti-TB drugs.

TB Harega Desh Jeetega Campaign

- **Union Health Ministry launched the TB Harega Desh Jeetega Campaign** which aims to improve and expand the reach of TB care services across the country, by 2022.
- The three strong pillars of the campaign include clinical approach, public health component and active community participation.

Global Tuberculosis Report 2019

- **World Health Organization (WHO) released the Global Tuberculosis Report 2019.**
- The world is not on track to reach the 2020 milestones of the End TB Strategy. The END TB strategy by the WHO aimed to reduce TB by 20 % from 2015-18.
- In 2018, 7 million new cases of TB were notified — an increase from 6.4 million notified in 2017. Cases of the multi-drug resistant (MDR-TB) and rifampicin-resistant TB (RR-TB) have also increased. Rifampicin is the first-line of drug used to treat TB.
- In India, 10 million people had TB in 2018. India accounted for 27 % of the world total. China was a distant second with 9 %. India also had 27 % of total drug-resistant TB cases while China had 14 %.
- The tuberculosis incidence rate in India has decreased by almost 50,000 patients from 27.4 lakh TB patients in India to 26.9 lakh in 2018.

GLOBAL HUNGER INDEX

- **The 14th Global Hunger Index (GHI) was released by Welthungerhilfe** (in partnership with Concern Worldwide).
- **Indicators:** For each country in the list, the GHI looks at four indicators (1) **Undernourishment**, (2) **Child Wasting**, (3) **Child Stunting** and **Child Mortality**.
- **Weightage:** Each country's data are standardised on a 100-point scale and a final score is calculated after giving 33.33% weight each to components 1 and 4, and giving 16.66% weight each to components 2 and 3.
- **Categories:** Countries scoring less than or equal to 9.9 are slotted in the “low” category of hunger, while those scoring between 20 and 34.9 are in the “serious” category and those scoring above 50 are in the “extremely alarming” category.

Findings for 2019

- The number of hungry people has risen from 785 million in 2015 to 822 million.
- **India is ranked 102 among the 117 countries.** In 2018, India was 103 out of 119 countries. With an overall score of 30.3, India falls in the “**serious**” category. India has the highest %age of children who suffer from acute undernutrition.
- **Among the BRICS grouping**, India is ranked the worst, with China at 25 and a score of just 6.5. **Within South Asia**, too, India is behind every other country. Sri Lanka, Nepal, Bangladesh and Pakistan (in that order) are all ahead of India.

NATIONAL ANIMAL DISEASE CONTROL PROGRAMME (NADCP)

- PM Modi launched the National Animal Disease Control Programme (NADCP)
- With 100 % funding from the Central Government, of Rs 12,652 Crores for a period of five years till 2024, it aims at vaccinating over 500 Million Livestock including cattle,

He also launched the National Artificial Insemination Programme and a country wide workshop in all the Krishi Vigyan Kendras (KVKs) in all the 687 Districts of the country on vaccination, Artificial Insemination and Productivity.

buffalo, sheep, goats and pigs against the Foot and Mouth Disease (FMD)

- It also aims at vaccinating 36 Million Female Bovine Calves annually against Brucellosis.
- **Target:** To control the diseases by 2025 and eradication by 2030.

Do you know?

- **Foot and Mouth Disease (FMD) and Brucellosis** are very common diseases amongst the livestock – cow-bulls, buffaloes, sheep, goats, pigs etc.
- If a cow/buffalo gets infected with **FMD, the milk loss is upto 100% which could last for four to six months.**
- Further, in case of **Brucellosis the milk output reduces by 30%, during the entire life cycle of animal.** Brucellosis also causes infertility amongst the animals. The infection of brucellosis can also be transmitted to the farm workers and livestock owners.

GLOBAL FUND FOR AIDS, TB AND MALARIA (GFTAM)

- **India has announced a contribution of 22 million US Dollars to the Global Fund for AIDS, TB and Malaria (GFTAM) for the 6th replenishment cycle (2020-22).**
- **What is it?** GFTAM is an independent, non-profit international foundation under Swiss law designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics.
- **Created in:** 2002; HQ: Geneva, Switzerland.
- **Working:** It mobilizes and invests more than US\$4 billion a year to support programs run by local experts in more than 100 countries.

EAT RIGHT INDIA MOVEMENT

- **Union Health Minister launched “Eat Right India Movement” of Food Safety and Standards Authority of India (FSSAI) with tagline ‘Sahi Bhojan. Behtar Jeevan.’**
- It is a year-long social and mass media campaign of under which FSSAI has put in place robust regulatory measures under **three major pillars: Eat Safe, Eat Health and Eat Sustainably for the programme.**
- As part of campaign, FSSAI has trained about 1.7 lakh food safety supervisors for capacity building under the **Food Safety Training and Certification (FoSTaC) initiative.** They will sensitise people and food vendors on food safety.

Food Safety Mitra Scheme

- Food Safety and Standards Authority of India (FSSAI) has introduced scheme of Food Safety Mitra (FSM) through which it plans to engage motivated individuals with the food safety ecosystem at ground level.
- A FSM is an individual professional certified by FSSAI who assists in compliances related to FSS Act, Rules & Regulations with three avatars- Digital Mitra, Trainer Mitra and Hygiene Mitra depending upon their respective roles and responsibilities.

FSSAI is an autonomous body under the Ministry of Health. It was established in 2011 under the Food Safety and Standards Act, 2006. HQ: New Delhi.

WHO'S REPORT ON SUICIDE

- **World Health Organization (WHO) released a fact sheet on suicides.**
- Close to 8 lakh people die due to suicide every year. In other words, suicides account for one death every 40 seconds. The global age-standardized **suicide rate for 2016** was 10.5 per 100 000.

- While 79% of the world's suicides occurred in low- and middle-income countries, **high-income countries had the highest rate, at 11.5 per 100 000**. Europe (12.85) registered the maximum deaths due to suicide while Eastern Mediterranean (4.3) reports the lowest average.
- **Nearly three times as many men as women die by suicide in high-income countries**, in contrast to other countries, where the rate is more equal.
- **Suicide was the second leading cause of death among young people** aged 15-29 years, after road injury. **The most common methods of suicide are** hanging, pesticide self-poisoning, and firearms.

In September 2019 WHO launched the **40 seconds of action** campaign on suicide prevention. The focus of this year's World Mental Health Day (10 October) is also suicide prevention.

MEASLES, RUBELLA

- **Member-countries of the World Health Organisation (WHO) South-East Asia Region have resolved to eliminate measles and rubella by 2023.**
- **Measles (also known as Rubeola):** Infection with Measles is followed by high fever, rash that spreads over the body, cough, running nose and red watery eyes.
- **Rubella (also known as German Measles):** Infection with Rubella is followed by rash and low fever. It may be associated with swelling of lymph node and joint pain. The emergence of these rashes is far less bright than that of the measles.
- **Congenital rubella syndrome (CRS):** Rubella infection in pregnant women may have serious consequences causing miscarriages, stillbirths or severe birth defects known as congenital rubella syndrome (CRS).

NATIONAL SURVEY ON COVERAGE OF IODISED SALT

- **Findings of National survey to measure the coverage of iodised salt in India, was released by Nutrition International in collaboration with the AIIMS, Delhi and the Indian Coalition for the Control of Iodine Deficiency Disorders (ICCID).**
- 76.3% of Indian households consumed adequately iodised salt, which is salt with at least 15 parts per million of iodine.
- **Tamil Nadu has the lowest consumption of iodised salt despite being the third biggest producer of salt in the country.**
- **Gujarat produces 71% of salt in the country**, followed by Rajasthan at 17% and Tamil Nadu at 11%. The rest of the country accounts for a mere 1% of salt produced.
- 13 out of 36 States have already achieved **Universal Salt Iodisation**.

Do you know?

- **Deficiency of iodine, a vital micro-nutrient, can result in** goitre, hypothyroidism, cretinism, abortion, still births, mental retardation and psychomotor defects.
- **India made fortification of salt with iodine mandatory** for direct human consumption in 1992. This was relaxed in 2000 and then reimposed in 2005. In 2011, the Supreme Court, too, mandated universal iodisation for the control of iodine deficiencies.

VACCINE HESITANCY

- **The World Health Organization (WHO) has included 'vaccine hesitancy' as one of the 10 threats to global health for the year 2019.**

- Vaccine hesitancy means the reluctance or refusal to vaccinate despite the availability of vaccines. **Some of the reasons why people choose not to vaccinate are:** Complacency, inconvenience in accessing vaccines, and lack of confidence are key reasons underlying hesitancy.

Top 10 threats in 2019 acc. to WHO are: (1) Air pollution and climate change, (2) Noncommunicable diseases, (3) Global influenza pandemic, (4) Fragile and vulnerable settings, (5) Antimicrobial resistance, (6) Ebola and other high-threat pathogens, (7) Weak primary health care, (8) Vaccine hesitancy, (9) Dengue, (10) HIV.

WILD POLIOVIRUS TYPE 3 (WPV3)

- **The World Health Organisation (WHO) on World Polio Day (October 24) declared that wild poliovirus type 3 (WPV3) has been eradicated worldwide.**
- **This follows the eradication of smallpox and wild poliovirus type 2.** With this, 2 out of 3 wild poliovirus strains have been eradicated.
- Efforts are being taken to eliminate the **wild poliovirus type 1. This virus remains in circulation in just two countries, Afghanistan and Pakistan.**

Polio

- **Polio (poliomyelitis)** is a highly infectious disease caused by a virus. The virus is transmitted by person-to-person spread mainly through the faecal-oral route
- **It invades the nervous system, and can cause total paralysis** in a matter of hours. 1 in 200 infections leads to irreversible paralysis. Among those paralysed, 5% to 10% die when their breathing muscles become immobilized.
- **Polio mainly affects children under 5 years of age. There is no cure for polio, it can only be prevented.** Polio vaccine, given multiple times, can protect a child for life.
- There are three distinct wild poliovirus strains: wild poliovirus type 1 (WPV1), wild poliovirus type 2 (WPV2) and wild poliovirus type 3 (WPV3).

BHARATIYA POSHAN KRISHI KOSH (BPKK)

- **Ministry of Women and Child Development (WCD), along with Bill & Melinda Gates Foundation launched the Bharatiya Poshan Krishi Kosh (BPKK),** a repository of diverse crops across 128 agro-climatic zones in India for better nutritional outcomes.
- The Kosh aims at reducing malnutrition through a multi-sectoral results-based framework, including agriculture, among women and children across the country
- The Bharatiya Poshan Krishi Kosh seeks to promote healthy dietary practices and tackle under-nutrition in a sustainable manner.

UMMID (Unique Methods Of Management And Treatment Of Inherited Disorders)

- **Department of Biotechnology (DBT) launched ‘UMMID’ initiative to tackle inherited genetic diseases of newborn babies.**
- **Strategy:** The UMMID initiative aims to –
 - establish NIDAN (National Inherited Diseases Administration) Kendras to provide counselling, prenatal testing and diagnosis and multidisciplinary care in Government Hospitals wherein the influx of patients is more,
 - produce skilled clinicians in Human Genetics, and
 - undertake screening of pregnant women and new born babies for inherited genetic diseases in hospitals at aspirational districts.

MATERNAL MORTALITY RATIO (MMR)

- As per the latest Special Bulletin on MMR released by the Registrar General of India, MMR of India has declined from 130/ lakh live births in 2014-16 to 122/ lakh live births in 2015-17 i.e. a decline by 8 points in one year.
- With this persistent decline, India is on track to achieving the Sustainable Development Goal (SDG) target for reducing MMR by 2025, five years ahead of timeline of 2030.
- 11 States have achieved the **target of MMR of 100/lakh Live Births by 2020 set under the National Health Policy 2017**.
- MMR varies among the states from a high of 229 in Assam to a low of 42 in Kerala.

NATIONAL ANTI-MICROBIAL RESISTANCE HUB, KOLKATA

- **India's first National Anti-microbial Resistance Hub was inaugurated in Kolkata.**
- It has been developed by the Indian Council of Medical Research (ICMR), in association with the U.S. Department of Health and Human Services. The centre would be the hub for research on antibiotic resistance not only for the country but for the entire South Asia.

ACUTE RESPIRATORY INFECTIONS (ARI)

- **As per the National Health Profile-2019 released by the Union Health Ministry, Acute respiratory infections (ARI) accounted for 69.47% of morbidity in 2018.**
- This which was the highest in the communicable disease category, leading to 27.21% mortality.
- Andhra Pradesh, Gujarat, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh and West Bengal reported a large number of patients and fatalities due to ARI.
- Acute respiratory infections (ARI) is a serious ailment that prevents normal breathing function and kills an estimated 2.6 million children annually every year worldwide.

The 14th National Health Profile (NHP), 2019 is prepared by the Central Bureau of Health Intelligence (CBHI). This 14th edition of NHP is the continuation of the publication since 2005.

NATIONAL MILK SAMPLE SAFETY QUALITY SURVEY

- **The Food Safety and Standard Authority of India (FSSAI) released the National Milk Sample Safety Quality Survey.**
- Milk samples from Telangana, followed by Madhya Pradesh and Kerala, showed the highest number of cases of adulteration.
- **In terms of safety parameters**, 10.4% of the total processed milk samples (of 2,607) failed to comply with the FSSAI norm as contaminants like aflatoxin-M1 were found.

Aflatoxin-M1?

- Aflatoxin M1 is a chemical compound of the aflatoxin class, a group of mycotoxins produced by three species of *Aspergillus* which contaminate plant and plant products.
- Aflatoxin-M1 comes in the milk through feed and fodder.
- Tamil Nadu, Delhi and Kerala were top three States where Aflatoxin residue was found the most. In large doses, aflatoxins can be life threatening by damaging liver.

STATE OF THE WORLD'S CHILDREN REPORT FOR 2019

- **UNICEF released its State of the World's Children report for 2019.** Around 200 million children worldwide under the age of 5 are either undernourished or overweight.

- **Half of India's children suffer from some form of malnutrition.** 35% of Indian children suffer from stunting due to lack of nutrition, 17% suffer from wasting, 33% are underweight and 2% are overweight.
- **Among countries in South Asia,** India fares the worst (54%) on prevalence of children under five who are either stunted, wasted or overweight.
- **India also has the highest burden of deaths among children under five per year,** with over 8 lakh deaths in 2018.
- Only 61% Indian children, adolescents and mothers consume dairy products at least once a week, and only 40% of them consume fruit once a week.

GLOBAL ANTIMICROBIAL RESISTANCE (AMR) RESEARCH AND DEVELOPMENT (R&D) HUB

- **India has joined the Global Antimicrobial Resistance (AMR) Research and Development (R&D) Hub as a new member.**
- **Background:** The Global AMR R&D Hub was launched in 2018 in the margins of the 71st session of the World Health Assembly; **Secretariat:** Berlin, Germany.
- **Funding:** It's operations are currently financed through grants from the German Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Health (BMG).

SURAKSHIT MATRITVA AASHWASAN (SUMAN)

- Union Health Minister along with State Health Ministers launched Surakshit Matritva Aashwasan (SUMAN) initiative for Zero Preventable Maternal and Newborn Deaths.
- Under it, pregnant women, mothers up to 6 months after delivery, and all sick newborns will be able to avail free healthcare benefits. The government will also provide free transport from home to health institutions. The pregnant women will have a zero expense delivery and C-section facility in case of complications at public health facilities.

WORLD VISION REPORT

- **The World Health Organization (WHO) released its first World Vision Report.**
- Globally, 2.2 billion people have a vision impairment. Out of these, 1 billion people are suffering from conditions that are preventable, or unaddressed.
- A majority of the cases among these 1 billion cases are of **unaddressed presbyopia, at 826 million.** This is followed by unaddressed refractive error, at over 120 million.
- Surgeries for cataract, which is the leading cause of blindness globally, have shown improvements over time, in low middle-income countries.
- **In India the rate of cataract surgery has increased nine-fold between 1981 and 2012.** This has been possible due to the **National Programme for Control of Blindness**, which was launched in 1976 and under which cataract surgeries were performed on 6.5 million people in 2016-2017.

NATIONAL INSTITUTE OF SOWA RIGPA (NISR)

- The Union Cabinet approved the establishment of the National Institute for Sowa-Rigpa in Leh (Ladakh) as an autonomous Institute under Ministry of AYUSH.
- **Mandate:** To undertake interdisciplinary education and research programmes in Sowa-Rigpa in collaboration with premier national and international Institutes.

Sowa-Rigpa is a Traditional Medical system of the Himalayan belt in India. It has been popularly practiced in Sikkim, Arunachal Pradesh, Darjeeling, Himachal Pradesh and Ladakh.

- After setting up of NISR, the synergy among the existing Sowa Rigpa Institutions – Central University of Tibetan Studies at Sarnath, Varanasi and Central Institute of Buddhist Studies, Leh, Union Territory of Ladakh – which are under administrative control of Ministry of Culture and NISR will be established.

NATIONAL BLINDNESS AND VISUAL IMPAIRMENT SURVEY OF INDIA (2015-19)

- Union Health Ministry released the **National Blindness and Visual Impairment Survey of India (2015-19)**, It was conducted in 31 districts of 24 States.
- **Cataract is the principal cause of blindness for people above 50 years in India.** Cataract is the cause for 66.2% cases of blindness, 80.7% cases of severe visual impairment, and 70.2% cases of moderate visual impairment in the age group.
- **Blindness is more pronounced among** illiterate (3.23%) than literates (0.43%) and more prevalent in the rural population (2.14%) than urban (1.80%).
- **Among men, the most important barriers to treatment** are financial constraints (31%) and local reasons (21.5%). **Among women**, local reasons (23.1%) and financial constraints (21.2%) were the most important barriers.

HOUSEHOLD SOCIAL CONSUMPTION IN INDIA: HEALTH NSS 75TH ROUND (JULY, 2017 – JUNE, 2018)

The National Statistical Office (NSO) has conducted the survey on Household Social Consumption related to Health during the period July 2017 to June 2018 as a part of 75th round of National Sample Survey (NSS). **Key findings are:**

- **Proportion of persons treated as in-patient any time during a 365-day period:** 2.9% in India as a whole (2.8% for males and 2.9% for females).
- **Healthcare service provider for treatment of ailments:** Government hospitals in case of 30% ailments; Private hospitals in case of 23% ailments; Private doctors/clinics in case of 43% ailments and Informal health care provider and Charitable/trust/NGO-run hospitals in case of remaining 4.1% of ailments.
- 14% of the rural population and 19% of the urban population reported that they had **health expenditure coverage**.
- In both rural and urban India, **95% of ailments were treated by allopathy**.
- **Average medical expenditure per hospitalisation case (excluding childbirth)** in rural India is about Rs. 16,676 and Rs. 26,475 in urban India.
- **Place of childbirth:** In rural areas about 90% childbirths were institutional (in Government/private hospitals) and in urban areas it was about 96%.
- **Surgery was done in about 28% of hospital childbirths** in India (rural: about 24%; urban: about 41%).
- **Immunisation among children aged 0-5 years:** About 59% of boys and 60% of girls at all-India level had been fully immunised (i.e., received all 8 prescribed vaccinations).

AVIAN BOTULISM

- **In November, 2019 nearly 10,000 of migratory birds were found dead mysteriously in the Sambhar Salt lake area.** The investigation pointed to **avian botulism** as a possible cause.
- **Avian botulism** is a serious neuromuscular illness of birds caused by ingestion of toxin that is produced by the bacterium *Clostridium botulinum*. Avian botulism has been recognised as a major cause of mortality in wild-birds since the 1900s.

- **The Sambhar Salt Lake**, India's largest inland salt lake, is located 80 km southwest of the city of Jaipur. It has been designated as a Ramsar site (recognized wetland of international importance).

ACUPRESSURE

- **PM Modi has said the stick-like object he was holding in his hand while plogging on the Mamallapuram coastal beach in Tamil Nadu, was an acupressure roller.**
- Acupressure is a kind of touch therapy. It uses the same concept as acupuncture, which targets the pressure points. But acupressure treatment is used through fingers. It helps in relieving pain, increases blood circulation among other benefits.
- **Acupuncture and acupressure use the same points, while acupressure uses the gentle but firm pressure of hands or any blunted objects, but acupuncture employs needles.**

COMPREHENSIVE NATIONAL NUTRITION SURVEY

- Findings of the Comprehensive National Nutrition Survey – the first-ever national nutrition survey conducted by the Centre – were released. It was conducted by the Ministry of Health and UNICEF between February 2016 and October 2018.
- The study provides for the first time concrete evidence of the coexistence of obesity and undernutrition, among school going children.
- 10% of children in the age group of 5-9 years and adolescents in the age group of 10-19 years are pre-diabetic, 5% are overweight and another 5% suffer from blood pressure.
- A quarter of 5-9 and 10-19 year-olds were thin for their age, one in five children 5-9 years' old were stunted.

PLAGUE

- **In November 2019, China reported a third case of bubonic plague.**
- **Cause:** Plague is an infectious disease caused by the bacteria *Yersinia pestis*, a zoonotic bacteria, usually found in small mammals and their fleas.
- **Transmission:** It is transmitted between animals through fleas. Humans can be infected through bite of infected vector fleas and unprotected contact with infectious bodily fluids
- **Two main forms of plague infection, depending on the route of infection are:**
 - **Bubonic plague** is caused by the bite of an infected flea. Human to human transmission of bubonic plague is rare.
 - Any person with **Pneumonic plague, or lung-based plague** may transmit the disease via droplets to other humans.
- **Where is plague found?** As an animal disease, plague is found in all continents, except Oceania. Since the 1990s, most human cases have occurred in Africa. The three most endemic countries are the **Democratic Republic of Congo, Madagascar, and Peru.**
- **Treatment:** Nowadays, plague is easily treated with antibiotics and the use of standard precautions to prevent acquiring infection.

Historically, plague was responsible for widespread pandemics with high mortality. It was known as the "Black Death" during the fourteenth century, causing more than 50 million deaths in Europe.

BOMBAY BLOOD GROUP

- **In September 2019, demand for the "Bombay blood group" coincidentally spiked at Mumbai's hospitals, but supply had been scarce.**

VAJIRAM & RAVI

- H/H blood group, also known as Oh or the Bombay blood group, was first discovered in Mumbai (then Bombay) in 1952 by Dr Y M Bhende.
- **This rare blood group is deficient in expressing antigen H**, meaning the RBC has no antigen H. For instance, in the AB blood group, both antigens A and B are found. A will have A antigens; B will have B antigens. In hh, there are no A or B antigens.
- Often the hh blood group is confused with the O group. The difference is that **the O group has Antigen H, while the hh group does not.**
- **Transfusion limitations:** The individuals with Bombay blood group can only be transfused autologous blood or blood from individuals of Bombay hh phenotype only which is very rare.

This blood type is more **common in South Asia** than anywhere else because of inbreeding and close community marriages.

RASHTRIYA POSHAN MAAH

- **The entire month of September 2019 was celebrated as the Rashtriya Poshan with the theme of Complementary Feeding.** During Poshan Maah, various activities will be held to take the message of importance of nutrition to every household.
- Poshan Maah is an initiative of Ministry of Women and Child Development and NITI Aayog to give a push to Poshan Abhiyan.

Poshan Abhiyaan (National Nutrition Mission):

- It was launched in 2018 to reduce stunting, under-nutrition, anaemia (among young children, women and adolescent girls) and low birth weight by 2%, 2%, 3% and 2% per annum respectively.
- Although the target to reduce Stunting is atleast 2% p.a., Mission would strive to achieve reduction in Stunting from 38.4% (NFHS-4) to 25% by 2022
- Rs. 9046.17 crore is allocated for three years commencing from 2017-18. 50% will be funded by Government Budgetary Support and 50% by **International Bank for Reconstruction and Development (IBRD)** or other Multilateral Development Banks.
- Government budgetary support would be 60:40 between Centre and States/UTs, 90:10 for North East Region and Himalayan States and 100% for UTs without legislature.

IDF DIABETES ATLAS

- **The 9th edition of Diabetes Atlas was released by International Diabetes Federation (IDF), an umbrella organization of over 230 national diabetes associations.**
- **India continues to be home to the second-largest number** of adults with diabetes worldwide, with 77 million adults with diabetes in the 20-79 years age group. This follows **China, which has 116 million adults with diabetes** in the same age profile.
- The worldwide prevalence of diabetes was estimated at 463 million in this age group, or in other words, one in 11 adults.
- India was the largest contributor to diabetes mortality with more than 1 million estimated deaths attributable to diabetes and related complications, in the South East Asian region.
- Diabetes is among the top 10 causes of death, with people under the age of 60 accounting for almost half the deaths.

INTERNATIONAL

FINANCIAL ACTION TASK FORCE (FATF)

- Saudi Arabia has become the first Arab country to be granted full membership of the Financial Action Task Force (FATF). Saudi Arabia had obtained observer status in the Group in 2015.
- **Mandate:** To set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- **Established in:** 1989.
- **Headquarters:** Paris, France.
- **Members:** The FATF currently comprises 37-member jurisdictions and 2 regional organisations (the Gulf Cooperation Council or GCC, and the European Commission). **While India, Russia and China are members, Pakistan is only an associate member of Asia Pacific Group-FATF.**

SHANGHAI COOPERATION ORGANISATION (SCO) SUMMIT, BISHKEK

PM Modi attended the SCO summit in the Bishkek, Kyrgyzstan. **Key highlights of the summit:**

- PM Narendra Modi asked the member states to try coordinated action against international terrorism under the **SCO-Regional Anti Terrorist Structure (RATS)**.
- **'Roadmap for Further Action of the SCO-Afghanistan Contact Group'** was signed.
- A separate MoU was signed for establishment of **Astana International Financial Centre**.

About Shanghai Co-Operation Organisation (SCO)

- **What is it?** The SCO is a permanent intergovernmental international organisation. It is a Eurasian political, economic, and security alliance and has been the primary security pillar of the region.
- **Members:** India became a full member of the SCO in 2017.
- **History:** It was established in 2001. It was preceded by the Shanghai Five mechanism.
- **The Heads of State Council (HSC)** is the supreme decision-making body in the SCO. It meets once a year and adopts decisions and guidelines on all important matters of the organisation.
- **The organisation has two permanent bodies:** (1) the SCO Secretariat based in Beijing and (2) the Executive Committee of the Regional Anti-Terrorist Structure (RATS) based in Tashkent.
- **Membership:** **Eight member states** (India, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan, and Uzbekistan) and **Four observer states** (Afghanistan, Belarus, Iran and Mongolia).

REGIONAL COOPERATION AGREEMENT ON COMBATING PIRACY AND ARMED ROBBERY AGAINST SHIPS IN ASIA (RECAAP)

- Additional Director General Indian Coast Guard (ICG) along with Executive Director of ReCAAPISC inaugurated a two-day 12th Capacity Building Workshop in New Delhi.
- **What is it?** ReCAAP is the first regional government-to-government agreement to promote and enhance cooperation against piracy and armed robbery against ships in Asia.
- **History:** The ReCAAP Agreement was launched in 2006.

- **Members:** It has 20 Contracting Parties today, including Europe, Australia, and the United States.
- ReCAAP Information Sharing Centre (ReCAAP ISC) was established in Singapore in 2006.

WORLD REFUGEE DAY

- World Refugee Day was observed on 20th of June with the theme “Step with Refugees - Take a Step on World Refugee Day”.
- According to the latest annual study released by the office of the UN High Commissioner for Refugees, 70.8 million children, women and men were forcibly displaced at the end of last year. **This is the highest number in the organization’s almost 70-year history.**
- Wars, violence and persecution have driven record numbers of people from their homes worldwide. Almost two thirds of those uprooted from their homes are internally displaced people who have not left their homelands.
- About 80 percent of these refugees live in countries neighbouring their country of origin.

KIMBERLEY PROCESS

- The Intersessional meeting of Kimberley Process (KP) was hosted by India from 17th to 21st June, 2019 in Mumbai.
- **Kimberley Process Certification Scheme (KPCS)** is an international certification scheme which outlines the rules that regulates trade in rough diamonds with the aim of preventing the flow of conflict diamonds, while helping to protect legitimate trade in rough diamonds.
- The KPCS came into effect from 1st January, 2003.
- **What It Is Not?**
 - The KP is not, strictly speaking, an international organisation: it has no permanent offices or permanent staff. It relies on the contributions – under the principle of ‘burden-sharing’ – of participants, supported by industry and civil society observers.
 - Neither can the KP be considered as an international agreement from a legal perspective, as it is implemented through the national legislations of its participants.
- **Participants:** At present, KPCS has 55 members representing 82 countries including EU with 28 members. **India is the founding member of KPCS.**
- **Chairmanship:** The Kimberley Process is chaired, on a rotating basis, by participating countries. **India is the Chairman of KPCS from 1st January, 2019.**

CONFERENCE ON INTERACTION AND CONFIDENCE-BUILDING MEASURES IN ASIA (CICA)

- External Affairs Minister, S. Jaishankar attended the 5th CICA Summit in Dushanbe, Tajikistan.
- CICA is a multi-national forum established in 1999 for enhancing cooperation towards promoting peace, security and stability in Asia.
- **Secretariat:** Nur-Sultan, Kazakhstan.
- **Membership:** For becoming a member of CICA, a state must have at least a part of its territory in Asia. Presently CICA has **27 member states. India is a member of CICA since its inception.**
- **Meeting:** The highest decision-making organ of CICA is the meeting of the CICA heads of state and government. The CICA summit is convened every four years. Meeting of the ministers of foreign affairs is required to be held every two years.
- **Theme of the 5th Summit (2019):** Shared Vision for a Secure and More Prosperous CICA Region.

AFRICAN UNION (AU)

- The African Union (AU) has suspended the participation of Sudan in all AU activities until the effective establishment of a Civilian-led Transitional Authority. The military leadership that took control after the ouster of Omar al-Bashir in April had failed to hand over power to civilians.
- Also, during the **12th Summit of the African Union (AU)**, 54 of 55 of its member states signed the **African Continental Free Trade Agreement (AfCFTA)** for goods and services, with, **27 countries** ratifying it.

Key facts:

- **Established:** 2002; **HQ:** Addis Ababa, Ethiopia. **Membership:** 55 countries of Africa.
- **Main objectives are:** To rid the continent of colonization and apartheid; To promote unity and solidarity among African States; To coordinate and intensify cooperation for development.
- **New Partnership for Africa's Development (NEPAD)** is an economic development program of the African Union, which was started in 2001.

INDIA-UN DEVELOPMENT PARTNERSHIP FUND

- United Nation's Secretary General praised the India-UN Development Partnership Fund for championing greater prosperity for all while contributing to **South-South cooperation**.
- The Fund, established by the Government of India in 2017, is a dedicated facility within the United Nations Fund for South-South Cooperation (UNOSSC).
- **Mandate:** The Fund supports Southern-owned and led, demand-driven, and transformational sustainable development projects across the developing world, with a focus on least developed countries and small island developing states.

FENI BRIDGE

- High Commissioner of India to Bangladesh inspected the ongoing construction of the Feni Bridge also known as Maitree Setu in Chattogram.
- The bridge is being built over the Feni River and will connect Tripura with Chittagong port of Bangladesh. The project is scheduled to be completed by April 2020.
- **Agencies Involved:** The bridge is being constructed by the National Highways Infrastructure Development Corporation Ltd of Ministry of Road and Transport highways, Government of India.

'GOLD CARD' RESIDENCE PERMIT PROGRAMME

- UAE's Federal Authority for Identity and Citizenship (ICA) has issued the first Golden Residence Permit in Abu Dhabi to investor Yousuf Ali, the Abu Dhabi-based Keralite billionaire tycoon.
- **Eligibility:** The "Gold Card" programme unveiled by UAE Prime Minister early this year is open to investors and "exceptional talents" such as doctors, engineers, scientists, students and artists. The first batch of 6,800 investors with 100 billion Dirhams worth of investments in the country will be granted the "Golden Card".
- **Objective:** Objective of this Permanent residency scheme to woo wealthy individuals and exceptional talents.
- **Implications for India:** This move could attract more Indian professionals and businessmen to the country. The Indian expatriate community is reportedly the largest ethnic community in the UAE, constituting roughly about 30 % of the country's population of around nine million.

G7, BIARRITZ SUMMIT

- The 45th G7 summit was held in August 2019, in Biarritz, France with the theme “Fighting Inequality”. PM Modi attended the Summit as ‘Biarritz Partner.’
- Trump and Emmanuel Macron agreed that **Russia should be invited to the next G7 Summit in 2020** (In 2014, the G7 declared that a meaningful discussion was currently not possible with Russia in the context of the G8. Since then, meetings have continued within the G7 process).
- **The Group of Seven (G7)** is an international intergovernmental economic organization consisting of seven advanced economies in the world: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
- **Biarritz** is a city on the Bay of Biscay, on the Atlantic coast in southwestern France. It is located 35 kilometres from the border with Spain.

GENERALIZED SYSTEM OF PREFERENCES (GSP)

- The United States of America (USA) has withdrawn India’s GSP benefits after determining that it has not committed to provide “equitable and reasonable access to its markets” for the U.S.
- The Generalized System of Preferences (GSP) was instituted in 1971 under the aegis of UNCTAD.
- The following **13 countries grant GSP preferences**: Australia, Belarus, Canada, the European Union, Iceland, Japan, Kazakhstan, New Zealand, Norway, the Russian Federation, Switzerland, Turkey and the United States of America.
- These are **unilateral, non-reciprocal and non-discriminatory benefits** extended by these countries to promote economic growth in the developing world by providing preferential duty-free entry for thousands of products from beneficiary countries.

301 PROBE (UNITED STATES)

- Deputy U.S. Trade Representative (USTR) said that the U.S. will consider a “**301 investigation**” against India if the trade issues between the two countries are not resolved quickly.
- “301 investigation” is a probe employed as a precursor to tariffs and other trade measures against a country. A Special 301 Report is prepared annually by the USTR and is different from a 301 investigation.
- Section 301 of the U.S. Trade Act of 1974 authorizes the President to take all appropriate action to obtain the removal of any act or practice of a foreign government that burdens or restricts U.S. commerce. Section 301 cases can be self-initiated by the United States Trade Representative (USTR) or as the result of a petition filed by a firm or industry group.

ANITA BHATIA

- Indian-origin Anita Bhatia has been the Deputy Executive Director of the **United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women)** for *Resource Management, Sustainability and Partnerships*.
- **History**: It became operational in January 2011.
- **Headquarters**: New York City, United States.

KNOW INDIA PROGRAMME(KIP)

- A group of Indian Origin youth have visited India under the 54th Edition of ‘Know India Programme’.
- **Implementing agency**: The KIP is a 25-day orientation programme organized by the Ministry of External Affairs in partnership with the states of India.

- **Objective:** To make Indian origin youth (between 18-30 years) aware about India, its cultural heritage, art and to familiarize them with various aspects of contemporary India.
- **Background:** The programme has been in existence since 2003.
- **Salient features:** In 2016, the scheme was revamped to increase duration from 21 to 25 days, with a 10-day visit to one or two States and **preference given to PIOs from Girmitya countries**. Since 2016, six KIPs are being organised in a year.

Girmityas

- “Girmityas” or Indentured Labourers is the name given to the Indians who left India in the middle and late 19th Century to serve as labourers in British colonies, where the majority eventually settled.
- **Mauritius, Fiji, Suriname, Guyana, Trinidad & Tobago** are known as Girmitya Countries.

goAML

- UAE has become the first Gulf country to launch goAML, a new anti-money laundering platform.
- The goAML application is available to Financial Intelligence Units (FIUs) of Member States to support their work in countering money laundering and terrorist financing.
- **Developed by:** The United Nations Office on Drugs and Crime to curb organised crimes.

COUNCIL OF EUROPE

- Parliamentary Assembly of the Council of Europe has voted in favour of restoring Russia's voting rights, five years after they were revoked over its illegal annexation of the Crimean Peninsula.
- The Council of Europe, **founded in 1949**, is the continent's leading human rights organisation whose stated aim is to uphold human rights, democracy and the rule of law in Europe.
- It is headquartered in **Strasbourg, France**.
- The organisation is **distinct from European Union (EU)**, although it is sometimes confused with it.
- **Members:** It includes 47 member states, 28 of which are members of the European Union. The best known body of the Council of Europe is the **European Court of Human Rights**, which enforces the European Convention on Human Rights.

UNSC NON-PERMANENT SEAT

- India has won the unanimous support of all countries in the 55-member Asia-Pacific Group at the United Nations in support of its bid for a non-permanent seat at the UN Security Council (UNSC) for a two-year term in 2021-22.
- Asia-Pacific Group gets to nominate one of its members for the June 2020 elections to a non-permanent seat on the UNSC.
- **India has already held a non-permanent seat on the UNSC for seven terms:** 1950-1951, 1967-1968, 1972-1973, 1977-1978, 1984-1985, 1991-1992 and 2011-2012.

Background:

- Each year, the UN General Assembly elects five non-permanent members out of a total of 10, for a two-year term.
- These 10 seats are distributed among the regions: 3 for African countries; 2 for Asia-Pacific countries; one for Eastern European countries; two for Latin American and Caribbean countries; two for Western European and other countries. There is an informal understanding between Africa and Asia to reserve one for an Arab country.

MAHATMA GANDHI IT & BIOTECHNOLOGY PARK (MGIT-BP)

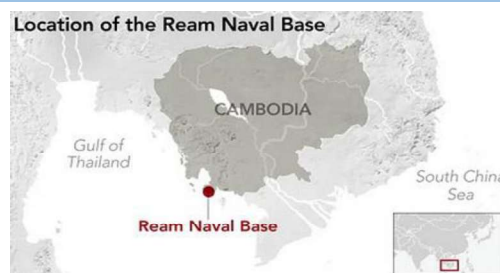
- The MGIT-BP was inaugurated in **Grand-Bassam, Cote d'Ivoire** in June 2019.
- MGIT-BP is a dedicated **Free Trade Zone (FTZ) for IT & Biotechnology**. It was built with India's assistance through EXIM Bank Lines of Credit.

FIVE EYES

- U.S. has threatened to cut off intelligence sharing between the so-called Five Eyes unless its members ban 5G equipment from Huawei, fearing it could be a vehicle for Chinese spy operations.
- The Five Eyes name refers to the security classification of intelligence documents: "SECRET – AUS/CAN/N.Z./U.K./U.S. EYES ONLY" or "FVEY."
- It is an anglophone intelligence alliance comprising Australia, Canada, New Zealand, the United Kingdom and the United States.
- **History:** It began in 1946 and was expanded in later years.

REAM NAVAL BASE

- China and Cambodia have reportedly signed a secret pact allowing China exclusive use of a Ream naval base for 30 years, a facility operated by the Royal Cambodian Navy on the coast of the Gulf of Thailand in the province of Sihanoukville, Cambodia.
- This would be China's second overseas naval foothold, after a base in Djibouti opened in 2017.

**WORLD HINDU ECONOMIC FORUM (WHEF)**

- WHEF has launched its Nepal Chapter to increase economic cooperation between India and Nepal and to connect Nepal with a global network for its economic prosperity.
- **Promoters of WHEF:** A group of committed Economists, Academicians, Industrialists, Businessmen, Bankers, Professionals and activists.
- **Objective:** WHEF wants Hindus to cooperate and collaborate globally so that market access and appropriately priced capital is facilitated among them.
- **Members of WHEF:** WHEF is not a membership organization. However, Business organizations, chambers, and associations can affiliate with WHEF.
- **HQ:** Gurgaon, Haryana.
- **History:** The WHEF journey began in 2012 at Hong Kong, followed by successful annual forums in Bangkok 2013, New Delhi 2014, London 2015, and several regional forums along the way.

INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY

- The US has formally withdrawn from Intermediate-Range Nuclear Forces Treaty (INF) with Russia.
- **Signatories:** INF Treaty was a crucial Cold War-era treaty between the United States and the Soviet Union (and later its successor state Russia).
- **Objective:** The treaty banned the development, testing and possession of short and medium range ground-launched nuclear missiles with a range of 500-5,000 km.
- **Background:** The INF was signed by then US President Ronald Reagan and Soviet leader Mikhail Gorbachev in 1987. It was central to ending the arms race between the two superpowers, and protect America's NATO allies in Europe from Soviet missile attacks.

MEKONG GANGA COOPERATION (MGC)

- Addressing the 10th MGC Ministerial Meeting in Bangkok, External Affairs Minister S Jaishankar has emphasised on better connectivity between India and other member countries of the MGC bloc for developing a vibrant economic growth corridor.
- Launched in 2000 at Laos capital Vientiane, the MGC is a sub-regional cooperation organisation comprising India and 5 ASEAN countries, namely Myanmar, Thailand, Laos, Cambodia, and Vietnam.
- MGC takes its name from the Ganga and the Mekong, the two civilisational rivers in Southeast Asia.
- **Mandate:** The MGC aims at facilitating closer contacts among the people inhabiting these two major river basins and enhancing cooperation in tourism, culture, education, transport and communications.

HENLEY PASSPORT INDEX

- The Henley Passport Index ranks passports based on their power and mobility.
- It is prepared by Henley and Partners, a London-based global citizenship and residence advisory firm. The index gathers data from the International Air Transport Association (IATA) that manages inter-airline cooperation globally.
- Passport rankings point towards the **strength of diplomatic relations between countries**.

Rankings for 2019

- For 2019, Japan and Singapore are ranked 1 and have a score of 189.
- India's score is 58 and it ranks 86 in the list, down five places from 81 in 2018. Last year, an Indian passport holder had visa-free access to 60 countries; this year, she has access to 58.
- Afghanistan holds the weakest passport, with a score and ranking of 25 and 109, respectively. Syria and Pakistan follow with rankings of 107 and 106 and scores of 29 and 30, respectively.

ASIA/PACIFIC GROUP ON MONEY LAUNDERING

- The Asia Pacific Group (APG) of the Financial Action Task Force (FATF) has put Pakistan in the Enhanced Expedited Follow Up List (**Blacklist**) for its failure to comply with terror funding standards. While the placing does not bring any new punitive measures on Pakistan, it will mean quarterly reporting to the group on improvement in its financial safeguards.
- **What is it?** The Asia/Pacific Group on Money Laundering is an inter-governmental organisation, consisting of 41 member jurisdictions.
- **Purpose:** To ensure that its members effectively implement the international standards against money laundering, terrorist financing & proliferation financing related to weapons of mass destruction.
- **Type:** It is a part of global network of similar bodies, referred to as Financial Action Task Force-Style Regional Bodies (FSRBs) and is the largest in terms of membership numbers and geographical size.
- **Secretariat:** Sydney, Australia
- **Established in:** 1997.

INDIA – UAE RELATIONS

- Prime Minister Narendra Modi paid a state visit to United Arab Emirates (UAE).
- He was honoured with the '**Order of Zayed**', the UAE's highest civilian award. The award is in the name of Sheikh Zayed bin Sultan Al Nahyan, the founding father of the UAE.
- **He** also launched the RuPay card in UAE, making the UAE the first country in West Asia to initiate the RuPay card scheme. India has already launched the RuPay card in Singapore and Bhutan.

List of awards PM Modi has been conferred with by Muslim-majority countries:

1. The King Hamad Order of the Renaissance, Bahrain - August 2019
2. Order of Zayed, UAE's highest civilian award - August 2019
3. Grand Collar of the State of Palestine - February 2018
4. Amir Amanullah Khan Award, Afghanistan - June 2016
5. King Abdulaziz Sash Award, Saudi Arabia - April 2016
6. Rule of Nishan Izzuddeen, Maldives - June 2019

INDIA BHUTAN TIES

PM Narendra Modi, during his second visit to Bhutan, held wide ranging talks with Bhutanese PM to further expand the bilateral partnership. **Some of the key MoU exchanged during the Visit:**

1. Power Purchase Agreement Between PTC India Limited and Druk Green Power Corporation Limited for Sale and Purchase of **Mangdechhu Power**
2. MoU between ISRO and Department of Information Technology and Telecom (DITT) of Bhutan on the establishment of **SATCOM Network for the Utilization of South Asia Satellite in Bhutan.**
3. MoU between the Air Accident Investigation Unit (AAIU), Bhutan, and Aircraft Accident Investigation Bureau, India on **cooperation on Aircraft Accident and Incident Investigation.**
4. MoU for interconnection between India's National Knowledge Network and Bhutan's Druk Research and Education Network.

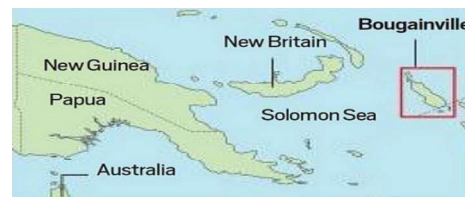
JOINT EXERCISES IN NEWS

EXERCISE NAME	PARTICIPANTS
SHAKTI	A Joint training Exercise between Armies of India and France.
EKUVERIN	A Joint Military Exercise between Armies of India and Maldives.
IMNEX	An India Myanmar Naval Exercise' (IMNEX).
KAZIND	A Joint Military Exercise between India and Kazakhstan.
DHARMA GUARDIAN	A Joint Military Exercise between India and Japan.
YUDH ABHYAS	A joint military training Exercise between India and USA.
MALABAR	Trilateral Maritime Exercise between the navies of India, Japan and USA.
SLINEX	A bilateral maritime fleet exercise between Navies of India and Sri Lanka.
NOMADIC ELEPHANT	A Joint Military Exercise between Armies of India and Mongolia.
DANX-19	Andaman and Nicobar Command (ANC) conducted the second edition of Defence of Andaman & Nicobar Islands 2019 (DANX-19), a joint services exercise between the Indian Army, Navy, Air Force and Coast Guard.

ASEAN-US MARITIME EXERCISE (AUMX)	The first Asean-US Maritime Exercise (AUMX) between the ASEAN regional bloc and U.S. was held, starting at the Sattahip Naval Base in Thailand and ending in Singapore.
EX TSENTR	Military contingents from China, India and central Asian countries took part in this year's Exercise TSENTR 2019, the annual series of large scale exercises by Russian Armed Forces.
TIGER TRIUMPH	An India-U.S. joint Tri services Humanitarian Assistance and Disaster Relief (HADR) Exercise.
SCOJtEx	A Shanghai Cooperation Organization (SCO) Joint Exercise on Urban Earthquake Search & Rescue (SCOJtEx-2019).
SITMEX	A Trilateral exercise involving Navies of Singapore, Thailand and India held at Port Blair.
EX EASTERN BRIDGE	A Bilateral Joint exercise held between Indian Air Force and Royal Air Force Oman (RAFO).
MAITREE	A Joint Military Exercise between armies of India and Thailand.
MITRA SHAKTI	A joint training exercise between armies of India and Sri Lanka.
ZA'IR-AL-BAHR (ROAR OF SEA)	A Bilateral Maritime Exercise between the Indian Navy and Qatari Emiri Naval Forces.
DUSTLIK-2019	It was the first-ever India-Uzbekistan Joint military exercise.
SAMUDRA SHAKTI	A Bilateral Naval Exercise between Navies of India and Indonesia.
HAND-IN-HAND	A Bilateral exercise between 'Armies' of India and China.
SURYA KIRAN	A Bilateral training exercise between Armies of India and Nepal.
INDRA	A joint, tri services exercise between Army, Air Force and Navy of India and Russia.

BOUGAINVILLE

- **Voters backing Bougainville's independence from Papua New Guinea have won a landslide referendum victory.**
- Between 1988 and 1998, the Bougainville Civil War claimed over 15,000 lives. In 2001, a peace agreement was signed including promise of a referendum on independence from Papua New Guinea to be held in 2019.
- The vote is not binding and the Government of Papua New Guinea has the final say on what becomes of Bougainville in the event of voters choosing independence.



Geography:

- Bougainville Island is the main island of the Autonomous Region of Bougainville of Papua New Guinea. This region is also known as the North Solomons.
- Bougainville Island is the largest of the Solomon Islands archipelago, forming part of the Northern Solomon Islands, which is politically separate from the sovereign country also called Solomon Islands. Mount Balbi at 2,700 m is the highest point.

How is a new country formed?

- **Who can declare itself a country?** Anyone. There is no law barring regions from declaring independence. **In June 1945, the right of “self-determination” was included in the UN charter.** This means that a population has the right to decide how and by whom it wants to be governed.
- **What criteria must a nation-hopeful meet? According to 1933’s Montevideo Convention,** a country-hopeful must have a defined territory, people, government, and the ability to form relationships with other countries.
- **How does a territory become a new country?**
 - A region’s quest for nationhood mainly depends on how many countries and international organisations recognise it as a country.
 - The biggest sanction of nationhood is the United Nations recognising a territory as a country. UN recognition means a new country has access to the World Bank, the IMF, etc. Its currency is recognised, which allows it to trade.

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

- The leaders of NATO met in London to mark the 70th birthday of the organization.
- **Objective:** NATO is an intergovernmental military alliance between North American and European countries. It constitutes a system of collective defence whereby its independent member states agree to mutual defence in response to an attack by any external party.
- **HQ:** Brussels, Belgium; **Origin:** it is based on the North Atlantic Treaty that was signed in 1949.
- **Member Countries:** It consists of 29 independent member countries. Three former Soviet states (Estonia, Latvia and Lithuania) are members of NATO.
- **Partners:** NATO cooperates with other organisations/ countries in different structures such as: Euro-Atlantic Partnership Council (EAPC), Istanbul Cooperation Initiative (ICI) and **Partners across the globe** (Under it, countries develop cooperation with NATO in areas of mutual interest. Pakistan is also NATO’s partner across the globe).

GLOBAL REFUGEE FORUM (GRF)

- The first Global Refugee Forum (GRF) was held in Geneva, Switzerland. It was **jointly hosted by** the United Nations High Commissioner for Refugees (UNHCR) and the government of Switzerland. The GRF will be held every four years at the Ministerial level.
- **It aims to** debate and discuss the response of the world’s countries to the global refugee situation. The first GRF has been organised around six areas of focus: burden- and responsibility-sharing, education, jobs and livelihoods, energy and infrastructure, solutions, and protection capacity.

UNITED STATES-MEXICO-CANADA AGREEMENT (USMCA)

- The US, Mexico and Canada have finalised the United States-Mexico-Canada Agreement (USMCA) that will replace the North American Free Trade Agreement (NAFTA), is an agreement which came into force in 1994, creating a trilateral trade bloc between Canada, Mexico, and the United States.
- USMCA is intended **to last 16 years and will be reviewed every 6 years.**
- USMCA **gives the U.S. greater access to the dairy markets of Canada.** Tariffs of up to 275% have kept most foreign milk out of the Canadian market.
- If the U.S. imposes a 25% global tariff on **car imports**, Canada and Mexico will have a quota of 2.6 million cars they can export to the U.S. as a protection for their car industry.

- Canada managed to preserve the **dispute-settlement mechanism** as a protection for its wood industry. It also adds provisions to **prevent “manipulation” of the trade rules**.
- The USMCA will now go to the countries' legislatures for final approval.

INSTRUMENT IN SUPPORT OF TRADE EXCHANGES (INSTEX)

- Six new European joined the INSTEX barter mechanism which is headquartered in Paris, France.
- INSTEX is a European special-purpose vehicle (SPV) established in 2019 to circumvent U.S. sanctions against trade with Iran by avoiding use of the dollar.
- **Owner:** France, Germany and United Kingdom are the founding members of INSTEX.
- **Who can join it?** Its purpose is to facilitate "legitimate trade" with Iran for any EU member and has been conceived to be open to non-EU countries.
- **Functioning:**
 - INSTEX functions as a clearing house allowing Iran to continue to sell oil and import other products or services in exchange. The system has not yet enabled any transactions.
 - In Iran, INSTEX is mirrored by the **STFI (Special Trade and Finance Instrument)**, a similar SPV. STFI matches incoming and outgoing transactions in the same way. As of now, the use of the SPV is limited to humanitarian purposes, such as the purchase of otherwise embargoed foods or medicines.

GLOBAL MIGRATION FILM FESTIVAL (GMFF)

- The Global Migration Film Festival (GMFF) was organised across many cities in the world between 28 November to 18 December.
- GMFF was launched by the International Organisation of Migrants (IOM) in 2016. It features films and documentaries that capture the promise and challenges of migration, and the unique contributions that migrants make to their new communities.
- **The International Organisation of Migrants (IOM)** is the UN migration agency established in 1951. With 173 member states and a further 8 states holding observer status, it works to ensure orderly and humane management of the migration issue.

MAMALLAPURAM SUMMIT: KEY TAKEAWAYS

PM Modi and Chinese President Xi Jinping met on an informal summit at Mamallapuram. The first informal summit between them was held in Wuhan in China in April 2018.

Key takeaways from the meeting are:

- They agreed to a new set up a **High-Level Economic and Trade Dialogue mechanism** to address the trade deficit and issues related to investment.
- To celebrate the 70th year of diplomatic relations between the two nations, the year 2020 will be designated as **Year of India-China Cultural and People to People Exchanges**.
- A 'Sister-state relationship' will be formed between **Tamil Nadu and Fujian Province**.

Informal Summit: It is different from a regular formal summit which involve minute diplomatic planning. It lacks the delegation-level talks and a pre-set agenda for discussions. No agreements are signed, and there is no joint statement or press conference.

Veshti: While hosting Xi Jinping, PM Modi appeared in a Tamil traditional 'karai veshti' (dhoti with a border in green), angavastram (a shawl), and a half sleeve white shirt.

Sirumugai: The portrait of Xi Jinping – knitted in a bright red coloured shawl woven in gold zari in the centre – that pm Modi gifted Xi during the summit was weaved at Sirumugai (a town in Coimbatore district in Tamil Nadu) known for Silk Sarees Bazaars.

Mamallapuram: Mamallapuram – also known as Seven Pagodas or Mahabalipuram – is a town in Chengalpattu district, Tamil Nadu. It was a major port city within the Pallava kingdom during the 7th century. The town has a collection of 7th and 8th century religious monuments that has been declared as a UNESCO World Heritage site.

LOTUS-HR

- **India and Netherlands launched the second phase of the LOTUS-HR (Local Treatment of Urban Sewage streams for Healthy Reuseplant).**
- The project is jointly supported by Department of Biotechnology (India) and Netherlands Organization for Scientific Research.
- The project was initiated in July 2017 and aims to demonstrate a novel holistic (waste) water management approach that will produce clean water which can be reused for various purposes. In the 2nd phase, 10,000 Litre sewage water will be treated per day.

COUNTERING AMERICA'S ADVERSARIES THROUGH SANCTIONS ACT (CAATSA)

- **India's defence procurement from Russia could get adversely affected due to implementation of CAATSA**, a United States law, enacted in 2017 with the objective of countering the aggression by Iran, Russia and North Korea through punitive measures.
- Section 231 of the Act empowers the US President to impose sanction on persons engaged in a "significant transaction" with Russian defence and intelligence sectors.
- Two of the most stringent of these sanctions are:
 - suspending export licences related to munitions, dual-use and nuclear related items; and
 - ban on American investment in equity/debt of the sanctioned person.

LETWIN AMENDMENT

- **In Britain, the former Tory minister Oliver Letwin's amendment passed 322 to 306.**
- The Letwin amendment says the British parliament will withhold approval of the Prime Minister's Brexit deal until the withdrawal bill implementing Brexit has been passed.
- Essentially, this meant that PM Boris Johnson was legally obliged to request the EU under the **Benn Act** to extend the date the votes on Brexit will be cast.

The Benn Act, formally called the European Union (Withdrawal) (No. 2 Act) 2019, is an act of the UK Parliament, which legally mandates seeking an extension for the negotiating period under certain circumstances.

INTERPOL GENERAL ASSEMBLY

- **India will host the 91st Interpol General Assembly in 2022, as part of celebrations of the 75th anniversary of Indian Independence. Earlier, Interpol had hosted the general assembly in India in 1997.**
- The **International Police Organisation (INTERPOL)** is an international organization to facilitate international police cooperation against cross-border terrorism, trafficking etc.
- **General Assembly:** All decisions regarding the activities of INTERPOL are made by the General Assembly – where representatives of all member countries converge – which is its 's supreme governing body which meets annually.

- **Status:** It is 'NOT' a unit or part of united nation system.
- **HQ:** Lyon in France; **Founded in:** 1923; **Membership:** It is a 194 member body.
- **Central Bureau of Investigation (CBI)** represents Interpol in India as the country's national central bureau.
- **Interpol Notices:** It issues **8 type of notices (7 of which are colour-coded)** which are in the form of alert/requests allowing police in member countries to share critical crime-related information.

TYPE	OBJECTIVE
Red Notice	To seek the location and arrest of a person wanted by a judicial jurisdiction or an international tribunal with a view to his/her extradition. <i>It is like an international arrest warrant.</i>
Blue Notice	To locate, identify or obtain information on a person of interest in a criminal investigation.
Green Notice	To warn about a person's criminal activities if that person is considered to be a possible threat to public safety.
Yellow Notice	To locate a missing person or to identify a person unable to identify himself/herself.
Black Notice	To seek information on unidentified bodies.
Orange Notice	To warn of an event, a person, an object or a process representing an imminent threat and danger to persons or property.
Purple Notice	To provide information on modus operandi, procedures, objects, devices or hiding places used by criminals.
Interpol-UNSC Special Notice	To inform Interpol's members that an individual or an entity is subject to UN sanctions.

THE UNITED NATIONS' UNIVERSAL POSTAL UNION (UPU)

- In a unilateral decision, Pakistan has stopped exchange of postal mails with India since August 27. Pakistan's decision was taken "without any prior notice" and "in direct contravention of international norms."
- The Universal Postal Union (UPU) is a specialized agency of the **United Nations (UN)**.
- **Functions:** It coordinates postal policies among member nations, in addition to the worldwide postal system. It frames rules for international mail exchange, and fixes rates for international postal services.
- **Membership:** 192 member-countries; **HQ:** Bern, Switzerland.
- **Timeline:** it was established by the Treaty of Bern in **1874**. India joined the UPU on July 1, 1876 and Pakistan on November 10, 1947.

Under UPU rules, when a country decides to suspend exchange with a country, it must notify the operator of the other country (in India's case, India Post) and, if possible, the duration for which services are being stopped.

RCEP (REGIONAL COMPREHENSIVE ECONOMIC PARTNERSHIP)

- **PM Modi** announced that India was dropping out of the RCEP, citing its negative effects on "farmers, MSMEs and the dairy sector".

- **Members:** The RCEP is a proposed Free Trade Agreement (FTA) between 16 countries namely 10 countries of ASEAN and their six ASEAN FTA Partners namely Australia, China, India, Japan, Korea and New Zealand.
- **Objective:** The 16-member RCEP bloc aims to cover among the issues related to goods, services, investments, economic and technical cooperation, competition and intellectual property rights.
- RCEP negotiations were formally launched in 2012 at the ASEAN Summit in Cambodia.

INTERNATIONAL CRIMINAL COURT (ICC)

International Criminal Court (ICC) Judges have opened an investigation into crimes committed against Myanmar's Rohingya Muslim minority. While Myanmar is not a member of the ICC, ICC said that it has jurisdiction over crimes partially committed in Bangladesh, which is a member state of the court.

- **Mandate:** it is an intergovernmental international tribunal for Criminal prosecution of individuals for four main crimes namely (1) Genocide, (2) War crimes, (3) Crimes against humanity and (4) Crime of aggression.
- **Established in:** 2002 by Rome statute; **HQ:** it's official seat is in The Hague, Netherlands, but its proceedings may take place anywhere.
- **Jurisdiction:** It can exercise its jurisdiction only when national courts are unwilling or unable to investigate or prosecute such crimes. The Court can generally exercise jurisdiction only in three cases, viz.
 - if the accused is a national of a state party,
 - if the alleged crime took place on the territory of a state party or
 - if a situation is referred to the Court by the United Nations Security Council.
- **Judges:** 18; Elected for 9-year term; **Members:** 122 countries. Israel, United States, Russia, china and India are not its member.
- **While it is not a United Nations organization,** the Court has a cooperation agreement with the United Nations. When a situation is not within the Court's jurisdiction, the United Nations Security Council can refer the situation to the ICC granting it jurisdiction.

INDIA GERMANY RELATIONS

- **German Federal Chancellor Angela Merkel visited India for the fifth round of Inter-Governmental Consultations (IGC).**
- Chancellor Merkel and PM Modi welcomed the success of the '**Make in India Mittelstand**' (MIIM) **Programme** which has helped facilitate over 135 German Mittelstand and family-owned companies.
- They acknowledged the successful work under the **German Indian Startup Exchange Program (GINSEP)** and welcomed the introduction of a new **German Accelerator (GA) programme "Next Step India"**, which could lead to a full programme for German Startups in India.

List of MoUs/Agreements signed during the visit:

- MoU between National Institute of Agricultural Extension Management MANAGE and the German Agricultural Academy DEULA in the city of Nienburg on collaboration in agricultural technical and professional training.
- MoU between All India Football Federation and DeutscherFußball-Bund e.V (DFB).

PM Modi gifted Angela Merkel Ratnam Pen:

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- The Ratnam Pen, named after K.V. Ratnam (originally from a family of goldsmiths in Rajahmundry), was made in 1934 by Ratnam, by using indigenous materials upon Mahatma Gandhi's request to create a 'swadeshi' (locally made) pen. He wrote many of his letters using Ratnam Pen.
- It is produced even today in its original form by Ratnam's descendants.
- It has a barrel for filling ink using a dropper and the **Genius Iridium Nib from Germany**.

11TH BRICS SUMMIT

- **PM Modi attended the 11th BRICS summit in Brasilia, Brazil. The theme of the BRICS summit this year was "Economic Growth for an Innovative Future."**
- PM Modi has called for an early opening of **New Development Bank's (NDB's)** regional office in India.
- PM Modi expressed hope that MOU between trade promotion agencies of BRICS will help achieving the target of **500 billion US dollars intra BRICS trade**.
- During the the 4th BRICS-Young Scientist Forum (YSF), 2019, Ravi Prakash, an Indian scholar won the 25,000 US Dollar **BRICS-Young Innovator Prize** for inventing an affordable indigenous milk chilling unit for smaller and marginal rural dairy farmers.

BRICS

- BRICS is the acronym coined for an association of five major emerging national economies: **Brazil, Russia, India, China and South Africa**.
- BRICS brings together five major emerging economies comprising **42 % of the world's population, having 23 % of the global GDP and 17 % of the share and world trade**.
- Originally the first four were grouped as "BRIC", before the induction of South Africa in 2010. Since 2009, the BRICS nations have met annually at formal summits.
- **The New Development Bank (NDB)**, formerly referred to as the BRICS Development Bank, is a multilateral development bank operated by the BRICS states.
- **The BRICS Contingent Reserve Arrangement (CRA)** is a framework for providing protection against global liquidity pressures.

INDIA BANGLADESH RELATIONS

Prime Minister of Bangladesh, Sheikh Hasina paid an official visit to India that included her presence as the Chief Guest at the India Economic Summit organized by the World Economic Forum on 03-04 October 2019. List of MoUs/Agreements exchanged during the visit:

1. Standard Operating Procedure (SOP) on the use of Chattogram and Mongla ports
2. MoU on withdrawal of 1.82 cusec of water from Feni river by India for drinking water supply, scheme for Sabroom town, Tripura, India
3. MoU on providing Coastal Surveillance System

The two leaders also inaugurated three bilateral development partnership projects:

- Import of Bulk LPG from Bangladesh,
- Inauguration of Vivekananda Bhaban (students hostel) at Ramakrishna Mission, Dhaka
- Inauguration of Bangladesh-India Professional Skill Development Institute (BIPSDI) at the Institution of Diploma Engineers Bangladesh (IDEB), Khulna.

Feni River is a trans-boundary river that originates in Tripura and flows through Sabroom town and then enters Bangladesh. Muhuri River, also called Little Feni, from Noakhali District joins it near its mouth.

OPERATION KAYLA MUELLER / BARISHA RAID

- **Abu Bakr al-Baghdadi committed suicide during the Barisha raid conducted by the Delta Force, in Syria**
- Abu Bakr al-Baghdadi was the leader of the Islamic State (ISIS) militant terrorist organisation. In 2014, the ISIS announced the establishment of a worldwide caliphate. Al-Baghdadi was named its caliph, to be known as "Caliph Ibrahim".
- The Barisha raid was a United States military operation in Barisha, Idlib Governorate, in Syria targeting ISIS leadership on October 26-27, 2019.
- The special forces raid was officially **code-named Operation Kayla Mueller after the American humanitarian worker** who was held captive, tortured, and sexually abused by Baghdadi before her death in 2015.

BUDAPEST CONVENTION

- **India maintained its status as a non-member of the Europe-led Budapest Convention, even as it voted in favour of a Russian-led UN resolution to set up a separate convention.**
- **The Convention on Cybercrime of the Council of Europe (CETS No.185)** is also known as the Budapest Convention on Cybercrime or the Budapest Convention.
- **It is the first international treaty seeking to address cybercrime** by harmonizing national laws and improving investigative techniques. It was opened for signature in Budapest in 2001 and it entered into force in 2004.
- **The following offences are defined by the Convention:** illegal access, illegal interception, misuse of devices, computer-related fraud, offences related to child pornography, and offences related to copyright and neighbouring rights.
- **Participants:** It was drawn up by the Council of Europe with the active participation of the Council of Europe's observer states Canada, Japan, Philippines, South Africa and the United States. As of September 2019, 64 states have ratified the convention.
- **Non-participants:** Brazil and India have declined to adopt the Convention on the grounds that they did not participate in its drafting. Russia opposes the Convention, stating that adoption would violate Russian sovereignty.

Russian-led UN resolution?

- The Russian proposal entitled "Countering the use of information and communications technologies for criminal purposes" was recently passed in the United Nations General Assembly (UNGA) Third Committee 88-58, with 34 absentions.
- The proposal, which India voted in favour of, creates a committee to convene in August 2020 in New York to establish a new treaty through which nation-states can coordinate and share data to prevent cybercrime.

INDIA – SAUDI ARABIA RELATIONS

- **During the visit of Prime Minister Modi to Saudi Arabia, the two sides have agreed to establish a Strategic Partnership Council to coordinate on important issues, taking the bilateral relationship to the next level.** It will be headed by the top leadership on either side.
- The two sides re-affirmed their deep commitment to strengthen the strategic partnership envisaged in the 'Riyadh Declaration' of 2010.

Other MoUs/Agreements signed during the visit:

- MoU between Indian Strategic Petroleum Reserves Limited (ISPRL) and Saudi Aramco.
- MoU for Cooperation between National Stock Exchange (NSE) and Saudi Stock Exchange (Tadawul)
- MoU between National Payments Corporation of India (NPCI) and Saudi Payments
- MoU for Cooperation in the field of combating illicit trafficking and smuggling of narcotic drugs.
- MoU for Cooperation in the field of Civil Aviation
- Letter of Intent between Small and Medium Enterprises General Authority (Monshaat) of Saudi Arabia and Atal Innovation Mission (AIM), NITI Aayog.

KURDS

- **Kurdish fighters in northern Syria have served as a crucial U.S. ally in the fight against the Islamic State. But U.S. troops stepped aside as Turkey launched an offensive against the U.S.-backed Kurdish forces.**
- The Kurds are members of a large, predominantly Muslim ethnic group.
- They live in the highlands of southern and eastern Turkey, northern Iraq, the northeastern Syria, northwestern Iran, and parts of south Armenia, and are a minority in each of these countries.
- Today, there are about 30 million Kurds living across the region, with about half of them in Turkey. Iraq is the only country in the region to have established an autonomous Kurdish region, known as Iraqi Kurdistan. Its parliament was founded in 1992.
- After World War I, Western powers promised Kurds their own homeland in the agreement known as the Treaty of Sèvres. But a later agreement instead divided them among Turkey, Iraq, Syria and Iran.
- Over the decades, the Kurds made repeated attempts at establishing a de facto Kurdistan with defined national borders.



FRAMEWORK ON CURRENCY SWAP ARRANGEMENT FOR SAARC

- **The RBI has put in place a revised Framework on Currency Swap Arrangement for SAARC countries for the period 2019 to 2022.**
- **A currency swap** between countries is an agreement to exchange currencies with predetermined terms and conditions.
- Under it, RBI will offer swap arrangement within the overall corpus of \$2 billion.
- The RBI would enter into bilateral swap agreements with SAARC central banks, who want to avail swap facility.
- The drawals can be made in US Dollar, Euro or Indian Rupee. The Framework provides certain concessions for swap drawals in Indian Rupee.

SAARC

Members: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

Founded in: 1985

Secretariat: Kathmandu, Nepal.

G5 SAHEL

- **UN Secretary-General Antonio Guterres warned that al Qaeda and Islamic State have strengthened their foothold across the Sahel region this year as the G5 Sahel task force has been perennially underfunded.**

- G5 Sahel task force is a five-nation anti-terror force in the Sahel region of West Africa.
- **Members:** Burkina Faso, Chad, Mali, Mauritania, and Niger.
- **Headquarters:** Nouakchott, Mauritania.
- **The Sahel Belt** is a semi-arid tropical savanna ecoregion in Africa, which forms the transitional zone between the Sahara Desert to the north and the more humid savanna belt to the south.



FUTURE INVESTMENT INITIATIVE (FII)

- **PM Modi attended the Future Investment Initiative (FII), an annual investment forum held in Riyadh, Saudi Arabia.** It is hosted by the Public Investment Fund of Saudi Arabia (PIF), Saudi Arabia's main sovereign wealth fund.
- **The Future Investment Initiative (FII) is widely described as “Davos in the desert”.** The informal name derives from the World Economic Forum’s annual meeting that is held in Davos, Switzerland, where world leaders discuss agendas for pressing international issues.
- It is held to discuss trends in the world economy in the context of the Saudi Vision 2030 program to diversify the kingdom’s economy and reduce its dependence on petroleum.

COMMISSION FOR THE CONSERVATION OF ANTARCTIC MARINE LIVING RESOURCES (CCAMLR)

- **During the meeting of CCAMLR in Hobart, China and Russia opposed a push by Australia and France to create a massive ocean sanctuary in east Antarctica.**
- **Members:** CCAMLR is an international commission with 26 Members (India being one of them), and a further 10 countries have acceded to the Convention.
- **Objective:** Conserving Antarctic marine life; **Secretariat:** Hobart, Australia.
- **History:** CCAMLR was established by international convention in 1982 in response to increasing commercial interest in Antarctic krill resources.

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

- **Argentina's Rafael Grossi has been appointed as the Director General of the IAEA. He is the first Latin American to hold this position.**
- **Name:** IAEA is widely known as the world’s “Atoms for Peace and Development” organization within the United Nations family.
- **Mandate:** It is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field. It works for the safe, secure and peaceful uses of nuclear science and technology.
- **History:** Though established as an autonomous organisation, independently of the United Nations through its own international treaty, the IAEA Statute, the IAEA reports to both the United Nations General Assembly and Security Council.
- **Headquarters:** Vienna, Austria; **Members:** 171 member states.
- The IAEA and its former Director General, Mohamed ElBaradei, were jointly awarded the Nobel Peace Prize in 2005.

PACIFIC SMALL ISLAND DEVELOPING STATES (PSIDS)

PM Narendra Modi met leaders of the Pacific Small Islands Developing States (PSIDS) on the sidelines of the UN General Assembly session in New York. he announced the allocation of 12 million US Dollar grant towards the implementation of high impact developmental projects in Pacific Island countries.

- **What are they:** Small Island Developing States (SIDS) are maritime countries that tend to share similar sustainable development challenges.
- **Location:** These countries are across the globe in the Caribbean, the Pacific, Atlantic and Indian Oceans, and the Mediterranean and South China Sea.
- **Population:** An estimated 60 million people live in small island developing States.
- **How many:** The UN has never established any criteria to determine an official list of SIDS" but it maintains a shorter, unofficial list for analytical purposes. The United Nations Department of Economic and Social Affairs lists 57 small island developing states.
- **Groupings:** These are broken down into following three geographic regions, with each region having it's own regional cooperation body.
 - **Caribbean:** The Caribbean Community
 - **Pacific:** The Pacific Islands Forum
 - **Africa, Indian Ocean, Mediterranean and South China Sea (AIMS):** The Indian Ocean Commission.

CARIBBEAN COMMUNITY AND COMMON MARKET (CARICOM)

- **PM Modi met with the leaders of the CARICOM group of countries on the sidelines of the United Nations General Assembly (UNGA) in New York.**
- It was the first-ever meeting of PM Modi with CARICOM leaders in a regional format.
- He announced a USD 14 million grant for community development projects in the CARICOM and another 150 million Line of Credit for solar, renewable energy and climate- change related projects.
- He also announced the setting up of the Regional Center for Excellence in Information Technology in Georgetown, Guyana and the Regional Vocational Training Center in Belize.
- It was decided to set up a Joint Task Force to expeditiously look into possible areas of cooperation and identify the way forward.

CARICOM

It is an economic and political community. It has 15 members-states and 5 associate members.

Established: 1973

Secretariat: Georgetown, Guyana.

DOXXING

- **A court in Hong Kong has issued a temporary order, in effect until November 8, banning the practice of 'doxxing'.**
- Doxxing (also spelt as 'doxing') means to publicly identify or publish private information about someone, especially with the intention of punishing or taking revenge.
- Doxxing first emerged as hacker slang for obtaining and posting private documents about an individual, usually a rival or enemy.
- In Hong Kong, protesters have been releasing information about police officers and their families, thereby opening them up to targeted violence or harassment and abuse, either physically or online.

GLOBAL MIGRATION REPORT 2020

The Global Migration Report 2020 was recently released by the UN-affiliated International Organization for Migration (IOM). Key findings of the report:

- Of the 272 international migrants worldwide (3.5% of the global population), India accounts for the highest share with 17.5 million Indians living outside the country. India is followed by Mexico (11.8 million) and China (10.7 million).
- Roughly two-thirds of international migrants are labour migrants.
- India is the leading recipient of remittances. International remittances in 2018 (2020 report) reached \$689 billion, out of which India received \$78.6 billion from the 17.5 million living abroad. India is currently followed by China (\$67.4 billion) and Mexico (\$35.7 billion).
- The top destinations for international migrants is the USA followed by Germany, Saudi Arabia, Russian Federation and the UK.
- The top migration corridors for Indians are the United Arab Emirates, the US and Saudi Arabia.
- The highest number of migrants entering India come from Bangladesh.
- Oceania is the region with the highest proportion of international migrants and the UAE is the country with the highest proportion of international migrants. More than half of all international migrants (141 million) live in Europe and North America.

- **International Organization for Migration (IOM)** is a related organization of the United Nations.
- **HQ:** Geneva, Switzerland;
- **Established in:** 1951.

INTERNATIONAL MIGRANT STOCK 2019

- **The Population Division of the UN Department of Economic and Social Affairs (DESA) released the International Migrant Stock 2019. It provides the estimates of the number of international migrants by age, sex and origin for all countries.**
- **In 2019, the number of migrants globally** reached an estimated 272 million. The top ten countries of origin account for one-third of all international migrants.
- **India is the leading country of origin of international migrants** in 2019 with a 17.5 million strong diaspora. Migrants from Mexico constituted the second largest diaspora.
- **Regionally, Europe hosted the largest number of international migrants (82 million),** followed by Northern America (59 million).
- **At the country level, United States of America hosted the largest number of international migrants (51 million).**
- **India hosted 5.1 million international migrants in 2019.** The highest number of international migrants came from Bangladesh, Pakistan and Nepal. International migrants as a share of total population in India was steady at 0.4 % from 2010 to 2019.
- **In terms of the share of international migrants in total population,** the highest proportion was recorded in Oceania region at 21.2%.
- **The share of women and girls in the global number of international migrants** fell slightly, from 49% in 2000 to 48% in 2019. The share of migrant women was highest in Northern America (52%) and Europe (51%).

CHAGOS ARCHIPELAGO SOVEREIGNTY DISPUTE

- **Mauritius called the UK an “illegal colonial occupier”, after it ignored the United Nations (UN) mandated deadline to return the Chagos Islands to Mauritius.**
- The Chagos Archipelago is a group of seven atolls comprising more than 60 islands in the Indian Ocean. It is officially part of the **British Indian Ocean Territory**.

Timeline of dispute:

- Chagos Archipelago has been part of Mauritius since at least the 18th century when France governed it. In 1810, Mauritius was captured by the United Kingdom and France ceded the territory in the Treaty of Paris.
- In 1965, three years before Mauritius got its independence, Britain separated the Chagos islands to carve out a ‘British Indian Ocean Territory’.
- In 1966, the UK leased **Diego Garcia (the biggest island in the Chagos archipelago)** to the US to create an air & naval base. For constructing the defence installation, the inhabitants of the island were forcibly removed.
- In 1968 Mauritius was granted independence and since then wants its sovereignty over the islands restored.
- **In May 2019, the UN General Assembly** passed a resolution asking the U.K. to withdraw its “colonial administration” from the Chagos Archipelago within six months.

**INDIA-RUSSIA ANNUAL SUMMIT, VLADIVOSTOK**

PM Modi and Russian President Vladimir Putin held delegation-level talks in Vladivostok, Russia. List of MoUs/Agreements exchanged during visit are:

1. **MoU on the Development of Maritime Communications between the Port of Chennai, and the Port of Vladivostok**
2. Agreement on the cooperation in the production of spare parts for Russian/Soviet military equipment.
3. MoU to cooperate in coking coal mining projects implementation in the Russian Far East.
4. Cooperation Agreement between Invest India and the Russian Direct Investment Fund for Investment Collaboration.
5. MoU between the Joint Stock Company NOVATEK and PETRONET LNG Limited on joint development of downstream LNG Business and LNG supplies.

Other key highlights of visit:

- PM Modi announced a line of credit worth one Billion US dollars for the development of the Far East region of Russia.
- He also launched the Indo-Russian Innovation Bridge, an online platform to promote joint innovations. This facility is meant to bridge the gap between Indian and Russian startup ecosystems.

Vladivostok: Located on the Golden Horn Bay north of North Korea and a short distance from Russia's border with China, Vladivostok is the largest port on Russia's Pacific coast.

EASTERN ECONOMIC FORUM

- **PM Modi attended the Eastern Economic Forum (EEF) in Vladivostok, Russia. This was the first visit by an Indian Prime Minister to the Russian Far East region.**

- **Background:** The Eastern Economic Forum was established by decree of the President of the Russian Federation Vladimir Putin in 2015.
- **Purpose:** To support the economic development of Russia's Far East and to expand international cooperation in the Asia-Pacific region.
- **Features:** Events at the Forum traditionally take place in the form of panel sessions, roundtables and business dialogues devoted to Russia's relationships with various countries.

Russian Far East**Дальний Восток****INDIA SOUTH KOREA DEFENCE RELATIONS**

- **Defence Minister Rajnath Singh paid an official visit to South Korea.**
- India and South Korea concluded a **military logistics agreement** to extend logistical support to each other's Navies. India will be able to get assured logistic support when it operates in the Indo-Pacific in the ports of South Korea.
- A MoU was signed to further **defence educational exchanges**.
- They also stressed on consolidation of **Special Strategic Partnership**.

H-1B, H-4 VISAS

- **A United States court ruled that a group of American-born tech workers have faced heightened job competition from work authorisations given to the spouses of H-1B visa holders.**
- **H-1B visa:** The lottery-based H-1B visas allow US companies to employ foreign workers temporarily in specialised occupations for three years, extendable to six years. The issuances are capped at 85,000 a year, but some employers such as universities and research nonprofits are exempt.
- **H-4 visa:** Spouses of H-1B workers are granted an H-4 visa, through which some have been allowed to apply to work in the US since a Barack Obama-era 2015 law.

EB-5 US VISA

- **New rules governing the EB-5 visa of the United States came into effect, which include a increase in the investment amount required to obtain the visa.**
- The EB-5 is one of five employment-based immigrant visas that can be obtained in the United States (others being EB-1, EB-2, EB-3, EB-4). An immigrant visa allows its holder to live and work in the US permanently, as opposed to a non-immigrant visa like H-1B.
- Under the US immigration rules, the EB-5 is a category of visa which enables an individual to apply for permanent residency in the United States (also called green card) after meeting certain investment and employment-generation criteria.
- The applicant is required to: (1) make the necessary investment in a commercial enterprise in the United States, and (2) create or, in certain circumstances, preserve 10 full-time jobs for qualified United States workers.

The US uses the visa scheme to generate employment in '**Targeted Employment Areas (TEAs)**' which consist of areas that have an average unemployment rate of at least 150% of the national average unemployment rate of the US, as well as certain rural areas.

POST-STUDY WORK VISA (U.K.)

- **To attract more international students, the UK government led by Boris Johnson has announced a new two-year post-study work visa route from next year.**

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- Under the new graduate visa route, students from anywhere including India would be able to work or even look for work at any skill level.
- The visa will be two years long and will be a separate visa, requiring a new application.
- This route is non-extendable and does not count towards settlement. However, graduates who find an appropriate job and meet the requirements will be able to switch into skilled work, which is a route to settlement.

TAIWAN

- Governments of Kiribati as well as Solomon Islands' have ended their diplomatic relations with Taiwan and instead recognized mainland China. Now, Taiwan maintains official ties with 14 out of 193 UN member states and the Holy See.
- Taiwan is officially known as the **Republic of China (ROC)**. **Taipei** is its capital.
- It is a state in East Asia with Neighbouring states include the People's Republic of China (PRC) to the west, Japan to the north-east, and the Philippines to the south.
- The East China Sea lies to its north, the Philippine Sea to its east, the Luzon Strait directly to its south and the South China Sea to its southwest.
- **The Taiwan Strait** separates the island of Taiwan from mainland China. The strait is currently part of the South China Sea and connects to the East China Sea to the north.
- Taiwan is no longer a member of the UN, having been replaced by the PRC in 1971. Taiwan is claimed by the PRC, which refuses diplomatic relations with countries that recognise the ROC.

COMMONWEALTH YOUTH PARLIAMENT

- **Lok Sabha Speaker Om Birla addressed youngsters from India and the Commonwealth during the inaugural session of the 10th Commonwealth Youth Parliament in Delhi Assembly.**
- The Commonwealth Youth Parliament is an annual gathering hosted by the Commonwealth Parliamentary Association (CPA). It brings together young people aged 18–29 from across the Commonwealth of Nations to discuss issues of governance.
- The Youth Parliament rotates annually through the nine regions of the CPA.

It is for the first time that an Indian Legislature is hosting the Commonwealth Youth Parliament.

NON ALIGNED MOVEMENT (NAM)

- **Vice-President Venkaiah Naidu represented India at the 19th Non Aligned Movement (NAM) summit in Baku, Azerbaijan, marking the second time in a row that PM Modi will give the summit a miss.** In 2016 as well, India was represented by then Vice-President at the NAM summit in Venezuela.
- Since it was inaugurated in 1961, the Indian Prime Minister has always attended the NAM summit, except in 1979, when Chaudhury Charan Singh was the caretaker PM and hence missed it, and in 2016.

Bandung Principles:

- The theme for the 19th NAM Summit was **“Upholding the Bandung Principles to ensure adequate response to the challenges of contemporary world”**.
- The Ten Principles of Bandung, a political statement encapsulating the need to promote world peace and cooperation were formulated at the Asian-African Conference in 1955.

- India is one of the founding members of the Non-Aligned Movement (NAM), which was established in 1961 with 29 members. It has since grown to 120 members to become one of the largest groupings of nation-states.

ARTICLE 35 & 51 OF UN CHARTER

- **Union Home Minister said that had India's first PM Jawaharlal Nehru taken the matter to the United Nations under Article 51 of the UN Charter, instead of Article 35, the outcome would have been different on the Pakistan-occupied Kashmir.**
- **Article 35 of the UN Charter** says that any member of the UN may take a dispute to the Security Council or General Assembly, if the parties to a dispute that has the potential for endangering international peace are not able to resolve the matter through negotiations between them.
- **Article 51** says that a UN member has the "inherent right of individual or collective self-defence" if attacked, "till such time that the Security Council has taken measures necessary to maintain international peace and security".

ECONOMY

PROJECT SU.RE

- The Union Minister for Textiles, Smriti Zubin Irani launched Project SU.RE.
- SU.RE stands for 'Sustainable Resolution.' The SU.RE project is a commitment by India's apparel industry to move towards fashion that contributes to a clean environment.
- The project has been launched by the Minister, along with Clothing Manufacturers Association of India (CMAI); United Nations in India; and IMG Reliance.

SUGAR SECTOR: FRP and BUFFER STOCK

Fair and Remunerative Price (FRP):

- The Union Cabinet has approved the determination of 'Fair and Remunerative Price' of sugarcane payable by sugar mills for 2019-20 sugar season.
- Price of sugarcane is fixed by the centre/State, while the price of sugar is market determined.
- Fair and remunerative price (FRP) is the minimum price at which the sugarcane is to be purchased by sugar mills from farmers. The FRP is **fixed by Union government** on the basis of **recommendations of Commission for Agricultural Costs and Prices (CACP)**.
- The 'FRP' of sugarcane is determined under Sugarcane (Control) Order, 1966.
- FRP assures margins to farmers, irrespective of whether sugar mills generate a profit or not.

Sugar Buffer Stock

The Cabinet has also approved the creation of buffer stock of 40 lakh Metric Tonnes of sugar for one year from August 1, 2019, to July 31, 2020. The decision will lead to an improvement in the liquidity in sugar inventories and stabilization in sugar prices.

BONDS YIELD CURVE

- As talk of a recession gets louder globally, Bond yields curve have featured in news reports both globally and within India in recent months as it most accurately reflects what investors think about current and future economic growth prospects.
- **Bond Yield or the yield of a bond** is the effective rate of return that a bond earns. But the rate of return is not fixed — it changes with the price of the bond.
- **Bond Yield curve** is a graphical representation of yields for bonds (with an equal credit rating) over different time horizons.
- If bond investors expect the economy to grow normally, then they would expect to be rewarded more (that is, get more yield) when they lend for a longer period. This gives rise to a normal — upward sloping — yield curve.
- The steepness of this yield curve is determined by how fast an economy is expected to grow. When the economy is expected to grow only marginally, the yield curve is "flat".
- Yield inversion happens when the yield on a longer tenure bond becomes less than the yield for a shorter tenure bond. A yield inversion typically portends a recession. An inverted yield curve shows that investors expect the future growth to fall sharply.

Government e-Marketplace (GeM)

- The **Steel Authority of India Limited (SAIL)** became the first Central Public Sector Enterprise (CPSE) to enter into MoU with the Government e-Marketplace (GeM).
- GeM is an online market place that was launched in 2016 to ensure that public procurement of goods and services in India (done by government bodies) worth more than Rs. 5 lakh crore annually is carried out through the online platform.
- Directorate General of Supplies and Disposal (DGS&D), an organization under *Ministry of Commerce & Industry*, is the nodal organization for hosting Government e-Market (GeM).
- **Benefits of GeM:**
 - **Transparency:** GeM eliminates human interface in vendor registration, order placement and payment processing, to a great extent.
 - **Efficiency:** Direct purchase on GeM can be done in a matter of minutes.
 - **Secure and safe:** GeM is a completely secure platform and all the documents on GeM are e-Signed at various stages by the buyers and sellers.

THE CODE ON WAGES, 2019 PASSED BY LOK SABHA

- Parliament passed the Code on Wages, 2019 to regulate wage and bonus payments in all employments where any industry, trade, business, or manufacture is carried out.
- **The Code replaces the following four laws:** (i) the Payment of Wages Act, 1936, (ii) the Minimum Wages Act, 1948, (iii) the Payment of Bonus Act, 1965, and (iv) the Equal Remuneration Act, 1976.
- **Coverage:** The Code will apply to all employees. The central government will make wage-related decisions for employments such as railways, mines, and oil fields, among others. The state governments will make decisions for all other employments.
- **Floor wage:** According to the Code, the central government will fix a floor wage, taking into account living standards of workers. Further, it may set different floor wages for different geographical areas.
- **Fixing the minimum wage:** The Code prohibits employers from paying wages less than the minimum wages. Minimum wages will be notified by the central or state governments. The minimum wages will be revised and reviewed by the central or state governments at an interval of not more than five years.
- **Advisory boards:** The central and state governments will constitute advisory boards. The Boards will advise the respective governments on various issues including: (i) fixation of minimum wages, and (ii) increasing employment opportunities for women.

COMPANIES (AMENDMENT) BILL, 2019

The Companies (Amendment) Bill, 2019 was passed by Parliament. It amends the Companies Act, 2013. Key features of the Bill include:

- **Issuance of dematerialised shares:** Under the Act, certain classes of public companies are required to issue shares in dematerialised form only. The Bill states this may be prescribed for other classes of unlisted companies as well.
- **Re-categorisation of certain Offences:** The Bill re-categorizes 16 compoundable offences as civil defaults, where adjudicating officers (appointed by the central government) may now levy penalties instead.
- **Corporate Social Responsibility (CSR):** Under the Bill, any unspent annual CSR funds must be transferred to one of the funds under Schedule 7 of the Act (e.g., PM Relief Fund) within six months of the end of the financial year.

- **Commencement of business:** The Bill states that a company may not start business, unless it
 - files a declaration within 180 days of incorporation, confirming that every subscriber to the Memorandum of the company has paid for the shares agreed to be taken by him
 - and files a verification of its registered address with the RoC within 30 days of incorporation.

INSOLVENCY AND BANKRUPTCY CODE (AMENDMENT) BILL, 2019

The Insolvency and Bankruptcy Code (Amendment) Bill, 2019 was passed by Parliament to amend the Insolvency and Bankruptcy Code, 2016. The Code provides a time-bound process for resolving insolvency in companies and among individuals. Salient features of bill are:

- **Initiation of resolution process:** In case, the National Company Law Tribunal (NCLT) does not find the existence of default and has not passed an order within 14 days, it must record its reasons in writing.
- **Time-limit for resolution process:** It must be completed within 330 days. This includes time for any extension granted and the time taken in legal proceedings in relation to the process.
- **Resolution plan:** The resolution plan must ensure that the operational creditors receive an amount that should be the higher of: (i) amounts receivable under liquidation, and (ii) the amount receivable under a resolution plan, if such amounts were distributed under the same order of priority (as for liquidation).

REVIEW OF FDI POLICY

- The Union Cabinet has approved the proposal for Review of Foreign Direct Investment (FDI) policy on various sectors.
- **Digital Media:** It has been decided to permit 26% FDI under government route for uploading/streaming of News & Current Affairs through Digital Media, on the lines of print media.
- **Contract Manufacturing:** It has been decided to allow 100% FDI under automatic route in contract manufacturing in India as well.
- **Coal Mining:** It has been decided to permit 100% FDI under automatic route for sale of coal, for coal mining activities including associated processing infrastructure.
- **Single Brand Retail Trading (SBRT):**
 - All procurements made from India by the SBRT entity for the single brand shall be counted towards local sourcing, irrespective of whether the goods procured are sold in India or exported.
 - Further, the current cap of considering exports for 5 years only is proposed to be removed, to give an impetus to exports.

KHANIJ BIDESH INDIA LTD. (KABIL)

- A joint venture company Khanij Bidesh India limited (KABIL) has been set up with the participation of three Central Public Sector Enterprises (CPSEs) - National Aluminium Company Ltd.(NALCO), Hindustan Copper Ltd.(HCL) and Mineral Exploration Company Ltd. (MECL) - to ensure supply of critical Minerals to Indian domestic market.
- The equity participation between **NALCO, HCL and MECL is in the ratio of 40:30:30**
- The newly setup company will ensure supply of **Lithium and Cobalt** which is available in less quantity in the country, thus ensuring mineral security of the nation.
- The KABIL would carry out identification, acquisition, exploration, development, mining and processing of strategic minerals overseas for commercial use and meeting country's requirement of these minerals.

PMGSY PHASE III

- The Cabinet Committee on Economic Affairs has approved the launch of the third phase of the Pradhan Mantri Gram Sadak Yojana (PMGSY-III).
- Under the PMGSY-III Scheme, it is proposed to consolidate 1,25,000 Km road length in the States during 2019-20 to 2024-25.
- **Strategy:** PMGSY-III involves consolidation of through routes and major rural links connecting habitations to Gramin Agricultural markets (GrAMs), higher secondary schools and hospitals.
- **Financial Implications:** It will entail an estimated cost of Rs 80,250 crore. The funds would be shared in the ratio of **60:40** between the Centre and State for all States except for 8 North Eastern and 3 Himalayan States for which it is 90:10.

Background:

- **PMGSY-I was launched in 2000** with an objective to provide single all-weather road connectivity to eligible unconnected habitation of designated population size.
- Government launched **Road Connectivity Project for Left Wing Extremism Area (RCPLWEA)** in the year 2016 as a separate vertical under PMGSY in 44 districts (35 are worst LWE affected districts and 9 are adjoining districts).
- In 2018, CCEA approved continuation of PMGSY-I & II beyond 12th Five Year Plan and covering of balance eligible habitations under PMGSY-I by March 2019, PMGSY-II, and habitations under identified LWE blocks (100-249 population) by March 2020.

BIMAL JALAN PANEL

Reserve Bank of India (RBI) had constituted an “**Expert Committee to Review the Extant Economic Capital Framework of the RBI**” under the Chairmanship of Dr. Bimal Jalan. Major recommendations of the Committee with regard to risk provisioning and surplus distribution are as follows:

- **RBI's economic capital:** A clearer distinction between the two components of economic capital (realized equity and revaluation balances) was recommended.
 - Realized equity could be used for meeting all risks/ losses as they were primarily built up from retained earnings.
 - Revaluation balances could be reckoned only as risk buffers against market risks as they represented unrealized valuation gains and hence were not distributable.
- **Risk provisioning for market risk:** It has recommended the adoption of Expected Shortfall (ES) methodology under stressed conditions (in place of the extant Stressed-Value at Risk) for measuring RBI's market risk. It has recommended the adoption of a target of ES 99.5 % confidence level (CL).
- **Size of Realized Equity:** Contingent Risk Buffer (CRB) – made primarily from retained earnings – has been recommended to be maintained within a range of 6.5 % to 5.5 % of the RBI's balance sheet, comprising 5.5 to 4.5 % for monetary & financial stability risks and 1.0 % for credit & operational risks.
- **Surplus Distribution Policy:** It has recommended a surplus distribution policy which targets the level of realized equity to be maintained by the RBI. Under it, only if realized equity is above its requirement, will the entire net income be transferable to the Government.
- It has also suggested that the **RBI's economic capital framework** may be periodically reviewed after every five years.

35th GST COUNCIL**Key decisions taken during the Council Meeting under chairmanship of Union Finance Minister:**

- There will be a common **State Bench of Goods and Services Tax Appellate Tribunal (GSTAT)** for Sikkim, Nagaland, Manipur and Arunachal Pradesh.
- Tenure of **National Anti-Profiteering Authority (NAPA)** has been extended by 2 years. NAPA deals with complaints by consumers against companies for not passing on GST rate cut benefits.
- **Electronic invoicing system** to be introduced in a phase-wise manner for B2B transactions. The Phase 1 is proposed to be voluntary and it shall be rolled out from January 2020.
- It has simplified rules for registration and **Aadhaar will now be used by businesses for registration under GST**. In the earlier system, people had to give various documents.

MONEY IN SWISS BANKS**Key findings of analysis released by the Swiss National Bank (SNB):**

- **Total amount:** The total money held in Swiss banks by foreign clients from across the world fell by about 4 % to CHF 1.4 trillion (about Rs 99 lakh crore) in 2018.
- **Top 5:** Among the top-ranked jurisdictions, the UK is followed by the US, West Indies, France and Hong Kong in the top five. These countries alone account for more than 50 % of the aggregate foreign funds parked with the Swiss banks.
- **Indian scenario:** India has moved down one place to 74th rank in terms of money parked by its citizens and enterprises with Swiss banks at the end of 2018. The funds officially held by Indians with banks in Switzerland now accounts for only 0.07 % of the total funds kept by all foreign clients.
- **BRICS:** Among the five-nation BRICS block of emerging economies, India is ranked the lowest while Russia is ranked the highest at 20th place, followed by China at 22nd, South Africa at 60th and Brazil at 65th place.
- **South Asia:** Several of India's neighbouring nations are ranked lower, with Pakistan ranking 82nd, Bangladesh 89th, Nepal 109th, Sri Lanka 141st, Myanmar 187th and Bhutan 193rd.

TURNOVER RATIO (STOCK MARKET)

- As per the latest study by the World Bank, the turnover ratio of the Indian stock market has fallen significantly by 60% in the last 10 years. The fall had been the **highest among most leading markets of the world, barring the U.S. and the European Union**.
- The turnover ratio is a universally accepted parameter to gauge trading volumes. It is the total value of the shares traded in a specific period divided by the average market capitalisation of that period.

CRYPTOCURRENCY**Libra:**

- Facebook announced a digital currency called Libra that will be rolled out for use in 2020 to allow the Facebook's billions of users to make financial transactions online.
- **Libra:** Facebook says Libra is a "global currency and financial infrastructure". It is a digital asset built by Facebook and powered by a new Facebook-created version of blockchain, the encrypted technology used by bitcoin and other cryptocurrencies.
- **Calibra:** When the cryptocurrency is launched, users can download Calibra, a digital wallet, that will allow them to send it to anyone with a smartphone. It will be available in Messenger, WhatsApp, and as a standalone app.

- **Who is in charge of Libra?** The currency will be serviced by a collective of companies called the “Libra Association”, an independent, not-for-profit organisation based in Switzerland.

Indian scenario:

- An Inter-Ministerial Committee on Virtual Currencies submitted its Report along with Draft Bill ‘Banning of Cryptocurrency & Regulation of Official Digital Currency Bill, 2019’
- It has recommended **banning of the cryptocurrencies in India**. However, it has also proposed that the Government **keeps an open mind on official digital currency**.

HIGH POWERED COMMITTEE OF CMs FOR ‘TRANSFORMATION OF INDIAN AGRICULTURE’

- PM has set up a High Powered Committee of Chief Ministers for ‘Transformation of Indian Agriculture’.
- **Convenor:** Maharashtra CM Devendra Fadnavis is the Convenor of the committee.
- **Members:** CMs of Karnataka, Haryana, Arunachal Pradesh, Gujarat, UP, MP & Union Minister of Agriculture, RD & Panchayati Raj to be the Members.
- **Member Secretary:** Member, NITI Aayog Ramesh Chand to be the Member Secretary
- The Committee will be serviced by **NITI Aayog**.

WORLD INVESTMENT REPORT 2019

The World Investment Report 2019 was released by the UNCTAD. Key findings of the report are:

- Foreign Direct Investment (FDI) to India grew by 6 % to 42 billion dollars in 2018, with strong inflows in the manufacturing, communication and financial services sectors, and cross-border merger and acquisition activities.
- India was among the top 20 host economies for FDI inflows in 2017-18.

UN Conference on Trade and Development (UNCTAD)

- UNCTAD was established by the United Nations General Assembly (UNGA) in 1964 and it reports to the UNGA and United Nations Economic and Social Council.
- **Headquarters:** Geneva, Switzerland.
- It deals with trade, investment, and development issues. It conceived and implements the Generalised System of Preferences (GSP).
- UNCTAD produces a number of topical reports - The Trade and Development Report; The World Investment Report; The Information Economy Report; and The Technology and Innovation Report.

EMPLOYEES’ STATE INSURANCE (ESI)

- Government of India has reduced the rate of contribution under the ESI Act from 6.5% to 4%.
 - Employers’ contribution is being reduced from 4.75% to 3.25%.
 - Employees’ contribution is being reduced from 1.75% to 0.75%.
- **Impact:** It will facilitate further enrolment of workers under the ESI scheme and bring more and more workforce into the formal sector.

Do you know

- The Employees’ State Insurance Act 1948 (the ESI Act) provides for **medical, cash, maternity, disability and dependent benefits** to the Insured Persons under the Act.
- The ESI Act is administered by Employees’ State Insurance Corporation (ESIC).
- Under the ESI Act, **employers and employees both contribute** their shares respectively.

- The Government of India, through **Ministry of Labour and Employment**, decides the rate of contribution under the ESI Act.

MULTILATERAL CONVENTION TO PREVENT BASE EROSION AND PROFIT SHIFTING (MLI)

- The Union Cabinet has approved the ratification of the **Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI)**.
- The Multilateral Convention is an outcome of the OECD / G20 Project to tackle **Base Erosion and Profit Shifting (the "BEPS Project")** i.e., tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no tax being paid.
- The Convention enables countries to implement the tax treaty related changes to achieve anti-abuse BEPS outcomes through the multilateral route without the need to bilaterally re-negotiate each such agreement which is burdensome and time consuming.

PRUDENTIAL FRAMEWORK FOR RESOLUTION OF STRESSED ASSETS

RBI has issued a new prudential framework for resolution of stressed assets by banks. Key highlights of new framework are:

- The new framework for resolution of bad loans offers a 30-day gap for stress recognition instead of the one-day default earlier.
- **Lenders will have complete discretion with regard to the design and implementation of resolution plans**, subject to the specified timeline and independent credit evaluation.
- Lenders may recognise incipient stress in loan accounts, immediately on default, by classifying such assets as **special mention accounts (SMA)**.
- For the purpose of restructuring, the **definition of 'financial difficulty' to be aligned** with the guidelines issued by the Basel Committee on Banking Supervision; and,
- If multiple lenders are involved, all the lenders must enter into an inter-creditor agreement (ICA) during the review period, to provide for ground rules for the resolution plan.
- This will replace all the earlier resolution plans such as Framework for revitalising distressed assets, Corporate debt restructuring scheme, Strategic debt restructuring scheme (SDR) etc.

LEVERAGE RATIO

- RBI has mandated leverage ratio of 3.5% for all the banks except for the domestic systemically important banks (D-SIBs), which will have a 4% ratio.
- **Meaning:** The leverage ratio, as defined under Basel-III norms, is Tier-I capital as a percentage of the bank's exposures. The framework is designed to capture leverage associated with both on- and off-balance sheet exposures.
- **Total exposure:** In this case, a bank's total exposure is defined as the sum of the following exposures - on-balance sheet exposures; derivative exposures; securities financing transaction exposures; and off-balance sheet items.
- **Background:**
 - The leverage ratio was introduced for banks post the financial crisis of 2008, as one of the underlying features of the crisis was the build-up of excessive on- and off-balance sheet leverage in the banking system.
 - The Basel Committee on Banking Supervision (BCBS) has set the minimum requirement for leverage ratio at 3%.

- **Domestic Systemically Important Banks (D-SIBs).** D-SIB means that the bank is too big to fail. These banks become systemically important due to their size, cross-jurisdictional activities, complexity and lack of substitute and interconnection. **SBI, ICICI Bank, and HDFC Bank** continue to be identified as D-SIBs.

PRADHAN MANTRI LAGHU VYAPARI MAAN-DHAN, YOJANA 2019

- It is a pension scheme notified by the Union labour ministry for retailers and traders.
- The scheme, which is an extension of the **PM Shram Yogi Maan-dhan Yojana**, will make all beneficiaries eligible for a monthly pension of **Rs 3000 after the age of 60** at a miniscule monthly contribution.
- All shopkeepers and self-employed persons, as well as retail traders with GST turnover below **Rs 1.5 crore and aged between 18-40 years**, can enrol for the scheme.
- The **Life Insurance Corporation of India** has been chosen as pension fund manager responsible for managing the pension fund.
- Government of India will make matching contribution in the subscribers' account. The scheme is based on self-declaration as no documents are required except Aadhaar and bank account.

PENSION SCHEME FOR FARMERS

- The Union Cabinet has approved a new voluntary and contributory pension scheme for all Small and Marginal Farmers (SMF) across the country. There is an entry age of **18 to 40 years** with a provision of minimum fixed pension of **Rs.3,000/-** on attaining the age of 60 years.
- A beneficiary farmer is required to contribute Rs 100/- per month at median entry age of 29 years. The Central Government shall also contribute to the Pension Fund an equal amount as contributed by the eligible farmer.
- After the subscriber's death the spouse of the SMF beneficiary shall be entitled to receive 50% of the pension received by the beneficiary as family pension, provided he/she is not already an SMF beneficiary of the Scheme.

PRADHAN MANTRI KISAN SAMMAN NIDHI (PM-KISAN)

- The Union Cabinet has approved that the ambit of the PM-KISAN would be comprehensively extended. The revised Scheme is expected to cover around 2 crore more farmers, increasing the coverage of PM-KISAN to around 14.5 crore beneficiaries.
- With this decision, **all land holding eligible farmer families** (subject to the prevalent exclusion criteria) would avail of the benefits under this scheme, *irrespective of the size of land holdings*.

Background:

- The genesis of the PM-KISAN Yojana dates back to the interim Budget for the year 2019-2020.
- The key element of PM-KISAN is income support of Rs. 6000/- to the small and marginal landholder farmer families with cultivable land holding upto 2 hectare across the country. (This has been expanded today)
- The amount is being released in three 4-monthly instalments of Rs.2000/- each over the year, to be credited into the bank accounts of the beneficiaries held in destination banks through Direct Benefit Transfer mode.

NANDAN NILEKANI COMMITTEE

Nandan Nilekani committee on deepening digital payments submitted its report. Its Key recommendations are:

- Formulate an internationalization plan for Indian payment systems such as RuPay and BHIM UPI to ease remittances into India and to help Indian travellers make payments abroad.
- Current import duty of 18 % on POS machines be reduced to Nil for a period of three years to facilitate adequate expansion of acquiring infrastructure in the country.
- Enhance features of ATMs merely from cash dispenser to support other banking facilities including cash Deposit, bills payment, mobile recharge etc. to act as a complete Digital facilitation point.
- Don't charge convenience fee on payments made to government agencies by customers.
- Ensure Round the clock RTGS and NEFT facility.

SPECIAL MORAL RIGHTS

The Madras High Court ruled that film music composer R. Ilaiyaraaja was entitled to “special moral rights” over 4,500 songs composed by him for more than 1,000 movies in line with **Section 57 of the Copyright Act, 1957**. **Key Highlights of Section 57 of the Copyright Act, 1957:**

- The Section protects the right of a composer to claim a right over his compositions even after assigning them wholly or partially to others.
- It also entitles him to restrain or claim damages in respect of any distortion, mutilation, modification or other act in relation to his work if such distortion, mutilation or modification would be prejudicial to his honour or reputation.

TASK FORCE ON OFFSHORE RUPEE MARKETS

Task Force on Offshore Rupee Markets – chaired by Usha Thorat, former Deputy Governor, RBI – has submitted its report to the Governor of RBI. Key recommendations are:

- To extend onshore market hours to improve access of overseas users.
- To permit Indian banks to freely offer prices to global clients around the clock.
- To enable Rupee derivatives (settled in foreign currency), to be traded in the International Financial Services Centers (IFSC) in India, to begin with on exchanges in the IFSC.
- To allow users to undertake forex transactions up to USD 100 million in OTC currency derivative market without the need to establish underlying exposure.
- To facilitate non-residents to hedge their foreign exchange exposure onshore by establishing a central clearing and settlement mechanism for non-resident transactions in the onshore market.

ENABLING FRAMEWORK FOR REGULATORY SANDBOX

RBI released the ‘enabling framework for regulatory sandbox.’

- **Meaning:** The Regulatory Sandbox (RS) usually refers to live testing of new products or services in a controlled/test regulatory environment for which regulators may (or may not) permit certain regulatory relaxations for the limited purpose of the testing.
- **Benefits of setting up of an RS:** Regulators obtain first-hand empirical evidence on the benefits and risks of emerging technologies and their implications; Users of an RS can test the product's viability without the need for a larger and more expensive roll-out.

Salient features of framework are:

- **The target applicants** for entry to the RS are *FinTech companies* including startups, banks, financial institutions and any other company partnering with or providing support to financial services businesses, subject to the sandbox criteria laid down in these guidelines.
- **Minimum net worth** requirement for applicants relaxed to Rs 25 lakh from Rs 50 lakh earlier.

- **Notice period** for a fintech to exit the RS increased to one month from one week earlier.
- **The entity should either be** a company incorporated and registered in the country or banks licensed to operate in India.
- **An indicative negative list** of products/services/technology which may not be accepted for testing is: Credit registry, Credit information, Crypto currency/Crypto assets services, Trading/investing/settling in crypto assets, Initial Coin Offerings, Chain marketing services etc.

PRINCIPLE OF 'SIGNIFICANT ECONOMIC PRESENCE (SEP)'

- During the meeting of G-20 finance ministers in Fukuoka, Japan, Finance Minister Nirmala Sitharaman called on G-20 countries to adopt principle of SEP while addressing challenges to tax profits made by the digital companies.
- The concept of SEP was introduced in the IT Act, 1961 from April 1, 2018 to tax the income of the non-resident arising from transactions relating to any goods, services or property in India, including allowing download of data or software or carrying on business activities in India through digital means.

COMPETITION LAW REVIEW COMMITTEE

Injeti Srinivas, Secretary (Corporate Affairs), presented the Report of the Competition Law Review Committee to the Union Minister of Corporate Affairs. **Key recommendations of Committee are:**

- Introduction of a **'Green Channel'** for combination notifications to enable fast-paced regulatory approvals for vast majority of mergers and acquisitions.
- Introducing **a dedicated bench in NCLAT** for hearing appeals under the Competition Act.
- Introduction of express provisions to **identify 'hub and spoke' agreements** as well as agreements that do not fit within typical horizontal or vertical anti-competitive structures to cover agreements related to business structures and models synonymous with new age markets.
- Additional enforcement mechanism of **'Settlement & Commitments'** in the interests of speedier resolution of cases of anti-competitive conduct.
- **CCI to issue guidelines on imposition of penalty** to ensure more transparency and faster decision making which will encourage compliance by businesses.
- Strengthening the governance structure of CCI with the **introduction of a Governing Board to oversee advocacy and quasi-legislative functions**, leaving adjudicatory functions to the Whole-time Members.
- **Merging DG's Office with CCI** as an 'Investigation Division' as it aids CCI in discharging an inquisitorial rather than adversarial mandate. However, functional autonomy must be protected.
- **Opening of CCI offices at regional level** to carry out non-adjudicatory functions such as research, advocacy etc. and interaction with State Governments and State regulators.

HIGH LEVEL COMMITTEE ON CORPORATE SOCIAL RESPONSIBILITY (CSR)

Injeti Srinivas, Secretary (Corporate Affairs), presented the Report of the High Level Committee on Corporate social responsibility (CSR) to the Union Minister of Corporate Affairs. **Key recommendations of the Committee are:**

- Making CSR expenditure tax deductible,
- Provision for carry forward of unspent balance for a period of 3 – 5 years,
- Aligning Schedule 7 with the SDGs by adopting a SDG plus framework (which would additionally include sports promotion, Senior Citizens' welfare, welfare of differently abled persons, disaster management and heritage protection),

- Balancing local area preferences with national priorities,
- Introducing impact assessment studies for CSR obligation of 5 crore or more,
- Registration of implementation agencies on MCA portal,
- Developing a CSR exchange portal to connect contributors, beneficiaries and agencies,
- Allowing CSR in social benefit bonds,
- Promoting social impact companies and third party assessment of major CSR projects,
- Companies having CSR prescribed amount below Rs. 50 lakh may be exempted from constituting a CSR Committee and
- Violation of CSR compliance may be made a civil offence and shifted to the penalty regime.

NBFCs/ HFCs

- Government of India has offered a scheme called 'Partial Credit Guarantee' to Public Sector Banks (PSBs) for purchasing high-rated pooled assets from financially sound Non-Banking Financial Companies (NBFCs)/Housing Finance Companies (HFCs)'.
- PSBs can purchase high-rated pooled assets from financially sound NBFCs/HFCs, with the amount of overall guarantee provided by government till the first loss of up to 10 % of fair value of assets being purchased by banks or Rs 10,000 crore, whichever is lower.
- The scheme would cover NBFCs / HFCs that may have slipped into SMA-0 category during the one year period prior to 1.8.2018, and asset pools rated "BBB+" or higher.
- **Objective:** To address temporary asset liability mismatches of otherwise solvent NBFCs/HFCs without having to resort to distress sale of their assets for meeting their commitments.
- **Validity of the scheme:** The window for one-time partial credit guarantee offered by Gol will open from the date of issuance of the Scheme by the Government for a period of 6 months, or till such date by which Rs. 1 lakh crore assets get purchased by banks, whichever is earlier.
- **Eligible NBFCs/HFCs:**
 - The NBFCs registered with RBI under the Reserve Bank of India Act, excluding those registered as Micro Finance Institutions and Core Investment Companies.
 - HFCs registered with National Housing Bank (NHB) under the National Housing Bank Act.
 - Micro Finance Institutions and Core Investment Companies are not covered under it.

SMA-0 accounts are the special mention accounts (SMA) against which the principal or interest or any other amount wholly or partially is overdue between 1-30 days.

RBI DEPUTY GOVERNOR

- Reserve Bank of India (RBI) Deputy Governor Viral Acharya has resigned from his position six months before the end of his term.
- The Reserve Bank's affairs are governed by a **central board of directors**. It comprises Official Directors and Non-Official Directors. **Official Directors comprises** Governor and not more than '**four Deputy Governors**'. They hold office for not more than '**5 years**'.
- Board is appointed by the Government of India in line with Reserve Bank of India Act.

ECONOMIC INDICATORS

As per official data, **Unemployment** rate in the country rose to a 45-year high of 6.1% in 2017-18. India's GDP grew at 5.8% in the January-March 2019 quarter, dragging down the **full year growth to a five-**

year low of 6.8%. The slowdown was led by sluggish growth in the agriculture, forestry and fishing sector (2.9% growth), the mining sector (1.3% growth) and in manufacturing (6.9%).

BANK CONSOLIDATION

- Government of India has announced the merger of 10 public sector banks (PSBs) into 4 banks.
- Under the scheme of amalgamation,
 - Indian Bank will be merged with Allahabad Bank (anchor bank - Indian Bank);
 - PNB, OBC and United Bank to be merged (PNB will be the anchor bank);
 - Union Bank of India, Andhra Bank and Corporation Bank to be merged (anchor bank - Union Bank of India); and
 - Canara Bank and Syndicate Bank to be merged (anchor bank - Canara Bank).
- In place of 27 public sector banks in 2017, now there will be 12 public sector banks after the latest round of consolidation of PSU banks.
- **Earlier mergers:** Last year, the government had approved the merger of Vijaya Bank and Dena Bank with Bank of Baroda (BoB) that become effective from April 1, 2019. In 2017, the State Bank of India absorbed five of its associates and the Bharatiya Mahila Bank.

DRAFT PLAN FOR POWER DISTRIBUTION SECTOR

- Union Minister for Power reviewed the Draft Distribution Perspective Plan for power sector in India.
- The draft plan is the **first ever plan at Distribution level** which has been prepared by Central Electricity Authority (CEA) under the guidance of the Ministry of Power.
- The plan lays emphasis on **100% metering** of all consumers and providing an electricity connection on demand.
- The plan envisages **conversion of all Electricity consumer meters into smart meters in prepaid mode within the next three years.**
- It anticipates an increase in Distribution substation capacity by 38%, Distribution transformation capacity by 32% and an increase in different type of feeder lengths by 27-38% till 2022.

THE AIRPORTS ECONOMIC REGULATORY AUTHORITY OF INDIA (AMENDMENT) BILL, 2019

- **Parliament passed the Airports Economic Regulatory Authority of India, AERA (Amendment) Bill- 2019 to amend the AERA Act, 2008.**
- **Definition of major airports:** It amends the definition of “major airport” as any airport which has annual passenger traffic of over 35 lakh instead of existing 15 lakh.
- **Tariff determination by AERA:** AERA would not determine tariff structures in the case of privatised airports as that was part of the bid offered at the time of the privatisation.

START-UP CELL

- The Central Board of Direct Taxes (CBDT) notified the creation of a five-member special 'startup cell' headed by the member (Income Tax and Computerisation) of CBDT to address grievances of startups with respect to administration of Income-tax Act, 1961.
- Union Finance Minister has also announced exemption of startups from the angel tax.

NATIONAL LABORATORY DIRECTORY

- The Union Minister of Consumer Affairs launched the National Laboratory Directory, an online platform created by **National Standards Body of India , Bureau of Indian Standards (BIS).**

- It is a one-stop-shop for all testing needs of the industries, academia, researchers and other stakeholders who need to get their Testing Facilities accredited / certified / recognised.

DIFFERENTIAL VOTING RIGHTS (DVRs)

- The Ministry of Corporate Affairs has amended the provisions relating to Differential Voting Rights (DVRs) under the Companies Act.
- DVRs do not follow the common rule of one share-one vote. DVRs enable promoters to retain control over the company even after many new investors come in, by allowing shares with superior voting rights or lower or fractional voting rights to public investors.
- The key changes made are:
 - Raising the existing cap of 26 % of the total post issue paid up equity share capital to 74 % of total voting power in respect of shares with DVRs of a company.
 - Removal of the earlier requirement of distributable profits for 3 years for a company to be eligible to issue shares with Differential Voting Rights.

PRIORITY SECTOR LENDING (PSL) – LENDING BY BANKS TO NBFCs FOR ON-LENDING

- The RBI issued a circular under which Bank credit to registered NBFCs (other than MFIs) for on-lending will be eligible for classification as priority sector under respective categories:
 - **Agriculture:** On-lending by NBFCs for 'Term lending' component under Agriculture will be allowed up to ₹ 10 lakh per borrower.
 - **Micro & Small enterprises:** On-lending by NBFC will be allowed up to ₹ 20 lakh per borrower.
 - **Housing:** Enhancement of the existing limits for on-lending by HFCs from ₹ 10 lakh per borrower to ₹ 20 lakh per borrower.
- Bank credit to NBFCs for on-lending will be allowed up to a limit of five per cent of individual bank's total priority sector lending on an ongoing basis. These norms will be reviewed after March 31, 2020.

WORLD SKILLS KAZAN COMPETITION, 2019

- **Aswatha Narayana** created history at the 45th WorldSkills competition, in Kazan by winning India's first gold medal in WorldSkills competition. He bagged the gold in water technology.
- World Skills competition is the world's biggest international vocational skill competition.
- Every two years WorldSkills International hosts the world skills competition.
- There are competitions in 56 skills across a wide range of industries — from joinery to floristry; hairdressing to electronics; and autobody repair to bakery. The Competitors are selected from skills competitions that are held in WorldSkills Member countries and regions.

Do you know? Republic of Tatarstan is a federal subject of the Russian Federation. Its capital is the city of Kazan. Kazan lies at the confluence of the Volga and Kazanka Rivers.

SABKA VISHWAS-LEGACY DISPUTE RESOLUTION SCHEME, 2019

- The Sabka Vishwas-Legacy Dispute Resolution Scheme, 2019, has been operationalized from 1st September 2019 and would continue till 31st December 2019.
- The two main components of the Scheme are:
 - **The dispute resolution component** is aimed at liquidating the legacy cases of Central Excise and Service Tax that are subsumed in GST and are pending in litigation at various forums.
 - **The amnesty component** of the Scheme offers an opportunity to the taxpayers to pay the outstanding tax and be free of any other consequence under the law.

- For all the cases pending in adjudication or appeal – in any forum - this Scheme offers a relief of 70% from the duty demand if it is Rs.50 lakhs or less and 50% if it is more than Rs. 50 lakhs.

SPECIAL ECONOMIC ZONES (AMENDMENT) BILL, 2019

Parliament passed the Special Economic Zones (Amendment) Bill, 2019 in the parliament. Key Amendments are:

- After the amendment of sub-section (v) of section 2 of the Special Economic Zones Act, 2005, a trust or any entity notified by the Central Government will be eligible to be considered for grant of permission to set up a unit in Special Economic Zones.
- The amendment also seeks to provide flexibility to the central government to include 'trusts' in the definition of a 'person', in a bid to facilitate investments in SEZs.

SPECIAL DATA DISSEMINATION STANDARD (SDDS)

- According to the IMF's "Annual Observance Report of the Special Data Dissemination Standard (SDDS) for 2018", India failed to comply with multiple requirements prescribed in the SDDS — a practice mandatory for all IMF members.
- The International Monetary Fund (IMF) launched the SDDS initiative in 1996 to guide members to enhance data transparency and help financial market participants with adequate information to assess the economic situations of individual countries. **India subscribed to the SDDS in 1996.**

FUGITIVE ECONOMIC OFFENDER

- Enforcement Directorate told Bombay High Court that Diamond trader Mehul Choksi, accused in the multi-crore Punjab National Bank scam, is a fugitive economic offender under the **Fugitive Economic Offenders Act (FEOA), 2018.**
- **Objectives of FEOA, 2018:**
 - To deter economic offenders from avoiding the process of Indian law by remaining outside the jurisdiction of Indian courts.
 - To ensure that fugitive economic offenders return to India to face the action as per the law.
- **Defining Fugitive Economic Offender (FEO):** FEO is defined as an individual
 - who has committed offences involving an amount of *100 crore rupees or more* and
 - has ran away from India to avoid criminal prosecution.
- **Special Court:** A special court will be established under the Prevention of Money-laundering Act, 2002 to declare a person as a Fugitive Economic Offender.
- **Attachment of property:** Special courts can direct the Central government to seize assets of fugitive economic offender including those that are proceeds of the crime.
- **Appeal:** Appeals against the orders of the special court will lie before the High Court.

U.K. SINHA COMMITTEE ON MSMEs

U.K. Sinha committee, constituted by RBI to study the problems faced by MSMEs, has submitted its report. **Key recommendations:**

- Form a ₹5,000 crore stressed asset fund for MSMEs which will assist units in a cluster becoming sick or non-performing due to changes in external factors such as plastic ban etc.
- RBI should increase the limit for non-collateralised loans to ₹20 lakh.
- It also suggested revision in loan limit sanctioned under MUDRA by the Finance Ministry to ₹20 lakh from ₹10 lakh.

UTKARSH 2022

- The Reserve Bank of India (RBI) board has finalised Utkarsh 2022, a three- year roadmap to improve regulation and supervision of the RBI.
- This medium-term strategy is in line with the global central banks' plan to strengthen the regulatory and supervisory mechanism.

TIME RELEASE STUDY (TRS)

- The Department of Revenue, Ministry of Finance, conducted India's first national Time Release Study between 1st – 7th August, 2019 to enable faster movement of cargo across borders to benefit traders.
- TRS is an internationally recognized tool advocated by World Customs Organization (WCO) to measure the efficiency of international trade flows.
- It measures rule based and procedural bottlenecks (including physical touchpoints) in the clearance of goods, from the time of arrival until the physical release of cargo.

'FIT AND PROPER' CRITERIA FOR DIRECTORS OF PSBs

Reserve Bank of India (RBI) has released directions for determining the 'fit and proper' status of a person to be eligible to be elected as a director on the Board of Public Sector Banks (PSBs).

Key highlights of 'Fit & Proper' regime are:

- Banks are required to constitute a **Nomination and Remuneration Committee (NRC)** consisting of a minimum of three non-executive Directors from amongst the Board Of Directors. The Centre's nominee Director shall not be part of the NRC.
- Candidate who wants to become an elected Director should be between **35-67 years old**.
- An elected Director shall **hold office for 3 years** and shall be eligible for re-election, provided that no director hold office for a period exceeding 6 years, whether served continuously or intermittently.
- **Members of Parliament, state legislatures, and local governments are not eligible to be members of PSB boards**
- The candidate should not be a member of the board of any rival bank, RBI, Financial Institution, Insurance Company or non-operative financial holding company.
- A person connected with hire purchase, financing, money lending, investment, leasing and other para banking activities cannot be considered for appointment.
- The candidate should not be engaged in the business of stock broking or a partner of a Chartered Accountant firm currently engaged as a Statutory Central Auditor of any nationalised bank or SBI.

NAVARRO RECESSION

- The term 'Navarro recession' was recently coined in the U.S. media. The term highlights the manner in which misguided trade and currency policies by the current U.S. administration, guided by economist Peter Navarro, may be creating distortions in the economy, leading to a slowdown.
- Apparently, U.S. President Trump overruled all his economic advisers but Mr. Navarro in imposing new tariffs on China. This begs the broader question of whether economies across the world are in turmoil because of rise of 'Navarros', with trained economists taking unconventional policy positions.

NON-BANKING FINANCE COMPANIES (NBFCs)

The Reserve Bank of India (RBI) has announced following new measures to increase credit flow to the NBFCs so as to overcome the on-going liquidity crunch in the sector:

1. RBI has increased the cap on a bank's exposure to a single NBFC to 20% of its tier-I capital from 15% now.
2. Bank lending to registered NBFCs (other than MFIs) for on-lending to Agriculture up to ₹10.0 lakhs; Micro and Small Enterprises up to ₹ 20.0 lakh and housing up to ₹ 20.0 lakh per borrower to be classified as **priority sector lending**.

RAMESH CHAND WORKING GROUP

- The Government of India has decided to constitute a Working Group for the revision of the current series of Wholesale Price Index (Base 2011-12).
- **Chairman of the Working Group:** Ramesh Chand (Member, NITI Aayog).
- **Nodal office:** The Office of Economic Adviser, Department for Promotion of Industry & Internal Trade, will be the nodal office for the Working Group and will process the report / recommendation of the Group for further necessary action.
- **Need of revision of WPI:** The current series of Wholesale Price Index (WPI) with 2011-12 as base year was introduced in May 2017. Since 2011-12, significant structural changes have taken place in the economy.

WORLD BIOFUEL DAY

- World Biofuel Day was observed on 10th August to create awareness about the importance of non-fossil fuels as an alternative to conventional fossil fuels.
- It is being observed by the Ministry of Petroleum & Natural Gas since 2015.
- This year theme of the Day is "Production of Biodiesel from Used Cooking Oil (UCO)".

Used Cooking Oil (UCO) as Biofuel?

- The National Policy on Biofuels, released by the Government of India in 2018, envisages production of biofuel from Used Cooking Oil (UCO).
- In India, approximately, 22.7 MMTPA of Cooking Oil is used out of which 1.2 MMTPA UCO can be collected from Bulk Consumers such as hotels, restaurants, canteens, etc. for conversion, which will give approximately 110 crore litres of Biodiesel in one year.

BANNING OF UNREGULATED DEPOSIT SCHEMES BILL 2019

- Parliament has passed the Banning of Unregulated Deposit Schemes Bill 2019.
- **Unregulated deposit scheme:** The Bill bans unregulated deposit schemes. A deposit-taking scheme is defined as unregulated if it is taken for a business purpose and is not registered with the regulators listed in the Bill.
- **Deposit taker:** The Bill defines deposit takers as an individual, a group of individuals, or a company who asks for (solicits), or receives deposits. Banks and entities incorporated under any other law are not included as deposit takers.
- **Competent Authority:** The Bill provides for the appointment of government officers, not below the rank of Secretary to the state or central government, as the Competent Authority. The Competent Authority will have powers similar to those vested in a civil court.
- **Designated Courts:** The Bill provides for the constitution of one or more Designated Courts in specified areas. The Court will seek to complete the process *within 180 days* of being approached by the Competent Authority.

- **Central database:** The Bill provides for the central government to designate an authority to create an online central database for information on deposit takers. All deposit takers will be required to inform the database authority about their business.
- **Offences and penalties:** The Bill defines three types of offences: running unregulated deposit schemes, fraudulently defaulting on regulated deposit schemes, and wrongfully inducing depositors to invest in unregulated deposit schemes by willingly falsifying facts.

MOTOR VEHICLES (AMENDMENT) BILL, 2019

The Motor Vehicles (Amendment) Bill, 2019 was passed by Parliament to amend the Motor Vehicles Act, 1988 to provide for road safety. Its salient features are:

- Central government will develop a scheme for **cashless treatment of road accident victims during golden hour** (time period of up to one hour following a traumatic injury, during which the likelihood of preventing death through prompt medical care is the highest).
- The Bill requires the central government to constitute a **Motor Vehicle Accident Fund to provide compulsory insurance cover** to all road users in India.
- The Bill defines a **good samaritan** as a person who renders emergency medical or non-medical assistance to a victim at the scene of an accident. Such a person will not be liable for any civil or criminal action for any injury to an accident victim caused due to their negligence in providing assistance to the victim.
- The Bill allows the central government to order for **recall of motor vehicles** if a defect in the vehicle may cause damage to the environment, or the driver, or other road users.
- The Bill provides for a **National Road Safety Board**, to be created by the central govt to advise the central and state govts on all aspects of road safety and traffic management.
- **The Bill increases penalties for several offences under the Act.** For example, the maximum penalty for driving under the influence of alcohol or drugs has been increased from Rs 2,000 to Rs 10,000. The central government may increase fines mentioned under the Act every year by up to 10%.
- **The Bill defines aggregators** as digital intermediaries which can be used by passengers to connect with a driver for transportation purposes. These aggregators will be issued licenses by state. Further, they must comply with the Information Technology Act, 2000.

ADVISORY BOARD FOR BANKING FRAUDS (ABBF)

- The Central Vigilance Commission (CVC) has constituted Advisory Board for Banking Frauds (ABBF) to examine bank fraud of over 50 crore rupees and recommend action.
- The four-member board will be **headed by former Vigilance Commissioner T M Bhasin**.
- **It will function as the first level of examination of all large fraud cases** before references are made to the investigative agencies by the respective Public Sector Banks.
- **It's jurisdiction** will be confined to those cases involving officers of General Manager level and above in the PSBs in respect of an allegation of a fraud in a borrowal account.

FISHERIES AND AQUACULTURE INFRASTRUCTURE DEVELOPMENT FUND (FIDF)

- The First tripartite MoU was signed under FIDF between the department of Fisheries Government of India, NARBARD and the Government of Tamil Nadu for the implementation of FIDF.
- **Background:** In October 2018, Union Cabinet approved the creation of special FIDF.

- **Objective:** From the FIDF, entrepreneurs, fishermen and cooperatives will get loans at subsidised interest rate. The credit from the fund will help attract investment in fisheries development and boost fish production by 67% in next four years from current level of 12 million tonnes to 20 million tonnes by 2022-23.
- **Fund size:** The approved fund size is Rs. 7,522 crore, comprising Rs 5,266 crore to be raised by the nodal loaning entities (NLEs), Rs 1,316 crore from beneficiaries' contribution and Rs 939.48 crore by budgetary support. The credit from the FIDF will have to be disbursed by 2022-23.
- **Nodal Loaning Entities (NLEs):** National Bank for Agriculture and Rural Development (NABARD), National Cooperatives Development Corporation (NCDC) and all scheduled banks are the designated NLEs in disbursement of the fund.
- **Interest rate:** The Department of Fisheries under the FIDF provides interest subvention up to 3% per annum for providing the concessional finance by the NLEs at the interest rate not lower than 5% per annum.
- **Repayment period:** The government has fixed the repayment period at maximum 12 years including moratorium of two years on principal amount.

SEMI-CLOSED PREPAID PAYMENT INSTRUMENT (PPI)

To give impetus to small value digital payments, RBI has decided to introduce a new type of semi-closed PPI. The directive is issued under Section 18 read with Section 10(2) of Payment and Settlement Systems Act, 2007. **It's Salient features are:**

- Such PPIs shall be issued by bank and non-bank PPI Issuers. These PPIs shall be reloadable in nature and issued in card or electronic form. Loading shall be only from a bank account.
- The amount loaded in such PPIs during any month shall not exceed ₹ 10,000 and the total amount loaded during the financial year shall not exceed ₹ 1,20,000.
- The amount outstanding at any point of time in such PPIs shall not exceed ₹ 10,000.
- These PPIs shall be used only for purchase of goods and services and not for funds transfer.
- The minimum detail PPIs existing as on the date of this circular can be converted to the above type of PPI, if desired by the PPI holder.

Do you know?

- **Prepaid Payment Instruments (PPI)** can be used to buy goods and services as well as transferring/sending money to a friend, family, etc.
- **Some of the prominent PPIs include** Paytm, Mobikwik (semi-closed system PPIs), Gift card (closed system PPIs), Travel/Debit/credit cards (open system PPIs).
- **Semi-closed wallets** have a specific contract with the issuer to accept the payment instruments but do not permit cash withdrawal or redemption by the holder and which enables the procuring of goods & services which consist of financial services at a group of clearly recognized merchant locations/establishments.

THE RECYCLING OF SHIPS BILL, 2019

- Parliament passed "The Recycling of Ships Bill 2019" for Safe and Environmentally Sound Recycling of Ships in India. The Union Cabinet also approved accession to the Hong Kong Convention for Recycling of Ships, 2009.
- The bill provides for the regulation of recycling of ships by setting certain international standards and laying down the statutory mechanism for enforcement of such standards.

- The Bill restricts and prohibits the use or installation of hazardous material, which applies irrespective of whether a ship is meant for recycling or not. Ships shall be recycled only in authorized ship recycling facilities.
- Now, ships to be recycled in India will need to obtain a 'Ready for Recycling Certificate' in accordance with the Hong Kong Convention.
- When the Hong Kong Convention comes into force, its provisions will be implemented under the provisions of the Recycling of Ships Bill, 2019 and rules and regulations framed there under.

Implementation of the bill will raise the brand value of **Ships Recycling Yards located at Alang in Gujarat, Mumbai Port, Kolkata Port & Azhikkal in Kerala.**

Hong Kong Convention for the safe and environmentally sound recycling of ships?

- **Objective:** To make the ship recycling industry safe for its workers and the environment.
- **Agencies involved:** The convention was adopted in 2009 by the International Maritime Organization (IMO), which is a specialist agency of the United Nations (U.N).
- It will enter into force two years after **"15 states, representing 40% of the world merchant shipping by gross tonnage, and on average 3% of recycling tonnage for the previous 10 years, have signed and ratified it."**

INTERNATIONAL FINANCIAL SERVICES CENTRES (IFSC) AUTHORITY BILL, 2019

- Parliament passed the International Financial Services Centres Authority Bill, 2019.
- An IFSC provides jurisdiction for carrying out international financial services domestically.
- **Gujarat International Finance Tech-City (GIFT City) in Gandhinagar, Gujarat is the only functional IFSC in India as of now.** There is no limit on the number of IFSCs that can be set up. Other states can also seek nod for similar centres.
- The Bill will apply to all IFSCs set up under the Special Economic Zones Act, 2005.
- The Bill sets up the International Financial Services Centres Authority. It will consist of nine members, appointed by the central government. Members will have a term of three years, subject to reappointment.
- The bill seeks to establish a unified Authority to develop and regulate the financial services market in the IFSC's in India. Currently, multiple agencies are entrusted with regulating the specific market including the RBI, SEBI, IRDA and PFRDA.
- Fourteen Central Acts would be amended including seven relating to the RBI, three each relating to the SEBI and the IRDA and one on the PFRDA.
- The proposed authority will be subjected to the scrutiny of the CAG and the CVC. The Central agencies like the CBI, the ED and the Prevention of Money Laundering Act-PMLA will have jurisdiction over the proposed authority.

BHARAT BOND EXCHANGE TRADED FUND (ETF)

- Cabinet Committee on Economic Affairs (CCEA) has given its approval for creation of Bharat Bond Exchange Traded Fund (ETF) as the **first corporate Bond ETF in India.**
- **Objective:** To create an additional source of funding for Central PSUs, Public Financial Institutions and other Government organizations.

Exchange Traded Funds (ETFs) are essentially Index Funds that are listed and traded on exchanges like stocks. An ETF is a basket of stocks that reflects the composition of an Index, like S&P CNX Nifty or BSE Sensex. The ETFs trading value is based on the net asset value of the underlying stocks that it represents.

- **Features of Bharat Bond ETF:** ETF will be a basket of bonds issued by government organization (Initially, all AAA rated bonds) with following features: Tradable on exchange; Small unit size Rs 1,000; Transparent NAV (Periodic live NAV during the day); Transparent Portfolio (Daily disclosure on website) and Low cost (0.0005%).
- **Bharat Bond ETF Structure:**
 - Each ETF will have a fixed maturity date. ETF will track the underlying Index on risk replication basis, i.e. matching Credit Quality and Average Maturity of Index.
 - Will invest in a portfolio of bonds of CPSE, CPSU, CPFI or any other Government organizations that matures on or before the maturity date of the ETF
 - As of now, it will have 2 maturity series - 3 and 10 years. Each series will have a separate index of the same maturity series.
- Index will be constructed by an independent index provider – National Stock Exchange.

WORLD ECONOMIC LEAGUE TABLE 2020

The report titled 'World Economic League Table 2020' was released by the UK-based Centre for Economics and Business Research (CEBR). Key findings are:

- India will overtake Germany to become fourth-largest economy in the world by the year 2026. India is all set to overtake Japan to become the third-largest economy by 2034.
- India is also set to become a 5 trillion dollar economy by 2026, 2 years later than the government's target of 2024. India has decisively overtaken both France and the UK to become the world's fifth-largest economy in 2019.

The **World Economic League Table** is an annual calculation by Centre for Economics and Business Research (CEBR) jointly published by CEBR and Global Construction Perspectives. The base data for 2019 is taken from the IMF World Economic Outlook.

INSOLVENCY AND BANKRUPTCY CODE (AMENDMENT) ORDINANCE, 2019

- The Union Cabinet has approved Promulgation of the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2019 to amend the Insolvency and Bankruptcy Code, 2016.
- Under the Amendments, the **liability of a corporate debtor** for an offence committed prior to the commencement of the corporate insolvency resolution process shall cease.
- In addition, it provides immunity from any action against the property (such as attachment, seizure, or confiscation) of the corporate debtor in relation to such offences. Such immunity will be granted if the resolution plan approved by the NCLT results in the change of promoters, or management of the corporate debtor.
- However, any person in charge of the corporate debtor, or associated with it, will continue to be held liable for such offences.

The National Company Law Tribunal (NCLT) is a quasi-judicial body to adjudicate issues relating to Indian companies. It was established in 2016 under the Companies Act 2013.

CHARTERED DESIGNS OF INDIA (CDI); DESIGN EDUCATION QUALITY MARK (DEQM)

The India Design Council (IDC) has launched following two new Initiatives:

1. **The Design Education Quality Mark (DEQM)** will benchmark design education programmes on predetermined standards and will accord Design Education Quality Mark to institutions that meet the provisions of the published standard.

2. **The Chartered Designs of India (CDI)** is envisaged as an institution that will establish and uphold the professional standards of design practice in India.

India Design Council (IDC) is an autonomous body under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce. It is mandated to implement the National Design Policy (NDP) adopted in 2007.

PASHU KISAN CREDIT CARDS

- The First Pashu Kisan credit cards in India were distributed to 101 animal farmers in Bhiwani in Haryana. Haryana Govt has set a target to issue 10 lakh Pashu Kisan Credit cards by March 2021.
- Under the Scheme, banks will give Rs 40783 for a cow and Rs 60249 for a buffalo. The credit amount for goat and sheep each is Rs 4063. In the case of a pig, it is Rs 16337 per pig. For Hens, it is Rs 720 per layer and Rs 161 per broiler hen.
- Livestock owners can use the amount under cards to pay for animal feed, etc. They can repay within a stipulated period. The card is along lines of the **Kisan credit card scheme**.

Kisan Credit Card (KCC) scheme was introduced in 1998 by Indian banks. This model scheme was prepared by the National Bank for Agriculture and Rural Development (NABARD) on the recommendations of R.V. Gupta committee to provide term loans for agricultural needs.

INDEPENDENT DIRECTOR'S DATABANK

- The Ministry of Corporate Affairs launched the Independent Director's Databank in accordance with the provisions of the Companies Act, 2013. The Databank portal will be maintained by the **Indian Institute for Corporate Affairs (IICA)**, a subordinate office under the Ministry of Corporate Affairs.
- All existing Independent Directors are required to register themselves in the databank within 3 months from 01 December 2019.
- **Objective:** To provide a platform for the registration of existing Independent Directors as well as individuals aspiring to become independent directors; To provide a wide array of e-learning courses on various topics for capacity building of Independent Directors.

eBक्रय

- To enable online auction of attached assets by Public Sector Banks (PSBs) transparently for improved realisation of value, eBक्रय, a common e-auction platform has been launched by the Union Finance Minister.
- The platform is equipped with property search features and navigational links to all PSB e-auction sites, provides single-window access to information on properties up for e-auction as well as facility for comparison of similar properties.

RATING SHOPPING

- Reserve Bank of India (RBI) has criticised Credit Rating Agencies (CRAs) for allowing low-rated companies to do "rating shopping".
- Rating shopping refers to how, a company or a debt paper manages to get same or better rating from another agency within three months of it getting a poor rating.
- Rating agencies have been largely blamed for their lax policies and oversight for the 2008 global financial crisis. A fortnight before IL&FS went belly up in September 2018, rating agencies India Ratings, Icra and Care had given its debt papers AAA/AA+ ratings.

CENTRAL REPOSITORY OF INFORMATION ON LARGE CREDITS (CRILC)

- The Reserve Bank of India (RBI) has directed large cooperative banks to report all exposures of 5 crore rupees and more to the Central Repository of Information on Large Credits (CRILC). The move is aimed at early detection of financial distress.
- The RBI has created a CRILC of commercial banks, all India financial institutions and certain non-banking financial companies with multiple objectives, which, among others, include strengthening offsite supervision and early recognition of financial distress.
- With a view to building a similar database of large credits extended by primary (urban) co-operative banks (UCBs), it has been decided to bring UCBs with assets of ₹500 crores and above under the CRILC reporting framework.

SILVER LINE PROJECT

- The Ministry of Railways has granted in-principle approval for the 'Silver Line' project a proposal of the Kerala government that aims to connect major districts and towns with semi high-speed trains that will run on their own tracks.
- It involves laying railway lines from Kasaragod in the north to Kochuveli (Thiruvananthapuram) in the south for the movement of semi high-speed trains.
- The Kerala Rail Development Corporation (K-Rail), a joint venture between the Ministry of Railways and the Kerala government will execute the project.

STAGFLATION

- India's retail price inflation in November 2019 jumped to a 40-month high, at a time when growth has slowed to a six-year low, prompting some economists to warn that the country could be entering into a stagflationary phase.
- Stagflation is a portmanteau of stagnant growth and rising inflation. Stagflation is said to happen when an economy faces stagnant growth as well as persistently high inflation.
- With stalled economic growth, unemployment tends to rise and existing incomes do not rise fast enough and yet, people have to contend with rising inflation. So people find themselves pressurised from both sides as their purchasing power is reduced.

OPERATION TWIST

- RBI has decided to conduct simultaneous purchase and sale of government securities under Open Market Operations (OMO) for ₹10,000 crores each on December 23, 2019.
- It is the first time the RBI will conduct a special OMO of this kind, similar to the 'Operation Twist' carried out in the United States near the start of the decade to make long-term borrowing cheaper.
- The RBI said it will buy 100 billion rupees' (\$1.4 billion) worth of the current benchmark 10-year bond while selling four bonds maturing in 2020 for an equivalent amount.
- RBI has decided to conduct the special OMO after reviewing the liquidity & market situation and assessing financial conditions. Bond yields have been rising since the RBI unexpectedly left its key repo rate unchanged earlier this month. Analysts believe this 'Operation Twist' is aimed at bringing longer term yields lower.

STANDING COMMITTEE ON STATISTICS (SCES)

- The Ministry of Statistics and Programme Implementation (MOSPI) has constituted a 28-member Standing Committee on Statistics (SCES) chaired by former Chief Statistician Pronab Sen to review

and develop the country's surveys on employment, industry and services sector amid criticism of official statistics.

- **The SCES will subsume in it the four standing committees** on labour force statistics, industrial statistics, services sector and unincorporated sector enterprises.

INTEREST RATE OPTIONS

- National Stock Exchange (NSE) has launched interest rate options based on 10-year government bonds maturing in 2029 with coupon rate of 7.26% and 6.45%. Presently, interest rate futures are available on seven government bonds for residual maturity ranging from 4 years to 15 years.
- Interest rate options are financial derivative contracts whose values are based on an underlying interest rate. Market participants can use options to trade and hedge interest rate risk on a transparent platform.

SMALL FINANCE BANKS (SFBs)

RBI released, "Guidelines for 'on tap' Licensing of Small Finance Banks in the Private Sector". Major changes from the earlier Guidelines on SFBs are:

- The licensing window will be open on-tap.
- minimum paid-up voting equity capital / net worth requirement shall be ₹ 200 crore.
- for Primary (Urban) Co-operative Banks (UCBs), desirous of voluntarily transiting into Small Finance Banks (SFBs) initial requirement of net worth shall be at ₹ 100 crore, which will have to be increased to ₹ 200 crore within five years.
- SFBs will be given scheduled bank status immediately upon commencement of operations.
- Payments Banks can apply for conversion into SFB after five years of operations, if they are otherwise eligible as per these guidelines.

Background: RBI had last issued guidelines for licensing of Small Finance Banks in the private sector in 2014. Consequently, the RBI issued in-principle approval to ten applicants and they have since established the banks.

CENTRE OF EXCELLENCE FOR NEXT GENERATION TRANSPORTATION SYSTEMS

- The National Rail Transport Institute (NRTI) signed an MoU with the University of Birmingham to set up its first Centre of Excellence for Next Generation Transportation Systems.
- This Centre will be involved in promoting development of the Rail and Transportation sector in India which include training programmes for in-service professionals and undertaking research in areas such as signalling, asset maintenance etc.

NRTI has been set up as a deemed to be university and has been operational since 2018.
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20th LIVESTOCK CENSUS

Department of Animal Husbandry & Dairying released the findings of 20th Livestock Census which covers all domesticated animals and its headcounts in rural and urban areas of all States and Union Territories. Its key results are:

- **The total Livestock population is 535.78 million** in the country showing an increase of 4.6% over Livestock Census-2012
- **Total Bovine population (Cattle, Buffalo, Mithun and Yak) is 302.79 Million in 2019** which shows an increase of about 1% over the previous census.

- **The total number of cattle** in the country in 2019 is 192.49 million showing an increase of 0.8 % over previous Census. **The Female Cattle (Cows population)** is 145.12 million, increased by 18.0% over the previous census (2012).
- **The Indigenous/Non-descript female cattle population** has increased by 10% in 2019 as compared to previous census. The population of the total **Exotic/Crossbred Cattle** has increased by 26.9 % in 2019 as compared to previous census.
- **The total milch animals (in-milk and dry)** increased by 6 % over the previous census.
- **The total sheep in the country** increased by 14.1% over previous Census.
- **The Goat population** showed an increase of 10.1% over the previous census.
- **The total Pigs in the country** declined by 12.03% over the previous Census.
- **The total poultry in the country** registered an increase of 16.8%. **The backyard poultry** has increased by around 46% and **The total Commercial Poultry** increased by 4.5% over previous Census.

The Livestock Census has been conducted in the country periodically since 1919-20.

HANDBOOK ON FISHERIES STATISTICS – 2018

- The Handbook on Fisheries Statistics - 2018 has been published by the Department of Fisheries of Ministry of Fisheries, Animal Husbandry & Dairying, Government of India.
- It is the 13th edition which presents useful statistical information for various aspects of Fisheries sector. The last (12th edition of) Handbook was published in 2014.

Key findings:

- **India is currently world's second largest producers of fish. It is also world number two in aquaculture production as well as in inland capture fisheries.**
- The total fish production of 12.59 million metric tonnes was registered during 2017-18 with a contribution of 8.90 million metric tonnes from inland sector and 3.69 million metric tonnes from marine sector.
- The average growth in fish production during 2017-18 stands at 10.14% when compared to 2016-17 (11.43 million metric tonnes).
- The %age contribution of inland fish production in the total fish production of 29% during the year 1950-51 and has increased to 71% in the year 2017-18.
- **Andhra Pradesh has recorded the highest production of inland fish (34.50 lakh tones) whereas Gujarat is the leading state in Marine fish (7.01 Lakh tonnes) in the country.**

WORLD INTELLECTUAL PROPERTY INDICATORS (WIPI) 2019

World Intellectual Property Organization (WIPO) released its annual World Intellectual Property Indicators (WIPI) report. Key findings are:

- **In all, innovators worldwide filed 3.3 million patent applications (up 5.2% for a ninth straight yearly increase), 14.3 million trademark applications, and 1.3 million industrial design applications.**
- **Asia accounted for more than two-thirds of all patent, trademark and industrial design applications in 2018.** China ranked first in all three categories and had as many patent filings as the next 10 places combined.

WIPO is a specialized agency of the United Nations created in 1967. It is the global forum for intellectual property policy, services, information and cooperation. It is Headquartered in Geneva, Switzerland.

- China accounted for nearly half of global patent filings last year, with a record 1.54 million applications. The US ranked second with almost 600,000 patent applications.

DOING BUSINESS REPORT 2020

What is measured in *Doing Business*?



- The World Bank released its latest Doing Business Report (DBR, 2020).
- Doing Business 2020 measures regulations across 190 economies in 12 business regulatory areas to assess the business environment in each economy. Ten of these indicators were used to estimate an ease of doing business score this year.
- The DBR ranks countries on the basis of Distance to Frontier (DTF), a score that shows the gap of an economy to the global best practice.
- The top 5 best places in the world to do business are New Zealand (with a score of 86.8 out of 100), Singapore, Hong Kong SAR, China and Denmark.

India's performance:

- India has recorded a jump of 14 positions against its rank of 77 in 2019 to be **placed now at 63rd** rank among 190 countries.
- India's Distance to Frontier (DTF) score improved to 71 from 67.23 in the previous year.
- For the third consecutive year India is amongst the top 10 improvers. As a result of continued efforts by the Government, **India has improved its rank by 79 positions in last five years [2014-19]**. India is **first among South Asian countries**.
- **India has improved its rank in 7 out of 10 indicators. India saw the biggest jump in ranking in "resolving insolvency" category, to 52nd rank from 108th**, while its ranking improved substantially in Dealing with Construction Permits (to 27th from 52nd) and "Trading across Borders" (to 68th from 80th).

GLOBAL COMPETITIVENESS INDEX

The latest edition of the annual Global Competitiveness Index was released by the Geneva-based World Economic Forum (WEF).

- It was first launched in 1979. This is the fourth version of the global competitiveness index – hence referred to as GCI 4.0 – and it was introduced in 2018.
- GCI maps the factors that determine the **Total Factor Productivity (TFP) in a country**.
- The GCI 4.0 maps the competitiveness of 141 economies through 103 indicators organised into 12 pillars which are further divided into **4 broad categories namely** (1) Enabling Environment, (2) Human Capital, (3) Markets and (4) Innovation Ecosystem.

- A country's performance on the GCI results is reported as a 'progress score' on a 0-to-100 scale, where 100 represents the 'frontier', an ideal state where an issue ceases to be a constraint to productivity growth".

Key findings:

- Singapore has become the world's most competitive economy in 2019, pushing the US to the second place.
- India's 2019 overall score (61.4) fell by merely 0.7 when compared to its 2018 score. But this slippage was enough for it to slide down 10 ranks in the list to 68th position.
- **India is among the worst-performing BRICS nations along with Brazil (ranked at 71).** India trails China (28th, 73.9) by 40 places and 14 points.
- **Within South Asia,** it is the best performer and is followed by Sri Lanka (84th), Bangladesh (105th), Nepal (108th) and Pakistan (110th).
- **India is ranked second globally for shareholder governance,** third in terms of the market size and third in terms of renewable energy regulation.

The Total Factor Productivity (TFP) in a country is essentially the efficiency with which different factors of production such as land, labour and capital are put to use to create the final product.

IMD WORLD TALENT RANKING

- **The latest edition of IMD World Talent Ranking was released by** International Institute for Management Development (IMD), a business education school located in Lausanne, Switzerland.
- **Methodology:** The ranking is based on the performance in three main categories -- investment and development, appeal and readiness.
- **The list was topped by Switzerland.** In Asia, Singapore rose from 13th to 10th position compared to last year.
- **India has slipped 6 places to 59 rank** on the global annual list of 63 countries. India lags behind fellow BRICs countries - China (42nd), Russia (47th) and South Africa (50th).

NOMURA'S FOOD VULNERABILITY INDEX (NFVI)

- **Nomura Global Market Research,** an Asia-headquartered financial services group, **released the Nomura's Food Vulnerability Index (NFVI) which ranks countries on the basis of their exposure to swings in food prices.**
- **NFVI has three components:** (1) country's GDP per person, (2) the share of food in household consumption and (3) the net food imports.
- The 50 countries most vulnerable to food price surges in the coming months largely belong to the Emerging Market group. **India has been ranked 44 out of 110 countries on the index; a higher rank is worse.**

ECONOMIC ADVISORY COUNCIL TO THE PRIME MINISTER (EAC-PM)

- **Government of India has reconstituted the Economic Advisory Council to the Prime Minister (EAC-PM) for a period of two years.** Bibek Debroy and Ratan P. Watal will continue to be the Chairman and Member Secretary respectively of EAC-PM.
- Apart from these two Full-Time Members, the EAC-PM will have two Part-Time Members.
- EAC-PM is an independent body to give advice on economic and related issues to the Government of India, specifically to the PM.



SUKHAMOY CHAKRAVARTY headed the PMEAC after it was formed in the early 1980s, when Indira Gandhi was Prime Minister. The Council went on to advise Prime Ministers Rajiv Gandhi and V P Singh.



MANMOHAN SINGH headed the Council briefly from December 1990 to March 1991, when Chandra Shekhar was Prime Minister. Bimal Jalan succeeded him. When he was PM, the Council was very strong.



ATAL BIHARI VAJPAYEE chose to chair the Council himself as Prime Minister in 1998. Vajpayee's Council was packed with a galaxy of economists, including former RBI Governor I G Patel and P N Dhar.



C RANGARAJAN was appointed Chairman after Manmohan Singh became PM in 2004. He continued until 2014, barring a year in 2008-09, when Suresh Tendulkar chaired.

COALBED METHANE (CBM)

- **Coal Ministry has asked Coal India Limited (CIL) to produce 2 MMSCB (million metric standard cubic metres) per day of CBM gas in the next 2 to 3 years.**
- **What is it?** Coalbed Methane (CBM) is extracted from unconventional gas reservoirs — where gas is extracted directly from the rock that is the source of the gas.
- **Process:** The methane is held underground within the coal and is extracted by drilling into the coal seam and removing the groundwater. The resulting drop in pressure causes the methane to be released from the coal.
- **Uses:** CBM is a clean alternative fuel which can be used for power generation, as compressed natural gas (CNG) auto fuel, as feedstock for fertilisers, industrial uses such as in cement production, rolling mills, steel plants, and for methanol production.
- **Indian scenario:** The Damodar Koel valley and Son valley are prospective areas for CBM development. In 2018, the Union Cabinet relaxed the rules for Coal India Limited (CIL) to extract natural gas lying below coal seams to boost production.

SPECIAL NON-RESIDENT RUPEE ACCOUNT (SNRR ACCOUNT)

- **In a bid to boost internationalisation of the rupee, the RBI has relaxed norms for the opening of special non-resident rupee (SNRR) accounts and permitted direct remittance from India into these accounts.**
- RBI has expanded the scope of SNRR Account by permitting person resident outside India to open such account for External Commercial Borrowings in INR; Trade Credits in INR; Trade (Export/ Import) Invoicing in INR; and Business related transactions outside International Financial Service Centre (IFSC) by IFSC units at GIFT city.

Do you know?

- SNRR accounts are designed for non-residents to enable them to undertake rupee transactions that are legally permitted. Earlier, these accounts were subject to several restrictions which have now been eased.
- **A task force on offshore rupee markets headed by Usha Thorat** had recommended measures to incentivise non-residents to access the onshore foreign exchange market.

STRATEGIC DISINVESTMENT

New Strategic Disinvestment Policy

- **The Union Cabinet has approved a new process of strategic disinvestment with a view to expediting privatization of select PSUs.**

VAJIRAM & RAVI

- Under the new policy, the Department of Investment and Public Asset Management (DIPAM) under the Ministry of Finance has been made the nodal department for the strategic stake sale.
- DIPAM and NITI Aayog will now jointly identify PSUs for strategic disinvestment.
- Strategic disinvestment would imply the sale of substantial portion of the Government share holding of a central public sector enterprise (CPSE) of upto 50%, or such higher %age as the competent authority may determine, along with transfer of management control.

The Cabinet Committee on Economic Affairs (CCEA) accorded 'In-principle' approval for strategic disinvestment in five public sector units (PSUs) as per the details below.

1. **Bharat Petroleum Corporation Ltd. (BPCL):** Government will sell its entire 53.29% stake in BPCL. However, BPCL's 61.65% share in Numaligarh Refinery Limited (NRL) will be retained and will be transferred to a PSU operating in the oil and gas space.
2. **Shipping Corporation of India Ltd. (SCI):** The government will sell its entire 63.75% stake in the SCI and will cede management control.
3. **Container Corporation of India Ltd. (CONCOR):** Government will sell its 30.8% stake in the CONCOR and hand over management control.
4. **Tehri Hydro Development Corporation India Limited (THDCIL):** The government will sell its entire 74.23% stake in THDCIL to NTPC Ltd. and also cede control.
5. **North Eastern Electric Power Corporation Limited (NEEPCO):** The government will sell its entire 100% stake in the NEEPCO to NTPC Ltd. and also cede control.

GREEN CHANNEL COMBINATION

- **The Competition Commission of India (CCI) has given its approval under the 'green channel' route to acquisition of Essel Mutual Fund by BAC Acquisitions Pvt Ltd, a Sachin Bansal-owned entity. This is the first clearance under the 'green channel' route, a speedier approval mechanism put in place by the CCI.**
- The green channel concept allow for an automatic system for speedy approval for certain categories of merger and acquisitions.
- **Under the framework, green channel approvals can be availed in combinations where there are no horizontal overlaps, no existing or potential vertical relationships and no complementary business activities between the combining parties.**

Competition commission of India (CCI)?

- It is a statutory body established in 2003 under the provisions of Competition Act, 2002.
- **Composition:** A Chairperson and 6 Members appointed by the Central Government.
- **Mandate:** To implement provisions of The Competition Act, 2002 which –
 - prohibits anti-competitive agreements and abuse of dominant position by enterprises
 - regulates mergers and acquisition (M&A) which can have an adverse effect on competition within India. **Thus, deals beyond a certain threshold are required to get clearance from CCI.**

NAMED DRIVER POLICY; TELEMATICS

A working group set up by Insurance Regulatory and Development Authority (IRDAI) has suggested the following.

Named Driver policy:

- **Named Driver policy** should be an option for private car and two wheeler policies.

- A **'named driver policy'** as an automobile insurance policy provides coverage only for drivers specifically named on the policy and not for other individuals driving the vehicle.

Telematics:

- Adopt **Telematics for Motor Insurance**. A central repository of telematics data can be created where data from various sources flows to create a common pool.
- Insurance Information Bureau of India (IIBI), which acts as data repository for insurance companies, can manage the data and its protection
- **Telematics, or black box insurance**, is a car insurance where a small box is fitted to the car. The device will have four components — a GPS system, a motion sensor (or accelerometer), a SIM card, and a computer software.
- The black box measures various aspects of how, when and where the car is driven. This data can be used to calculate a personalised renewal quote or premium, or in services like the accident alert and theft recovery.

CHIT FUNDS (AMENDMENT) BILL, 2019

- **Parliament passed the Chit Funds (Amendment) Bill, 2019. The Bill amend the Chit Funds Act, 1982 which** regulates chit funds, and prohibits a fund from being created without the prior sanction of the state government.
- **Names for a chit fund:** The Act specifies various names which may be used to refer to a chit fund. These include chit, chit fund, and kuri. The Bill additionally inserts 'fraternity fund' and 'rotating savings and credit institution' to this list.
- **Substitution of terms:** The amendment bill defines –
 - **'gross chit amount'** as the sum of subscriptions payable by all the subscribers of a chit;
 - **'share of discount'** as the share of the subscriber in the amount kept apart for running the chit; and
 - **'net chit amount'** as the difference between chit amount and the amount kept apart for running the chit. The Bill changes the names of these terms to
- **Presence of subscribers through video-conferencing:** The Act specifies that a chit will be drawn in the presence of at least two subscribers. The Bill seeks to allow these subscribers to join via video-conferencing.
- **Foreman's commission:** The 'foreman' is responsible for managing the chit fund.
 - He is entitled to a maximum commission of 5% of the chit amount. The Bill seeks to increase the commission to 7%.
 - The Bill allows the foreman a right to lien against the credit balance from subscribers.
- **Aggregate amount of chits:** The Bill increases the maximum amount of chit funds which may be collected to (i) 3 lakh rupees for chits conducted by individuals, and for every individual in a firm with less than four partners, and (ii) 18 lakh rupees for firms with four or more partners.
- **Application of the Act:** Currently, the Act does not apply to any chit where the amount is less than Rs 100. The Bill removes the limit of Rs 100, and allows the state governments to specify the base amount over which the provisions of the Act will apply.

<p>Under a chit fund, people agree to pay a certain amount from time to time into a fund. Periodically, one of the subscribers is chosen by drawing a chit to receive the prize amount from the fund.</p>
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DEPOSIT INSURANCE (DI)

With the failure of the Punjab and Maharashtra Co-operative (PMC) Bank reigniting the debate on the low level of insurance for deposits held by customers in banks in India, the central government now plans to raise the cover.

- Currently, in the event of a bank going bust in India, a depositor has claim to a maximum of Rs 1 lakh per account as insurance cover — even if the deposit in their account far exceeds Rs 1 lakh. Depositors holding more than Rs 1 lakh in their account have no legal remedy in case of the collapse of the bank.
- **This amount is termed ‘deposit insurance’.** The cover of Rs 1 lakh per depositor is provided by the Deposit Insurance and Credit Guarantee Corporation (DICGC).
- DICGC last revised the deposit insurance cover to Rs 1 lakh on May 1, 1993 — raising it from Rs 30,000, which had been the cover from 1980 onward.

Deposit Insurance and Credit Guarantee Corporation (DICGC)

- DICGC is a subsidiary of RBI, headquartered in Mumbai.
- It is a statutory body established in 1978 under Deposit Insurance and Credit Guarantee Corporation Act, 1961. Deputy Governor of RBI acts as its Chairman.
- **What does the DICGC insure?** In the event of a bank failure, DICGC protects bank deposits that are payable in India. The DICGC insures all deposits such as savings, fixed, current, recurring, etc. except the following types of deposits –
 - Deposits of foreign Governments;
 - Deposits of Central/State Governments;
 - Inter-bank deposits;
 - Deposits of the State Land Development Banks with the State co-operative bank;
 - Any amount due on account of any deposit received outside India;
 - Any amount, which has been specifically exempted by the corporation with the previous approval of Reserve Bank of India.
- **Banks insured by DIGC:** All commercial banks, local area banks, regional rural banks and co-operative banks and branches of foreign banks in India.
- **Banks not insured by DIGC:** Primary cooperative societies, Non-banking financial companies (NBFCs) and mutual funds are not insured by the DICGC.

AGRINDEX

- **National Commodity and Derivatives Exchange (NCDEX) launched India’s first agri index — ‘NCDEX Agrindex’, for easy reference to price variations in agricultural commodities.**
- It has been launched with a composition of 10 leading liquid contracts on the NCDEX platform at present. Leading commodities such as guar seed, guar gum, soybean, chana, mustard seed, and jeera, etc, will be the index's constituents.
- The index is now available as ‘indicative’. It will be made tradable after being approved from the Securities and Exchange Board of India (SEBI).

National Commodity & Derivatives Exchange Limited (NCDEX) is an online commodity exchange based in Mumbai. It is a public limited company, incorporated in 2003 under the Companies Act, 1956.

- For indices, the NCDEX has partnered with NSE Indices, a leading index service provider, as a third party, to maintain and disseminate real-time NCDEX Agridex values.

6th WORLD CONGRESS ON RURAL AND AGRICULTURAL FINANCE

- **The 6th World Congress on Rural and Agricultural Finance was held in New Delhi.**
- **It was** jointly hosted by Asia-Pacific Rural and Agricultural Credit Association (APRACA), National Bank for Agriculture and Rural Development (NABARD) and Ministry of Agriculture, Government of India.

Asia-Pacific Rural and Agricultural Credit Association (APRACA)

- **APRACA** is a regional association that promotes cooperation in the field of rural finance.
- **Secretariat:** Bangkok, Thailand.
- **APRACA is one of the three regional agricultural credit associations**, along with NENARACA (Near East – North Africa Agricultural Credit Association) and AFRACA (African Rural and Agricultural Credit Association) that were established, with the help of **FAO, following the 1975 World Conference on Agricultural Credit.**

SPECIAL WINDOW FOR FUNDING STALLED HOUSING PROJECT

- **The Union Cabinet approved the establishment of a 'Special Window' fund to provide priority debt financing for the completion of stalled housing projects that are in the Affordable and Middle-Income Housing sector.**
- **Objective:** This fund would provide relief to developers that require funding to complete a set of unfinished projects and consequently ensure delivery of homes.
- **Status:** The fund will be set up as a Category-II AIF (Alternate Investment Fund) debt fund registered with SEBI and would be professionally run.
- **Role of the Government and the Investment Managers:** The Government shall act as the sponsor to the proposed fund and shall have the authority and responsibility as specified under SEBI (AIF) Regulations, 2012. The investment manager is responsible for fund raising, investments and managing the fund team.
- **Size of the fund:** The total commitment of funds to be infused by the Government through the Special Window would be up to INR 10,000 cr. The fund is seeking matching contributions from Banks, LIC and others to generate a total corpus of INR 25,000 crore.

HS CODE

- **The Ministry of Commerce and Industries has allocated separate HS code for Khadi, to boost exports of this signature fabric of India.**
- HS stands for Harmonized System. It is a six digit identification code developed by the WCO (World Customs Organization). Custom officers use HS Code to clear every commodity that enters or crosses any international border.

Background:

- The Ministry of Commerce had accorded deemed **Export Promotional Council Status (EPCS) to Khadi and Village Industries Commission (KVIC)** in 2006, to boost the export of Khadi products.
- However in the absence of separate HS code, the export of Khadi products was difficult to categorize and calculate. Now, government will be able to keep a constant eye not only on export figures of Khadi, but it will also help it in planning export strategies.

DOCUMENTATION IDENTIFICATION NUMBER (DIN)

- The Documentation Identification Number (DIN) system of Central Board of Indirect Taxes (CBIC) came into existence.
- Any communication from GST or Custom or Central Excise department without a computer generated DIN, would be treated as invalid. No communication would be issued by CBIC without DIN except in the specified exceptional circumstances.
- The step is to further the Government's objectives of bringing transparency and accountability in the indirect tax administration
- The DIN system already exists in the direct tax administration.

GLOBAL MICROSCOPE FOR FINANCIAL INCLUSION 2019

- The Economist Intelligence Unit (EIU) released a report titled the 2019 Global Microscope on Financial Inclusion, which is a benchmarking index that assesses the enabling environment for financial access in 55 countries.
- It takes four basic parameters into account: (1) Whether non-banks can issue e-money, (2) the presence of financial service agents, (3) proportionate customer due diligence and (4) effective financial consumer protection.

The Economist Intelligence Unit (EIU) is the research and analysis division of The Economist group which brings out the UK's The Economist news magazine.

Key findings:

- Of the 55 countries assessed, only 4 countries - Colombia, India, Jamaica and Uruguay - scored perfectly across all four parameters.
- India has the fifth most conducive environment among emerging countries for inclusive finance. Only Columbia, Peru, Uruguay and Mexico are ahead of India.

TAPAN RAY WORKING GROUP

The RBI released the Report of the Working Group (WG) chaired by Tapan Ray to Review the Regulatory and Supervisory Framework for Core Investment Companies (CICs). Key recommendations are:

- Capital contribution by a CIC in a step-down CIC, over and above 10% of its owned funds, should be deducted from its Adjusted Networth, as applicable to other NBFCs. Further, step-down CICs may not be permitted to invest in any other CIC.
- The number of layers of CICs in a group should be restricted to two.
- Every Group having a CIC should have a Group Risk Management Committee (GRMC).

Core Investment Companies (CICs) are non-banking financial companies (NBFCs) holding not less than 90% of their net assets in the form of investment in equity shares, preference shares, bonds, debentures, debt or loans in group companies. In August 2019, there were 63 CICs registered with RBI.

DEPOSITOR EDUCATION AND AWARENESS FUND (DEA FUND)

- RBI released guidelines on the criteria for registering institutions 'on tap' for grant of financial assistance from the Depositor Education and Awareness Fund.
- Section 26A in the Banking Regulation Act, 1949 empowers the RBI to establish Depositor Education and Awareness Fund (DEA Fund).
- Accordingly, a Scheme was notified in the Official Gazette In 2014 which envisages registration of institutions and grant of financial assistance to them for promotion of depositors' awareness.

- With a view to widening and deepening depositor awareness efforts, it has now been decided to invite applications 'on tap' for registration of eligible entities.

NATIONAL PENSION SCHEME FOR TRADERS AND SELF EMPLOYED PERSONS

- **PM Modi launched the National Pension Scheme for Traders and Self Employed Persons.**
- It is a voluntary and contributory pension scheme for the Vyaparis (shopkeepers/retail traders and self-employed persons) with annual turnover not exceeding Rs 1.5 crore.
- It is a scheme for entry age of 18 to 40 years with a provision for minimum assured pension of Rs 3,000/- monthly on attaining the age of 60 years.
- **Contribution:** The Central Government shall give 50 % share of the monthly contribution and remaining 50% contribution shall be made by the beneficiary.
- **Process of enrolment:** With this nation-wide launch, people can enrol through 3.50 lakh Common Service Center (CSCs) across the country. In addition people can also self-enroll by visiting the portal www.maandhan.in/vyapari.
- **Criteria for enrolment:**
 - At the time of enrollment, the beneficiary is required to have an Aadhaar card and a saving bank/ Jan-dhan Account passbook only.
 - He/ She should be within 18 to 40 years of age group.
 - GSTIN is required only for those with turnover above Rs. 40 lakhs.
 - The beneficiary should not be income tax payer and also not a member of EPFO/ESIC/NPS (Govt.)/PM-SYM.
- **Target:** this scheme will target enrolling 25 lakh subscribers in 2019-20 and 2 crore subscribers by 2023-2024. An estimated 3 crore Vyaparis in the country are expected to be benefitted under the pension scheme.

PRADHAN MANTRI KISAN MAAN DHAN YOJANA (PM-KMY)

- **PM Modi launched the Pradhan Mantri Kisan Maan Dhan Yojana (PM-KMY),** an old age pension scheme for land holding Small and Marginal Farmers (SMFs) in the country.
- It is voluntary and contributory for farmers in the entry age group of 18 to 40 years and a monthly pension of Rs. 3000/- will be provided to them on attaining the age of 60 years.
- The Life Insurance Corporation of India (LIC) shall be the Pension Fund Manager and responsible for Pension pay out.
- If the farmer dies after the retirement date, the spouse will receive 50% of the pension as Family Pension. After the death of both the farmer and the spouse, the accumulated corpus shall be credited back to the Pension Fund.
- **Eligibility:** Small and Marginal Farmer (SMF) - a farmer who owns cultivable land upto 2 hectare as per land records of the concerned State/UT; Should be aged 18- 40 years.
- **The following categories of farmers have been excluded:**
 - SMFs covered under any other statutory social security schemes such as National Pension Scheme (NPS), Employees' State Insurance Corporation scheme, Employees' Fund Organization Scheme etc.
 - Farmers who have opted for Pradhan Mantri Shram Yogi Maan Dhan Yojana (PM-SYM) and Pradhan Mantri Laghu Vyapari Maan-dhan Yojana (PM-LVM).

- All Institutional Land holders; and
- Former and present holders of constitutional posts.

GOLDEN CHARIOT TRAIN

- **The Karnataka State Tourism Development Corp (KSTDC) signed a MOU with the Indian Railway Catering and Tourism Corporation (IRCTC) to market and operate the Golden Chariot, South India's only luxury train from March 2020.**
- The Golden Chariot, which started plying in 2008, began as a joint initiative of the Karnataka government and the Indian Railways. Its services were, however, suspended by the Karnataka government temporarily on account of huge losses.

IRCTC already runs the ultra luxurious Maharaja Express train. Similarly, while Rajasthan has the Palace On Wheels, Maharashtra has the Deccan Queen.

2019 DRIVING CITIES INDEX

- The 2019 Driving Cities Index was released by **European car parts retailer Mister Auto**. The Index looked at 100 cities and measured them on three main categories: Infrastructure, Safety and Costs.
- **Calgary in Canada** is named the best city for driving around the world. **Mumbai is placed last (100th), while Kolkata is ranked just two spots higher (98th).**

DEVELOPMENT COUNCIL FOR BICYCLE

- **Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has set up a Development Council for Bicycle** for vision planning in designing and engineering lighter, safe and faster premium bicycles.
- It will be headed by Secretary DPIIT and has been constituted for a period of two years.

CNG PORT TERMINAL, BHAVNAGAR

- **Gujarat Government has given its nod to the world's first CNG port terminal at Bhavnagar with annual capacity of 6 million metric tonne, which will increase the total handling capacity of the port to 9 million metric tonnes.**
- The U.K. based Foresight group and Mumbai based Padmanabh Mafatlal group joint venture will invest Rs.1900 crore to set up the CNG port terminal.

ICEDASH; ATITHI

- **Union Finance Minister unveiled two new IT Initiatives - ICEDASH and ATITHI.**
- **ICEDASH** is a monitoring dashboard of the Indian Customs helping the public see the daily Customs clearance times of import cargo at various ports and airports.
- **The ATITHI app** will facilitate hassle-free and faster clearance by Customs at the airports. Passengers can use this app to file declaration of dutiable items and currency with the Indian Customs even before boarding the flight to India.

SKILLS BUILD PLATFORM

- **Directorate General of Training (DGT), under Ministry of Skill Development announced the launch of Skills Build platform in collaboration with IBM.**
- As part of the programme, a two-year advanced diploma in IT, networking and cloud computing, co-created and designed by IBM, will be offered at the Industrial Training Institutes (ITIs) & National Skill Training Institutes (NSTIs).

In 2018, IBM joined hands with Ministry of Skill Development to launch a first-of-its kind 'New Collar' Curriculum.

ELEPHANT BONDS

- **A High Level Advisory Group (HLAG) under has suggested that the Ministry of Commerce could bring back black money by issuing elephant bond, an avenue for people to bring their money stashed offshore without fear of being prosecuted.**
- Under the proposed mechanism, those disclosing their black money will receive immunity from all laws including under foreign exchange, black money and taxation laws.
- Once they declare their offshore money, they will be asked to invest 40 % of that amount in these elephant bonds. A fixed coupon security will be issued. While 45 % of the wealth brought in by subscribing to these elephant bonds will be credited with the depositor, the remaining 15 % will be collected as tax deducted at source by the government.

MELBOURNE MERCER GLOBAL PENSION INDEX (MMGPI) 2019

- **Melbourne Mercer Global Pension Index (MMGPI) 2019 was released. It is based on how countries fare on providing pension and retirement benefits to citizens.**
- **In the overall list, the Netherlands had the highest index value (81.0), while Thailand had the lowest value (39.4). India stood at 32nd position in 2019 out of 37 countries, while it was ranked at 33rd place in 2018 out of 34 countries in the list.**

MOCHI SWABHIMAAN INITIATIVE

- **Ministry of Skill Development launched the Mochi Swabhimaan Initiative, a nationwide effort in which Leather Sector Skill Council (LSSC) will support the cobbler community who provide leather-based services, with CSR funds.**
- **Leather Sector Skill Council (LSSC) is an NSDC approved non-profit organization dedicated to meet the demand for skilled workforce in the leather industry in India.**

T. N. MANOHARAN TASK FORCE

- **RBI released the “Report of the Task Force on the Development of Secondary Market for Corporate Loans” under the Chairmanship of T. N. Manoharan.**
- **It recommends setting up of a**
 - Self-Regulatory Body of participants which will finalise detailed modalities for the secondary market for corporate loans;
 - Central Loan Contract Registry;
 - online loan sales platform to conduct sale process of the secondary market loans.

NIRVIK

- **Ministry of Commerce, through Export Credit Guarantee Corporation (ECGC) has introduced a new Export Credit Insurance Scheme (ECIS) called NIRVIK.**
- Under it, insurance cover %age is enhanced to 90% from the present average of 60% for both Principal and Interest of the loan for pre- and post-shipment credit.
- **Claim inspection would be waived for up to ₹10 crore.** For claims higher than this amount, inspection of bank documents and records by ECGC officials will be mandatory.
- The existing premium rate would be lowered, with **loans to be categorised into two broad categories of those below ₹80 crore and those above that amount.**

TRAVEL AND TOURISM COMPETITIVE REPORT

- **The World Economic Forum (WEF)** released the biennial “Travel and Tourism Competitive Report” which ranks travel & tourism competitiveness of 140 economies on **four indicators**: (1) enabling environment; (2) travel and tourism policy and enabling conditions; (3) infrastructure; (4) natural and cultural rankings.
- Spain is the world’s most travel-ready nation. India is ranked 34 in 2019, up 6 places from 2017. India’s highest improvement was in enabling environment.

VOLFEFE INDEX

- **American investment firm JPMorgan has created ‘Volfefe’ index to track the impact of Donald Trump’s tweets on US interest rates and stock market.**
- JPMorgan’s “Volfefe Index,” named after Trump’s mysterious covfefe tweet from May 2017, suggests that the President’s tweets have increasingly moved the US rates markets immediately after they were published.

GOLD RESERVES

- According to the latest release by the World Gold Council, in terms of total gold reserves in 2019., U.S. leads the list followed by Germany.
- India has toppled the Netherlands to move into the list of top ten countries.
- In terms of individual countries, India actually ranks ninth since the **International Monetary Fund (IMF)** occupies the third position after the U.S. and Germany.

The World Gold Council is an association whose members comprise the world’s leading gold mining companies. It is headquartered in London.

INDIAN INSTITUTE OF SKILLS, MUMBAI

- Union Minister for Skill Development laid the foundation stone of Indian IIS at Mumbai.
- The Union Cabinet had given its nod to set up Indian Institute of Skills (IISs) in three cities — Mumbai, Ahmedabad and Kanpur — to provide skill training in highly-specialised areas such as deep technology, aerospace, among others to students who want to pursue technical education after completing Class X and XII.
- These institutes will be constructed and operated on a PPP (Public-Private Partnership) model and on a not-for-profit basis.
- This institute will be on the lines of the Institutes of Eminence including IITs and IIMs.

SECTION 35A OF THE BANKING REGULATION ACT, 1949 (AACS)

- **The RBI has placed several restrictions on Mumbai-based Punjab and Maharashtra Cooperative (PMC) Bank for six months** under sub-section (1) of Section 35A read with Section 56 of the Banking Regulation Act, 1949.
- Section 35A of the Banking Regulation Act, 1949 vests power in the RBI to give directions to banks and can take action, "to prevent the affairs of any banking company being conducted in a manner detrimental to the interests of the depositors or in a manner prejudicial to the interests of the banking company".
- Meanwhile, Section 56 of the act is applicable to cooperative societies.

DIVIDEND DISTRIBUTION TAX (DDT)

- **The task force on direct tax code (DTC) has recommended abolishing dividend distribution tax (DDT) with a view to promote investment.**

- Dividends paid by a domestic company are subject to dividend distribution tax (DDT) at 15 % of the aggregate dividend declared, distributed or paid. The effective rate is 20.35 %, including a 12 % surcharge and a 3 % education cess.

CORPORATE TAX RATE FOR DOMESTIC INVESTORS

Union Finance Minister announced big cuts in corporate tax rate, giving a ₹1.45 lakh crore stimulus aimed at reviving private investment and lifting growth from a six-year low. Key changes announced in Income Tax Act:

1. **The government slashed basic corporate rate tax to 22% from 30% for domestic companies that don't avail any exemption/incentive.** The effective tax rate for these companies shall be 25.17% inclusive of surcharge and cess. Also, such companies shall not be required to pay Minimum Alternate Tax (MAT)
2. To boost manufacturing and the 'Make-in-India' initiative, the government has **slashed corporate tax rate to 15%, from 25%, for domestic companies incorporated on or after 1st October 2019 making fresh investment in manufacturing.**
3. To provide relief to companies which continue to avail exemptions/incentives, the **government reduced the rate of Minimum Alternate Tax (MAT) to 15% from 18.5%.**
4. To increase the flow of funds into capital markets, the government **rolled back increased surcharge introduced in this year's Budget on capital gains.**
5. To provide relief to listed companies that had announced share buyback before 5th July 2019, the government exempted them from buyback tax announced in the Budget.
6. Total revenue foregone for the reduction in corporate tax rate and other relief are estimated to be at 1.45 lakh crore rupees.

LIQUID FUNDS

- **SEBI has made it mandatory for Liquid funds to hold at least 20% of its net assets in liquid assets while mandating an exit load on investors that exit within seven days of making an investment.** The new norms will be effective from April 1, 2020.
- **Liquid funds** belong to the debt category of mutual funds. They invest in very short-term market instruments like treasury bills, government securities and call money. They are popular due to their higher than savings bank account returns and easy liquidity.

PROMPT CORRECTIVE ACTION (PCA)

- **RBI initiated Prompt Corrective Action (PCA) against Lakshmi Vilas Bank (LVB).**
- **Meaning:** PCA Framework are the corrective measures suggested by RBI that should be taken by commercial banks when its financial condition worsens beyond a level.
- **Objective:** To maintain sound financial health of commercial banks.
- **Parameters:** Under it, RBI has specified trigger points in terms of three parameters: (1) Capital to risk weighted assets ratio (CRAR), (2) Net non-performing assets (NPA) and (3) Return on Assets (RoA).
- **Actions:** If a bank hits the trigger point (like CRAR of 9%, 6%, 3%) then RBI initiates certain structured/mandatory and discretionary actions in respect of that bank.
- **Type of institutions covered:** The PCA framework is applicable only to commercial banks. It is not applicable to (1) Co-operative banks, (2) Non-Banking Financial Companies (NBFCs) and (3) Financial Management Institutions (FMIs).

NEGATIVE INTEREST RATES

- **President Donald Trump criticised the Federal Reserve's raising and then cutting of interest rates as it puts the United States at a competitive disadvantage with other countries and thus called for introducing negative interest rates.**
- **What is it?** A negative interest means that instead of the bank paying you money to keep in the savings account, you pay the bank to do so. It also means that anyone can borrow money from the bank and pay back less than what he borrowed.
- **Objective:** Negative interest rates are expected to make consumers save less and spend more; they are also expected to make banks lend more. In essence, negative interest rates are expected to boost economic activity when all other efforts fail.
- **Global scenario:** Sweden did it first in 2009 but now European Central Bank rates are also negative as are Japanese.

HURUN GLOBAL UNICORN LIST 2019

- **According to Hurun Global Unicorn List 2019, India, with 21 unicorns, has emerged as third largest ecosystems for more successful start ups right behind China and US but ahead of Britain and Israel.**
- Hurun Research found **494 unicorns in the world, based in 25 countries and 118 cities.** Set up seven years ago on average, they are worth \$3.4 billion on average and \$1.7 trillion in total. City wise, **Beijing** is the worlds unicorn capital with 82 unicorns.
- As a region, **Silicon Valley** leads the world with 102 or 21 % of the worlds unicorns.

In the venture capital industry, a unicorn refers to any tech startup company that reaches a \$1 billion dollar market value as determined by private or public investment. The term was originally coined by Aileen Lee, founder of Cowboy Ventures.

'ON TAP' AUTHORISATION OF PAYMENT SYSTEMS

- **RBI has issued guidelines on 'on tap' authorisation of payment systems.**
- RBI has decided to offer on-tap authorisation for the following payment systems: (1) Bharat Bill Payment Operating Unit (BBPOU), (2) Trade Receivables Discounting System (TReDS) and (3) White Label ATMs (WLAs).
- For entities desirous to provide platforms for BBPOU, they should have a 100 crore rupees net worth.
- In case of TReDS, the minimum paid up equity capital should be 25 crore rupees. The minimum net worth for entities desirous of entering the WLA segment should be 100 crore rupees.

An 'on-tap' facility would mean the RBI will accept applications and grant license for payment systems throughout the year, at any time, subject to the fulfilment of the set conditions.

CREDIT SUISSE'S GLOBAL WEALTH REPORT 2019

- **The Credit Suisse Group, a Switzerland-based multinational investment bank, has released the 10th edition of its annual Global Wealth Report.**
- Just 47 million people – accounting for merely 0.9% of the world's adult population – owned \$158.3 trillion, which is 44% of the world's total wealth.
- China has overtaken the United States this year to become "the country with most people in the top 10% of global wealth distribution".

Wealth is defined in terms of "net worth" of an individual. This, in turn, is calculated by adding up the value of financial assets (such as money) and real assets (such as houses) and then subtracting any debts an individual may have.

START-UPS

The Ministry of Electronics & Information (MeitY) unveiled following new initiatives during the first MeitY Start-up Summit held at New Delhi.

- **The MeitY Startup Hub (MSH)** will act as a platform to connect with incubators, accelerators, mentors, and eventually, angel funds and venture capitalists.
- **The Indian Software Product Registry** will be a single-window portal for cataloguing all companies and products developed in India with key analytics, category-wise listing and options to port the database to the Government e-Marketplace (GeM).
- **Technology Incubation Development for Entrepreneurs 2.0 (TIDE 2.0)** is aimed at strengthening close to technology startups in areas of national concern, by leveraging emerging technologies and empowering 51 incubation centres across the country.

FRAMEWORK FOR ISSUE OF DEPOSITORY RECEIPTS

- **SEBI has come out with a framework for issuance of depository receipts (DRs) to give Indian companies increased access to foreign funds through American Depositary Receipt (ADR)/ Global Depositary Receipt (GDR).**
- SEBI has not allowed unlisted companies to issue DRs. However, companies can do a simultaneous issuance, provided the listing in the domestic market takes place first.
- DR issuances can take place only on the recognised global exchanges.
- Domestic residents and NRIs are barred from investing in the DRs issued by an Indian company. The pricing of the DR issued in the overseas markets cannot be less than the price in the domestic markets.
- Equity issued under the DR programme will not be considered as public shareholding for the purpose of computing the 25 % minimum public float mandatory for listed companies.
- DRs will be included for calculating the foreign shareholding in the company and will have to adhere to the caps imposed.

A depository receipt is a foreign currency denominated instrument, listed on an international exchange, issued by a foreign depository to a domestic custodian and includes global depository receipts (GDRs).

YOUTH CO:LAB

- **Atal Innovation Mission (AIM), NITI Aayog and United Nations Development Programme (UNDP) India launched Youth Co:Lab.**
- Co-created in 2017 by UNDP and the Citi Foundation, and operational in 25 countries across the Asia Pacific region, the Youth Co:Lab initiative aims to create an enabling ecosystem to promote youth leadership, innovation, and social entrepreneurship.
- Through Youth Co:Lab, young entrepreneurs will get a chance to connect with mentors, governments and investors, who will help equip them with entrepreneurial skills.

FURTHER FUND OFFER 2 (FFO 2) OF BHARAT 22 ETF

- **The Further Fund Offer 2 (FFO 2) of Bharat 22 Exchange-Traded Fund (ETF), was opened to investors.**
- Bharat 22 ETF invests in the 22 companies that comprise the S&P BSE Bharat 22 index—19 companies are in the public sector and three in the private sector.
- An open-ended ETF, the fund allows investors to invest in a basket of government-owned and private sector entities like NTPC, ONGC etc.

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- The private sector companies have a 39.4% weightage in the index. The largest sectoral allocation in the Bharat 22 index was towards industrials (22%), followed by finance (21%) and utilities (21%), as of 4 September.
- The index has a sectoral cap of 20% and a single stock cap of 15%, which means that some of these exposures will have to be pruned. Rebalancing in the index takes place once a year in March.

PRAKASH PORTAL

- **The Union Minister for Power and the Union Minister for Coal & Mines jointly launched PRAKASH portal for transparency and better coordination in coal supplies to power plants.**
- PRAKASH stands for 'Power Rail Koyla Availability through Supply Harmony'.
- **PRAKASH Portal is developed by NTPC Limited** and sources data from different stakeholders such as Central Electricity Authority (CEA), Centre for Railway Information System (CRIS) and coal companies.

MARKET TRANSPORTATION FUELS

- **The Cabinet Committee on Economic Affairs (CCEA) has approved the Review of Guidelines for Granting Authorization to market Transportation Fuels.**
- **Non-oil companies** can also invest in setting up retail outlets for fuel, regardless of whether they have prior investments in the oil and gas sector.
- Private players seeking authorisation would need to have a minimum net worth of Rs.250 crore vis-à-vis the current requirement of Rs. 2000 crore prior investment.
- **In addition to conventional fuels**, the authorized entities are required to install facilities for marketing at least one new generation alternate fuel, like CNG, LNG, biofuels, electric charging, etc. at their proposed retail outlets.
- The authorised entities are required to **set up minimum 5% of the total retail outlets in the notified remote areas** within 5 years of grant of authorisation.

ELECTRIC VEHICLE (EV) CHARGING GUIDELINES

- **Union Minister for Power has approved amendments in Electric Vehicle Charging Guidelines and Specifications.**
- At least one Charging Station to be available in a grid of 3 Km x 3 Km in the cities and one Charging Station at every 25 Km on both sides of highways/roads.
- For inter-city travel, Fast Charging Station to be installed at every 100 Kms.
- **Bureau of Energy Efficiency (BEE)**, a statutory body under Ministry of Power will be the Central Nodal Agency to facilitate installation of Charging Infrastructure.

EXTERNAL BENCHMARK-BASED LENDING

- **The RBI has made it mandatory for banks to link all of their new loan products, be it personal, housing or auto to an external benchmark like the policy repo rate.**
- Banks can also choose any benchmark market interest rate published by Financial Benchmarks India Private Limited (FBIL) or the government's 3-month and 6-month treasury bill yields published by FBIL as their preferred external benchmark.
- This has been done because banks have been reluctant to cut interest rates despite the RBI lowering the repo rate by 110 basis points (bps) between February and August.

APPRENTICESHIP (AMENDMENT) RULES, 2019

- The government has notified Apprenticeship (Amendment) Rules, 2019 to amend Apprenticeship Rules (1992) with an aim to increase skilled manpower in the country, and raise monetary compensation of apprentices.
- The hiring limit of apprentices has been raised to 15 % of total strength of an establishment. The minimum stipends have been doubled to between Rs 5,000 and Rs 9,000 per month.
- The Centre has also lowered the size limit of an establishment with a mandatory obligation to engage apprentices on an optional basis from 40 to 30, and reduced the size-limit of an establishment wanting to engage apprentices from 6 to 4.

NEW MEASURES TO BOOST EXPORTS AND HOUSING SECTOR

- Finance Minister Nirmala Sitharaman has announced a fresh set of measures worth around 70,000 crore rupees to boost exports and housing sector.
- The government will provide a 10,000 crore rupees special window with an aim to help complete ongoing affordable and middle-income housing projects.
- The housing projects considered for the special window have been limited to non-NPA (Non-Performing Assets) and non-NCLT (National Company Law Tribunal) projects.
- The scheme for Remission of Duties or Taxes on Export Product (RoDTEP) will replace Merchandise Exports from India Scheme (MEIS) for textiles. Textile and all other sectors which currently enjoy incentives up to 2 % over MEIS will transit into RoDTEP from January 1, 2020.
- The government will set up an FTA Utilisation Mission headed by a senior officer in the Department of Commerce to maximise benefits available under Free Trade Agreements (FTAs). Priority sector tag for export credit was also announced.

INDIA URBAN DATA EXCHANGE (IUDX)

- The Union Ministry of Housing and Urban Affairs (MoHUA) said that the India Urban Data Exchange (IUDX) for its 100 Smart Cities would be expanded to cover 500 cities by 2022 and all urban centres in the country by 2024.
- IUDX is a research project under smart cities mission being implemented by Union Ministry of Housing in collaboration with Indian Institute of Science (IISc), Bengaluru.
- IUDX will be an open source software platform for cities, industry and researchers to share Smart City data with each other that could be monetised in the future, similar to the Unified Payments Interface (UPI) for bank accounts and digital payments.

INTERNAL SECURITY

CHINOOK HELICOPTERS

- American aerospace major Boeing has announced the arrival of two new heavy-lift Chinook helicopters for the Indian Air Force (IAF) at the Mundra port in Gujarat.
- The IAF had signed a contract with M/s Boeing Ltd in 2015 for 15 Chinook helicopters. The first batch of four helicopters arrived in Feb' 2019 and the last batch is to be delivered by March 2020.
- The helicopter is capable of airlifting diverse military and non-military loads into remote locations.
- Deployment location:** These helicopters will be deployed in the northern and eastern regions of India. Besides Chandigarh, another unit will be created at Dinjan in Assam.
- Significance:** The induction of Chinook will significantly improve airlift to high-altitude areas and rapid reaction capabilities along the western and eastern borders.

PREVENTION OF MONEY LAUNDERING ACT (PMLA)

The Centre has issued a notification on certain changes in PMLA. **Key changes are:**

- An explanation added to Section 45 clarifies that all PMLA offences will be **cognisable and non-bailable**. Therefore, the Enforcement Directorate (ED) officers are empowered to arrest an accused without warrant, subject to certain conditions.
- Amendment to Section 3** makes concealment of proceeds of crime, possession, acquisition, use, projecting as untainted money, or claiming as untainted property as independent and complete offences under the Act.
- It deletes the provisos in sub-sections (1) of Section 17 (Search and Seizure) and Section 18 (Search of Persons), thus **doing away with the pre-requisite of an FIR or chargesheet by other agencies** that are authorised to probe the offences listed in the PMLA schedule.
- Now, under Section 44, **the Special Court, while dealing with the offence under this Act shall not be dependent upon any orders** passed in respect of the scheduled offence, and the trial of both sets of offences by the same court shall not be construed as joint trial.
- The scope of "proceeds of crime", under Section 2, has been expanded** to empower the agency to act against even those properties which "may directly or indirectly be derived or obtained as a result of any criminal activity relatable to the scheduled offence".

PROMOTION OF MSMEs IN DEFENCE

- Ministry of Defence has introduced a scheme for promotion of MSMEs in the defence sector.
- The scheme aims to educate MSMEs in tier II and tier III cities across the country about the requirements of the defence sector and the provisions introduced by government to incentivise them.
- This will be done through organising various events which will include industry and MSME presence along with support of the Department of Defence Production.
- Funding for the scheme will be provided by the central government in the following manner: (i) maximum sponsorship of Rs 2 lakh per event for national level events, and (ii) maximum sponsorship of Rs 1 lakh per event for state level events.

STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE (SIPRI) YEARBOOK 2019

SIPRI, an international institute based in Stockholm, Sweden **was established in 1966** to research into conflict, armaments, arms control and disarmament. It released the SIPRI Yearbook 2019 which assessed the current state of armaments, disarmament and international security. Its key findings are:

- **At the start of 2019, nine states**—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea—possessed approximately 13 865 nuclear weapons.
- Despite an **overall decrease in the number of nuclear warheads in 2018**, all nuclear weapon-possessing states continue to modernize their nuclear arsenals.
- **The decrease is mainly due to Russia and the USA**—which together still account for over 90 % of all nuclear weapons—implementing the 2010 New START.
- **China, India and Pakistan are increasing the size of their nuclear arsenals.** For India, it gives a figure of 130-140 “other warheads” in 2019, roughly the same as in 2018.

CRIME CRIMINAL TRACKING NETWORK SYSTEM (CCTNS)

- The Maharashtra government has decided to upgrade the entire Crime Criminal Tracking Network System (CCTNS) project, following complaints of glitches in the system.
- **Origin:** The Project was launched in 2009 in the aftermath of Mumbai 26/11 attacks.
- **Objective:** Improving policing and criminal justice system through e-governance.
- **Nodal implementing agency:** National Crime Records Bureau (NCRB).
- **Project components: A Timeline**
 - **2009:** CCTNS launched to computerize Police Processes (FIRs, Investigations, Challans) and inter-link all Police Stations to create a central database by deploying a **Core Application Software (CAS)** in each state.
 - **2015: Inter-operable Criminal Justice System (ICJS)** announced to integrate the CCTNS database with databases of e-courts, e-prisons, Forensics, Prosecution and Fingerprints of criminals to improve criminal justice system.
 - **2017: Digital Police Portal** launched under CCTNS to enable citizens to register FIRs online and to offer 7 Public Delivery Services (like Address Verification of employees, tenants; Lost & Found Articles etc.).

DEFENCE SPACE RESEARCH AGENCY (DSRO)

- The Cabinet Committee on Security headed by Prime Minister Narendra Modi has cleared the setting up of the Defence Space Research Agency (DSRO). DSRO has been entrusted with the task of creating space warfare weapon systems and technologies.
- DSRO would be providing the research and development support to the **Defence Space Agency (DSA)** which comprises members of the three services.
- DSA is being set up in Bengaluru under an Air Vice Marshal-rank officer and will gradually take over the space-related capabilities of the three forces.

NATIONAL SECURITY ADVISOR (NSA)

- Ajit Doval will continue as National Security Advisor (NSA) for a five-year tenure. He has also been given a cabinet rank in recognition of his contribution in the national security domain.
- **National Security Advisor (NSA)** presides over the National Security Council (NSC), and is also the primary advisor to the Prime Minister. Brajesh Mishra was the first National Security Advisor.

- **National Security Council (NSC):** It is an executive government agency established in 1998 to oversee political, economic, energy and security issues of strategic concern. It operates within the executive office of the Prime Minister of India.
- The NSC is a three-tiered organization comprising the –
 - Strategic Policy Group (SPG)
 - National Security Advisory Board (NSAB) and
 - Joint Intelligence Committee (JIC)

SWATANTRATA SAINIK SAMMAN YOJANA

- The Supreme Court has slammed the Centre for harassing a 90-year-old freedom fighter by denying a freedom fighter's pension under the Swatantrata Sainik Samman Yojana (SSSY).
- The scheme, implemented by **Home Ministry**, provides for a monthly Samman Pension to freedom fighters, as a token of respect for their contribution in the national freedom struggle.

NATIONAL DEFENCE FUND

- PM Modi has approved major changes in the '**Prime Minister's Scholarship Scheme**' under the National Defence Fund.
- **The rates of scholarship have been increased** from Rs. 2000 per month to Rs. 2500 per month for boys and from Rs. 2250 per month to Rs. 3000 per month for girls.
- The Scholarship Scheme is being **extended to the wards of State Police officials** who are/were martyred during terror/naxal attacks. Home Ministry will be the nodal Ministry in this regard.

Background:

- NDF was set up in 1962 to take charge of the voluntary donations in cash and kind received for promotion of the national defence effort, and to decide on their utilisation.
- Currently the fund is being used for the welfare of the members of the Armed Forces, Para Military forces and Railway Protection Force, and their dependents.
- The fund is administered by an Executive Committee with the Prime Minister as the Chairperson.

ORDNANCE FACTORY BOARD (OFB)

- Ministry of Defence clarified that there is no proposal to privatise OFB, rather it is considering to make it into Defence Public Sector Undertakings (DPSUs), which is 100 % Government owned.
- OFB is a defense contractor owned by the Indian government. OFB comprises 41 ordnance factories.
- **Established in:** 1712; **Headquarters:** Kolkata.

COMMANDOS FOR RAILWAY SECURITY (CORAS)

- Minister of Railways Piyush Goyal launched CORAS of Indian Railways. CORAS is a separate Commando Unit of Railway Protection Force (RPF).
- These CORAS commandos will be posted in Left extremist wing affected areas, north-eastern region and Jammu and Kashmir where providing security to the passengers and the railway network is of utmost priority.

STATUS OF POLICING IN INDIA REPORT 2019

A new report titled "Status of Policing in India Report 2019: Police Adequacy and Working Conditions" was released by Common Cause and the Lokniti programme of Centre for Study of Developing Societies (CSDS). Key findings of the report are:

- 28% police personnel believe that pressure from politicians is the biggest hindrance in a crime investigation. The other obstacles cited were related to society, legal systems and internal working systems in police.
- 38% personnel reported always facing pressure from politicians in cases of crime involving influential persons. Roughly one third also reported “always” facing pressure from their seniors in police force.
- 50 % of police personnel feel that Muslims are likely to be “naturally prone” to committing crimes.
- 35 % of police personnel think it is natural for a mob to punish the “culprit” in cases of cow slaughter, and 43 % think it is natural for a mob to punish someone accused of rape.
- 37 per cent personnel feel that for minor offences, a small punishment should be handed out by the police rather than a legal trial.

SPECIAL PROTECTION GROUP (SPG)

- Government of India withdrew the SPG cover from former PM Manmohan Singh's security.
- **What is it? SPG** is an armed force of the Union for providing proximate security to the Prime Minister (PM) of India, Former PM of India and Members of their immediate families.
- **History:** It was formed in 1985 after the assassination of Prime Minister Indira Gandhi.
- **Type:** It is a statutory body under Special Protection Group Act, 1988.
- **Governance:** It is governed by **Cabinet secretariat** of India. SPG chief is an officer of the rank of inspector-general.
- **Tenure of security cover to former PM:** SPG Security is provided to former PM and the members of his immediate family **for a period of** one year from the date on which the former PM ceased to hold office and beyond one year based on the level of threat as decided by the Central Government. However, it can be extended in case the threat is of continuing nature.

HYPERSONIC TECHNOLOGY DEMONSTRATOR VEHICLE (HSTDV)

- DRDO conducted the maiden test of an indigenously developed HSTDV from Abdul Kalam Island off the coast of Odisha.
- Under this project, DRDO is developing a hypersonic vehicle that will be powered by a scram-jet engine. Through the HSTDV project, the idea was to demonstrate the “performance of a scram-jet engine at an altitude of 15 km to 20 km”.
- This is dual-use technology, which can be used for launching satellites at low cost. It will also be available for long-range cruise missiles of the future.

Scram-jet technology?

In scram-jet technology, combustion of fuel takes place in a chamber in missile at supersonic speeds. This is different from ram jet system where system collects the air it needs from atmosphere during the flight at subsonic speeds and propellants burn in combustion chamber.

STRATEGIC PARTNERSHIP MODEL

- The Government of India has issued the Expression of Interests (EOI) for shortlisting of potential Indian Strategic Partners for construction of six conventional submarines for **P-75(I) Project** of the Indian Navy. It is the second project being undertaken under the latest Strategic Partnership Model.
- Strategic Partnership (SP) policy was approved by the Defence ministry in May 2017 as a part of the Defence Procurement Procedure (DPP). In July 2018, Defence Acquisition Council (DAC) approved Implementation guidelines for the SP Model.

- **Objectives:** To reduce current dependence on imports and to bolster defence manufacturing in India through indigenous private defence firms.

Salient Features of Strategic Partnership Model:

- **Under it 4 segments** — submarines, single engine fighter aircraft, helicopters and armoured carriers/main battle tanks — would be opened up for the private sector.
- One Indian private company would be selected in each segment as **strategic partner**. It will tie-up with foreign original equipment manufacturers (OEM) to manufacture the platforms in India under technology transfer. (Indian company will have 51% ownership).
- All procurements under it would be executed by specially constituted **Empowered Project Committees**.

OPERATION SANKALP

- The Indian Navy has launched **Operation Sankalp in the Persian Gulf/Gulf of Oman** to re-assure Indian flagged vessels transiting through the area following the recent maritime incidents in the region.
- **Information Fusion Centre-Indian Ocean Region, which was inaugurated by the Navy in 2018 at Gurgaon**, was also monitoring the movement of ships in the Gulf.
- The move was announced after US President Donald Trump declared that “Iran made a very big mistake” by shooting down a US surveillance drone over the Strait of Hormuz.

OPERATION BANDAR

- **Operation Bandar (monkey)** was the code-name given by IAF to the air strikes conducted by its Mirage-2000 fighters against the major Jaish-e-Mohammed training facility at Balakot in Pakistan on Feb’ 26, in response to the Pulwama terror attack which claimed the lives of 40 security personnel.
- The idea behind the name 'Operation Bandar' was to give a nondescript, mundane tag to the air strikes to maintain operational secrecy. It was chosen to make it sound like a routine, small-time affair.

WORLD DRUG REPORT 2019

The latest World Drug Report was released by the United Nations Office on Drugs and Crime (UNODC) on the occasion of International Day Against Drug Abuse and Illicit Trafficking (26 June). **Key highlights of report:**

- In 2017, an estimated 271 million people, or 5.5 % of the global population aged 15-64, had used drugs in the previous year.
- The **most widely used drug globally continues to be cannabis**, with an estimated 188 million people having used the drug in 2017.
- Globally, some **35 million people suffer from drug use disorders**. Only **one in seven people with drug use disorders are receiving treatment each year**.
- Most of the world's opioids are produced in Afghanistan (263,000 hectares of poppy seed production) with Myanmar (37,300 hectares) coming in as the second largest producer.

ISALEX19 Of INTERNATIONAL SECURITY ALLIANCE (ISA)

- Abu Dhabi is hosting International Security Alliance (ISAs) first joint security exercise named ISALEX19. Representatives of 50 law enforcement agencies of the International Security Alliance are taking part in it.
- **What is it?** The International Security Alliance (ISA) is an international working group to confront organised, transnational and extremist crimes.

- It was launched in 2017 with **Secretariat at Abu Dhabi**.
- **Members:** The alliance now comprises nine countries, the United Arab Emirates, Bahrain, Morocco, France, Italy, Spain, Senegal, Singapore, and the Slovak Republic.

KALU POLICE STATION

- Kalu Police station in the Bikaner district in Rajasthan has bagged First Rank in an assessment by the Home ministry of 15,666 police stations across the country.
- The home ministry had started to rank police stations following a direction from Prime Minister Narendra Modi at the DGP conference in Kutch, Gujarat, in 2015.
- The 2018 survey evaluated police stations on the basis of how they dealt with crime against women, crime against SC/ST and property offences. The score were calculated depending on the number of FIRs charge sheeted within 60 days.

ANNUAL PIRACY REPORT (ICC-IMB)

- According to the International Maritime Bureau (IMB), West Africa's **Gulf of Guinea** became the world's most pirate-infested sea in 2018, with 72 attacks last year – up from 28 in 2014. This year so far it has recorded 30. Elsewhere piracy is in decline.
- The International Maritime Bureau (IMB), founded in 1981, is a **specialized department of the International Chamber of Commerce (ICC)**.
- The IMB's responsibilities lie in fighting crimes related to maritime trade and transportation, particularly piracy. It maintains a 24-hour piracy reporting centre in Kuala Lumpur, Malaysia.
- It is endorsed by the UN's International Maritime Organisation (IMO) and has observer status with Interpol.

INDIAN RAILWAY PROTECTION FORCE (RPF) SERVICE

- The Union Cabinet has approved Grant of **Organised Group 'A' status** to RPF.
- **Background:** The Railway Security Force (RSF) was established in **1953**. The **Railway Protection Force Act, 1957** renamed RSF to Railway Protection Force (RPF) and expanded the force's legal powers (**thus it's a statutory body**).
- **Status:** In 1980s it was transformed into an '**Armed Force of the Union**'
- **Administration:** RPF is under the control of **Ministry of Railways**.
- **Functions:** It has the primary duty of protection of railway property, passenger area, and passengers. *RPF is **NOT responsible for ALL aspects of railways security** as it shares its duties with the Government Railway Police (GRP) and the District Police.*

WITNESS PROTECTION SCHEME

- Odisha state government has implemented the Centre's Witness Protection Scheme-2018 which provides for protection of witnesses based on the threat assessment.
- **Protection measures inter alia include:** Protection/change of identity of witnesses, their relocation, installation of security devices at the residence of witnesses, usage of specially designed Court rooms, etc.
- **Three categories of witness as per threat perception:**
 - **Category 'A':** Where the threat extends to life of witness or his family members, during investigation/trial or thereafter.

- **Category 'B':** Where the threat extends to safety, reputation or property of the witness or his family members, during the investigation/trial or thereafter.
- **Category 'C':** Where the threat is moderate and extends to harassment or intimidation of the witness or his family member's reputation or property, during the investigation/trial or thereafter.
- **State Witness Protection Fund:** The Scheme provides for a State Witness Protection Fund for meeting the expenses of the scheme. This fund shall be operated by the Department/Ministry of Home under State/UT Government.
- **The Supreme Court of India in its December 2018 Judgment endorsed the Scheme.** It said that as per Article 141/142 of the Constitution, the Scheme is binding on all Courts within the territory of India and enforceable in all States and Union Territories.

MISSION RAKSHA GYAN SHAKTI (MRGS)

- In a major boost to Mission Raksha Gyan Shakti, a MOU was signed between the Intellectual Property Facilitation Cell (IPFC), Department of Defence Production, Ministry of Defence and National Research Development Corporation (NRDC), Ministry of Science and Technology.
- Mission Raksha Gyan Shakti was launched with the aim to **inculcate IP culture** in Indian defence manufacturing ecosystem.
- Under this, an Intellectual Property Facilitation Cell (IPFC) has been established under the aegis of Directorate General Quality Assurance (DGQA) which has trained more than 12,000 personnel on IPR and facilitating filing of more than 1000 new IPR applications.

DEFENCE INSTITUTE OF PHYSIOLOGY AND ALLIED SCIENCES (DIPAS)

- In a first, women personnel of the Central Reserve Police Force (CRPF) will soon get body gear designed especially for them by the DIPAS.
- **Parent Body:** DIPAS is a defence laboratory under the Life Sciences Directorate of Defence Research and Development Organisation (DRDO).
- **Mandate:** It conducts physiological and biomedical research to improve human performance in extreme and wartime environments.
- **Located in:** Delhi; **Established in:** 1962.

REVAMP OF ARMY HEADQUARTERS (AHQ)

Government of India has given in-principle approval for the reorganisation of the Army Headquarters (AHQ). Following are the **new changes planned**:

- The entire training function will move under the **Army Training Command (ARTRAC)**, which will be shifted from Shimla to Meerut.
- Director-General, Rashtriya Rifles (RR), now based in Delhi, will be moved to Udhampur.
- A new post of **Additional Director-General (ADG), Vigilance**, is being created, and he will report to the Army chief.
- There will be a new position of **ADG, Human Resources**, who "shall take proactive action on HR violations."
- The Army now has two Deputy Chiefs for (1) information systems & training and (2) Planning & Systems. After the restructuring, there will three Deputy Chiefs for (1) Sustenance, (2) Strategy and (3) Information Systems.

BHABHA KAVACH

- Bhabha Kavach, billed as “**India’s lightest bullet-proof jacket**”, was recently launched at the International Police Expo 2019 in New Delhi.
- **Bodies involved:** It has been developed jointly by the **Ordnance Factories Board** and the public sector metals and metal alloys manufacturer **MIDHANI**.
- **Features:** The jacket weighs 9.2 kg, is powered with nano technology from Bhabha Atomic Research Centre, and has a five-year warranty.

SECURITYPEDIA

- The Central Industrial Security Force (CISF) launched Securitypedia, an online encyclopaedia which contains information on technical learning, CISF manuals, case studies, technical compendium, etc. and security-related practices across the globe.
- The CISF has established a **technical lab at National Industrial Security Academy (NISA) in Hyderabad** to maintain and update it.

RETIREMENT IN CENTRAL ARMED POLICE FORCES (CAPFs)

- Union Home Ministry has directed all Central Armed Police Forces (CAPFs) to adopt uniform retirement age of 60 years.
- The Home Ministry order has corrected the anomaly where personnel between the ranks of Constable to Commandant in four forces – CRPF, BSF, ITBP and SSB – superannuated at the age of 57, instead of 60. Officers from the rank of Deputy Inspector General upto the top-most rank of Director General in these four forces retire after 60.

UNLAWFUL ACTIVITIES (PREVENTION) AMENDMENT BILL, 2019

- Parliament has passed the Unlawful Activities (Prevention) Amendment Bill, 2019.
- Under the Act, the central government may designate an organisation as a terrorist organisation. The Bill additionally empowers the government to designate **individuals as terrorists**.
- **Investigation by NIA:** Under the Act, investigation of cases may be conducted by officers of the rank of Deputy Superintendent or Assistant Commissioner of Police or above. The Bill additionally empowers the **officers of the NIA, of the rank of Inspector or above**, to investigate cases.
- **Approval for seizure of property by NIA:** If the investigation is conducted by an officer of the National Investigation Agency (NIA), the approval of the Director General of NIA would be required for seizure of such property.
- **Insertion to schedule of treaties:** The Act defines terrorist acts to include acts committed within the scope of any of the treaties listed in a schedule to the Act. The Bill adds another treaty to the list namely, the **International Convention for Suppression of Acts of Nuclear Terrorism (2005)**.

NATIONAL INVESTIGATIVE AGENCY (AMENDMENT) BILL, 2019

- Parliament passed the National Investigation Agency (Amendment) Bill, 2019.
- The amendment will strengthen the National Investigation Agency (NIA) to speed up trials in terrorism-related cases. **By designating special courts, the cases would be expedited** and transfers or delay in appointments of judges would not delay them.
- The agency will be able to **investigate terrorist acts against Indian embassies and assets abroad** and take up cases of drug, arms and women trafficking apart from cyber-terrorism.

CHIEF OF DEFENCE STAFF (CDS)

- The Union Cabinet has approved to create the post of Chief of Defence Staff (CDS) in the rank of a four-star General. Also, former Army Chief General Bipin Rawat has been named the first CDS.
- The first proposal for a CDS in India came from the **2000 Kargil Review Committee (KRC)**.
- **Existing Scenario:** India has the **Chairman, Chiefs of Staff Committee (CoSC)**, but this is a toothless office. The senior-most among the three Service Chiefs is appointed to head the CoSC, an office that lapses with the incumbent's retirement.
- **The CDS will head the Department of Military Affairs (DMA)**, to be created within the Ministry of Defence and function as its Secretary.
- The following areas will be dealt by the Department of Military Affairs headed by CDS:
 - The Armed Forces of the Union, namely, the Army, the Navy and the Air Force;
 - Integrated Headquarters of the Ministry of Defence comprising Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters;
 - The Territorial Army; Works relating to the Army, the Navy and the Air Force.
 - Procurement exclusive to the Services except capital acquisitions, as per prevalent rules and procedures.
- The CDS will also be the **Permanent Chairman of the Chiefs of Staff Committee**, and thus will perform the following functions:
 - Tri-service agencies/organisations/commands related to Cyber and Space will be under the command of the CDS.
 - CDS will be member of Defence Acquisition Council chaired by Raksha Mantri and Defence Planning Committee chaired by NSA.
 - Function as the Military Adviser to the Nuclear Command Authority.
 - Bring about jointness in operation, logistics, transport, training, support services, communications, repairs and maintenance, etc of the three Services, within three years of the first CDS assuming office.
- He will also act as the **Principal Military Adviser to Defence Minister** on all tri-Services matters.
- **CDS will not exercise any military command, including over the three Service Chiefs**, so as to be able to provide impartial advice to the political leadership.
- The defence ministry also amended the army, air force and navy rules to allow the CDS **to serve upto a maximum age of 65 years**.

THE SIPRI TOP 100 ARMS-PRODUCING AND MILITARY SERVICES COMPANIES, 2018

The Stockholm International Peace Research Institute (SIPRI) released a new report titled “The SIPRI Top 100 Arms-Producing And Military Services Companies, 2018.” Key findings are:

- Sales of arms and military services by the sector's largest 100 companies (excluding those in China) totalled \$420 billion in 2018, marking an **increase of 4.6 % compared with the previous year**.
- The turnover of the 100 biggest arms manufacturers came to 420 billion dollars. US manufacturers alone accounted for 59 % of the market.
- Russia was second in the rankings for arms production, with 8.6 % of the market, just ahead of the United Kingdom on 8.4 % and France on 5.5 %. The study did not include China, for lack of sufficient data

- **The top five spots in the ranking are held exclusively by arms companies based in the United States:** Lockheed Martin, Boeing, Northrop Grumman, Raytheon and General Dynamics. These five companies alone accounted for 35 % of total Top 100 arms sales in 2018.
- **The combined arms sales of the three Indian arms companies listed in the Top 100** were \$5.9 billion in 2018—a decrease of 6.9 % on 2017. The decline is mainly a result of Indian Ordnance Factory's significant 27 % drop in arms sales.

ARMS (AMENDMENT) BILL, 2019

- The Arms (Amendment) Bill, 2019 was passed by the Parliament. The Bill seeks to amend the Arms Act, 1959.
- **License for acquiring firearms:** Under the Act, a license must be obtained to acquire, possess, or carry any firearm. The Bill reduces the number of permitted firearms from three to one. The Bill also increases the duration of the validity of a firearm license from three years to five years.
- **Ban on firearms:** The Bill prohibits procuring un-licensed firearms, and the conversion of one category of firearms to another without a license. It also allows members of rifle clubs or associations to use any firearm for target practice instead of only point 22 bore rifles or air rifles.
- **Increase in punishment:** The Bill increases the punishment to imprisonment between seven and 14 years for carrying of prohibited ammunition without a license.
- **New offences:** The Bill adds following new offences –
 - **Forcefully taking a firearm from police or armed forces:** This is punishable with imprisonment between 10 years and life imprisonment
 - **Celebratory gunfire which endangers safety of others:** This is punishable with imprisonment of up to two years, or fine of up to one lakh rupees, or both.
- **Tracking of firearms:** The central government may make rules to track firearms and ammunition from manufacturer to purchaser to detect, investigate, and analyse illicit manufacturing and trafficking.

Firearms is in the Union List and the State governments have only limited jurisdiction relating to ammunition.

SPIKE

- The Indian Army successfully test-fired two newly-acquired Israeli Spike LR anti-tank guided missile (ATGM). With this, India became the 33rd country to have the Spike missile as part of its inventory.
- Spike is a fourth generation missile which can engage any target with precision at ranges up to 4 kilo metres. In addition to fire and forget capability, the missile has an inbuilt seeker, which gives the firer the flexibility to use any of two modes: Day (CCD) and Night (IIR). The dual seeker adds to the missile's reliability.

INDIA'S TOP 10 POLICE STATIONS, 2019

- **Ministry of Home Affairs released the list of best performing Police stations from across the country for 2019. The Top 3 Police Stations in the country are: (1) Aberdeen, Andaman & Nicobar, (2) Balasinor, Gujarat; and Ajk Burhanpur, MP.**
- **Methodology:** In the final stage 19 parameters were identified to evaluate the standards of service delivery and identify techniques of improvement in policing. This part constitutes 80% of weightage in overall scoring. The balance 20% was based on infrastructure of Police Station and approachability of personnel and Citizen feedback.

WOMEN IN ARMED FORCES

1. **Shivangi:** Sub-lieutenant Shivangi became the first woman pilot for the Indian Navy. She joined operational duties at the Kochi naval base and will be flying the Dornier surveillance aircraft of the Indian Navy.
2. **S Dhami:** Indian Air Force's Wing Commander S Dhami has become the first female officer in the country to become the Flight Commander of a flying unit. Dhami took over as Flight Commander of a Chetak helicopter unit at Hindon airbase.
3. **Anjali Singh:** Wing Commander Anjali Singh has become the first woman in the Indian military history to be posted as a military diplomat at an Indian mission abroad. The Indian Air Force (IAF) send her to Moscow as a deputy air attaché.

BLUE WATER FORCE

- On the occasion of Navy Day (December 4), Defence Minister Rajnath Singh called Indian Navy as a Formidable Blue Water Force.
- Navies are classified in terms of colours. A navy whose operations are restricted close to the shore, where the water is muddy, is called a Brown Water Force. A navy that can go farther out is called a Green Water Force.
- A Blue Water Navy is one that is able to **carry out operations far from its borders, without being required to return to its home port to refuel or re-stock**. Owning one or more aircraft carriers is sometimes seen as a marker of a Blue Water Navy.

MiG-27

- The last of Indian Air Force's (IAF) MiG-27 was decommissioned at Jodhpur Air base.
- The Russian origin aircraft was inducted in IAF in 1985. IAF has been gradually retiring the Russian MiG variants of fighters from service including the MiG-23 BN & MiG-23 MF.
- With decommissioning of the MiG-27, the number of IAF's fighter squadron has gone down to 28 as compared to the authorised 42 squadrons to fight a two-front war with Pakistan and China.

PINAKA MISSILE SYSTEM

- DRDO successfully flight-tested indigenous Pinaka Missile System from the Integrated Test Range, Chandipur off the Odisha coast.
- The Pinaka, a multi-barrel rocket launch system has a maximum range of 40 km for Mark-I and 75 km for Mark-II variant, and can fire a salvo of 12 rockets in 44 seconds.
- The weapon system is mounted on a Tatra truck and its system is aided by the Indian Regional Navigation Satellite System (IRNSS).

KHANDERI

- **The second Scorpene submarine 'KHANDERI' was commissioned into Indian Navy.** The first Submarine Khanderi was commissioned into the Indian Navy in 1968 and decommissioned in 1989 after more than 20 years of service to the nation.
- The submarine 'KHANDERI' is named after the wide snouted Saw fish, a deadly sea predator of the great Indian Ocean.

Scorpene class submarines:

- Six Scorpene class submarines are being built under **Project 75**. They can undertake various types of missions i.e Anti-Surface warfare, Anti-Submarine warfare, intelligence gathering, mine laying, area surveillance etc.

VAJIRAM & RAVI

- The submarines are designed by French naval defence and energy group DCNS and manufactured by the **Mazagon Dock Shipbuilders Limited (MDSL), Mumbai** under a 2005 contract worth \$3.75 billion.

Status of submarines:

- The **first submarine named INS KALVARI** was commissioned in 2018.
- The constructions of **third Scorpene KARANJ**, was started in 2018, and is currently undergoing the rigorous phase of sea trials. **The fourth Scorpene, VELA** was recently launched in May 2019, and is being prepared for sea trials.
- The remaining **two submarines, VAGIR and VAGSHEER**, are in various stages of outfitting. The last of the submarines will be delivered by 2022.

DATA ON POLICE ORGANIZATIONS (DOPO 2018)

Union Home Minister released Bureau of Police Research and Development's (BPRD) flagship publication Data on Police Organizations (DoPO 2018). Major highlights of the DoPO 2018 are as under:

- For the one year, since the 2017 edition of the DoPO, there has been an increase of 19,686 Police personnel in the sanctioned strength of the State Police and 16,051 in the strength of CAPFs.
- There has been 20.95% increase in the strength of Woman Police. It brings the total % of women in the Indian Police to 8.73%.
- The overall Police Population Ratio (PPR) at the state level stood at **192.95 policemen per lakh population**, which shows marginal increase.
- Police Stations have increased from 15579 to 16422. This includes **Cyber Police Stations whose number has risen from 84 to 120**.
- Electronic surveillance has improved, as there has been an addition of 2,10,278 **CCTV Cameras**. Now this number, as per the latest count, is 2,75,468.

Bureau of Police Research and Development (BPR&D)

- **HQ:** New Delhi;
- **Established:** 1970.
- **Parent agency:** Ministry of Home Affairs;

'MAKE IN INDIA' IN DEFENCE

- **The Defence Acquisition Council (DAC) accorded approval for three projects to be indigenously designed, developed and manufactured by the Indian industry.**
- The first two projects include third generation Anti-Tank Guided Missiles (ATGM) and the Auxiliary Power Units (APUs) for the T-72 and T-90 Tanks.
- Both these projects will be progressed under the **'Make-II' Category** and will provide a boost to indigenous research and development in the Private Sector.
- **With this, for the first time the Ministry of Defence has offered complex Military equipment to be developed by the Indian private industry.**
- The third indigenous project pertains to discrete Electronic Warfare (EW) systems for the mountain and High Altitude terrain, which would be designed and developed by DRDO and manufactured by design cum production partner from the Indian industry.

Defence Acquisition Council (DAC)

- **Established in:** 2001; **Chairman:** Defence Minister.
- **Members:** Chief of Army Staff, Chief of Naval Staff, Chief of Air Staff, Defence Secretary, Secretary Defence Research & Development, Secretary Defence Production, Chief of Integrated Staff Committees HQ IDS, Director General (Acquisition).

- **Objectives:** Overall guidance of the defence procurement planning process and ensuring expeditious procurement of the approved requirements of the Armed Forces.
- **Key Functions:** In-principle approval of 15 Year Long-Term Integrated Perspective Plan for Defence Forces and Categorization of the acquisition proposals relating to 'Buy', 'Buy & Make' and 'Make'.

OPEN GENERAL EXPORT LICENCES (OGELs)

- **Defence Minister has approved issuance of two Open General Export Licences (OGELs) for export of certain parts and components and intra-company transfer of technology to select countries. The decision will give a boost to defence exports.**
- **The OGEL is a one-time export licence** to be granted to a company for a specific period which is two years initially. The application for grant of OGEL will be considered by **Department of Defence Production (DPP)** on a case-to-case basis.
- For acquiring the licences, the applicant is mandatory to have Import-Export certificate.
- **The items permitted under OGEL includes** components of ammunition and fuse setting device without energetic and explosive material, firing control and related ing and warning equipment and related system and body protective items.
- Complete aircraft or complete unmanned aerial vehicles (UAVs) and any components specially designed or modified for UAVs are **excluded under this licence.**
- **The countries allowed under the OGELs are:** Belgium, France, Germany, Japan, South Africa, Spain, Sweden, UK, USA, Canada, Italy, Poland and Mexico. Export of items to a Special Economic Zone is not permitted.

AGNI-II

- India successfully conducted the night trial of 'Agni-II' from Dr Abdul Kalam Island off Odisha coast. This was the first time that this missile was test-fired at night.
- 'Agni-II', an intermediate-range ballistic missile (IRBM) has already been inducted into the armed forces. It is a versatile surface-to-surface medium-range nuclear-capable missile that can carry a nuclear payload of one thousand kilograms.
- The missile has a strike range of 2000 km. The range can also be increased to three thousand kilometres by reducing the payload.

NO MONEY FOR TERROR' MINISTERIAL CONFERENCE

- **The second annual 'No Money for Terror' Ministerial conference was hosted by the Australian government in Melbourne.**
- **65 nations were represented at the conference.** At the conference, it was announced that **India would host the next 'No Money For Terror' Conference in 2020.**
- This was the second conference of its kind, dedicated to the fight against terror financing. The first such meeting held in **Paris in 2018.**
- The Conference is organised by **Financial Intelligence Units (FIUs) of over 100 countries, jointly called The Egmont Group.**

ARMY BATTLE CASUALTIES WELFARE FUND (ABCWF)

- **Defence minister approved enhancement of monetary assistance to Next of Kin (NoK) of all categories of Battle Casualty (BC) from Rs 2 lakh to Rs 8 lakh. The amount will be granted under Army Battle Casualties Welfare Fund (ABCWF).**

VAJIRAM & RAVI

- The ABCWF has been set up under Department of Ex-Servicemen Welfare (ESW), Ministry of Defence. It was instituted in 2017 under Charitable Endowments Act, 1890.

Ministry of Home Affairs had launched '**Bharat ke Veer fund**' to assist families of paramilitary personnel killed or injured in action. The fund became hugely popular within a short span of time and received widespread support from all quarters.

HIGH ENERGY MATERIALS RESEARCH LABORATORY (HEMRL)

- **Defence Minister inaugurated the DRDO Igniter Complex at High Energy Materials Research Laboratory (HEMRL) in Pune.**
- HEMRL is a premier laboratory of DRDO and primarily engages in developing Rocket and Gun Propellants, Pyrotechnic Devices and High Explosive Systems.
- Ignition is a crucial and highly critical phenomenon in the ignition chain of Rocket motor. Ignition system for Agni, Prithvi, Akash, Nag, Pinaka, Long Range Surface-to-Air Missile (LRSAM), etc. have been designed and developed in HEMRL.

SPECIAL PROTECTION GROUP (AMENDMENT) BILL, 2019

Parliament passed the Special Protection Group (Amendment) Bill, 2019 to amend the Special Protections Group Act, 1988.

Background: Special Protections Group Act, 1988

- Based on the recommendations of the **Birbal Nath committee report**, SPG came into existence in 1985. From 1985 to 1988, SPG was governed by an Executive Order and only in 1988 the SPG Act came into existence.
- Under the Act, SPG provides security to the Prime Minister and his immediate family members. It also provides security to former Prime Ministers and their immediate family members for a period of one year from the date on which they cease to hold the office.
- The threat must: (i) emanate from a military or terrorist organisation, and (ii) be of a grave and continuing nature.
- If the SPG security is withdrawn from a former Prime Minister, it will also be withdrawn from his immediate family members, unless the level of threat faced by the immediate family member warrants such security.

Special Protection Group (Amendment) Bill, 2019:

- The Bill states that the SPG will provide security to the Prime Minister, and members of his **immediate family residing with him at his official residence.**
- It will also provide security to any former Prime Ministers, and his **immediate family members residing with him at the residence allotted to him.**
- **This security will be provided for a period of five years** from the date on which he ceases to hold the office of Prime Minister.
- If the SPG security is withdrawn from a former Prime Minister, **it will also be withdrawn from his immediate family members.**

PRISON STATISTICS INDIA-2017

The National Crime Records Bureau (NCRB) released the report 'Prison Statistics India 2017.' Key highlights of the report are:

- **Prisons Types:** There are 1,361 prisons in the country consisting of 666 Sub jails, 405 District jails, 142 Central jails, 64 Open jails, 41 Special jails and 22 Woman jails.
- **Prisons Occupancy:** Out of the total capacity 3,91,574 in 1,361 prisons in 2017, the Central jails of the country were having the highest capacity of inmates (1,74,412).
- **The number of prisoners** lodged in various jails has increased from 4,33,003 in 2016 to 4,50,696 in 2017.
- **Prisoners Types:** Out of 4,50,696 prisoners, the number of Convicts, undertrial inmates and detenues accounted for 30.9 % 68.5 % and 0.5 % respectively.
- **The number of deaths in prisons** has increased marginally from 1,584 in 2015 to 1,671 in 2017, out of which 1,494 were natural and 133 unnatural.
- A total of 378 **prisoners escaped from lawful custody** during the 2017.
- **Gujarat has the highest number of undertrial prisoners who are Pakistani nationals followed by Jammu and Kashmir.**

National Crime Records Bureau (NCRB)

- **Parent agency:** It is part of the Ministry of Home Affairs (MHA), Government of India.
- **Background:** NCRB was set-up in 1986, based on the recommendations of the National Police Commission (1977-1981) and the MHA's Task force (1985).
- **HQ:** New Delhi.
- **Mandate:** To function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.
- **Functions:**
 - In 2009, NCRB was entrusted with the responsibility for implementing the **Crime and Criminal Tracking Network & Systems (CCTNS) project**.
 - It launched the **National Digital Police Portal** in 2017.
 - It maintains the **National Database of Sexual Offenders (NDSO)**.
 - It has been designated as the Central Nodal Agency to manage technical and operational functions of the '**Online Cyber-Crime Reporting Portal**'.
 - It maintains **Counterfeit Currency Information and Management System (FICN)** and Integrated Monitoring on Terrorism (iMoT).

CRIME IN INDIA REPORT 2017

NCRB published the annual Crime in India Report 2017. Its Key highlights are:

- **A total of 50,07,044 cognizable crimes** were registered in 2017, an increase of 3.6 % in registration of cases over 2016.
- **The NCRB for the first time collected data on circulation of "false/fake news and rumours."** Under the category, maximum incidents were reported from Madhya Pradesh (138), Uttar Pradesh (32) and Kerala (18).
- **A new category of offences committed by various categories of "Anti-National Elements"** showed that the maximum offences were committed by Left Wing Extremist (LWE) operatives (652), followed by North East insurgents (421) and Terrorists (Jihadi and other elements) (371).

- **3,59,849 cases of crime against women** were reported in the country. **Uttar Pradesh topped the list with 56,011**. Majority of cases under crimes against women were registered under **‘Cruelty by Husband or his Relatives’ (27.9%)**.
- In % terms, major crime heads under **‘Crime Against Children’** during 2017 were kidnapping and abduction (42.0 %) and cases under the Protection of Children from Sexual Offences Act, 2012 (25.3 %) including child rape.
- **58,880 incidents of rioting were reported**, of which the maximum incidents were reported from Bihar (11,698).
- **Incidents of atrocities against Scheduled Castes** jump from 5,082 in 2016 to 5,775 in 2017. **Incidents of crime related to Scheduled Tribes** dipped from 844 in 2016 to 720 in 2017.
- **Delhi recorded a 40.4% share of total Indian Penal Code (IPC) crimes registered across 19 metropolitan cities** in 2017 with Bengaluru taking the second position.
- **The maximum number of sedition cases were reported from Assam (19)** followed by Haryana (13). Jammu and Kashmir recorded just one case of sedition.
- **Data collected under the new sub-heads of death due to mob lynching, murder by influential people, killing ordered by khap panchayat and murder committed for religious reason** have not been published.
- **A total 21,796 instances of cyber-crime** were recorded in 2017, an increase of 77% over the previous year’s number of 12,317. Nearly every fifth cyber-crime in 2017 was committed against a woman.

NATIONAL SECURITY GUARD (NSG)

- **IPS officer Anup Kumar Singh has been appointed as Director-General of the National Security Guard (NSG) by Appointments Committee of the Cabinet (ACC).**
- The National Security Guard (NSG) is an Indian special forces unit for combating terrorist activities with a view to protect states against internal disturbances.
- **Units:** It is a task-oriented Force and has two complementary elements in the form of the **Special Action Group (SAG)** comprising Army personnel and the **Special Ranger Groups (SRG)**, comprising personnel drawn from the Central Armed Police Forces / State Police Forces.
- **Parent agency:** Ministry of Home Affairs (MHA); **HQ:** New Delhi.
- **It was established in 1984** and is governed by the National Security Guard Act, 1986. According to Home Ministry, **it is one of the 7 Central Armed Police Forces (CAPF).**
- The head of NSG, designated as **Director General (DG)**, is selected by the Home Ministry. All the selected DGs have been officer from Indian Police Service (IPS).

PRIVATE SECURITY AGENCY LICENSING PORTAL

- **Home Ministry launched Private Security Agency Licensing Portal as a single-window system for issuing licences to private security agencies at National level.**
- The move attempts to streamline the licensing regime with the Home ministry becoming the dashboard for regulating the private security industry under **The Private Security Agencies (Regulation) Act, 2005.**
- Gujarat has highest number of private security agencies (2249) in the country.

PRAKHAR VAN

- **Union Home Ministry launched the PRAKHAR in Delhi.** PRAKHAR is a street crime patrol van, for patrolling at crime hot spot locations.
- Prakhhar vans are different from PCRs as these vans carry more firepower and are equipped with modern technology. Initially, one van will be deployed in each district in Delhi. Its strength will augment in due course with a target of 100 such vans for the city.

R.K.S. BHADAURIA

- **Government of India appointed Air Marshal RKS Bhadauria as the next Chief of the Air Staff.** He succeeded Air Chief Marshal BS Dhanoa. He will have a two-year tenure.
- He had played a key role in the negotiations for the deal with France for 36 Rafale jets. In an acknowledgment of Mr. Bhadauria's role in the negotiations, **the first Rafale, which made its maiden flight in France, is designated RB-008 after his name.**

BULLETPROOF JACKETS

- **India has begun exporting bulletproof jackets as per its own standards to over 100 countries including European nations.**
- **India is the fourth country after the US, UK and Germany** to have its own national standard on bulletproof jacket which provides 360-degree protection. It is framed by **the Bureau of Indian Standards (BIS).**

Bhabha Kavach, India's lightest bullet-proof jacket, was recently launched at the International Police Expo 2019 in New Delhi.

RAFALE

- **Defence Minister Rajnath Singh formally received the first Rafale fighter jet built for the Indian Air Force (IAF) at Production Unit of Dassault Aviation at Mérignac in France. He was handed over the first Indian aircraft, RB-001, by Dassault Aviation CEO Eric Trappier.**
- The Dassault Rafale is a French twin-engine, canard delta wing, multirole fighter aircraft designed and built by Dassault Aviation. Equipped with a wide range of weapons, the Rafale is intended to perform in-depth strike, anti-ship strike and nuclear deterrence missions.
- Introduced in 2001, the Rafale is being produced by the French Air Force and has been selected for purchase by the Air Force of India, Egypt and Qatar.

Indian scenario:

- In September 2016, India and France signed a €7.87 billion Inter-Governmental Agreement (IGA) for 36 Rafale multi-role fighter jets in fly-away condition following the surprise announcement by PM Modi in April 2015.
- the first batch of the jets will arrive in India only in May 2020. By February 2021, India will receive 18 Rafale jets and by April 2022, India will get all the 36 Rafale.

GOLDEN ARROWS

- **The Indian Air Force (IAF) resurrected the Air Force Station Ambala-based 17 Squadron 'Golden Arrows', which will operate the first squadron of Rafale fighter jets in the near future.** The squadron was earlier disbanded in 2016.
- The squadron was formed at Ambala in 1951 under the command of Flight Lieutenant D L Springett and was then equipped with Harvard-II B aircraft.
- The Squadron converted to the Mig-21 M in 1975 and participated actively in Operation Safed Sagar during the Kargil conflict in 1999.

CENTRALISED TECHNOLOGY VERTICAL (CTV)

- **Union Home Minister announced that a Centralised Technology Vertical (CTV) would be set up under the Central Bureau of Investigation (CBI) by 2020.**
- CTV would facilitate real-time information sharing with investigators across the country with access to data warehouses, equipped with big data analytics, data mining tools to handle complex financial crimes, like 2G scam, Ponzi schemes etc.

LARGEST DRY DOCK OF INDIAN NAVY

- **Raksha Mantri Rajnath Singh commissioned the largest dry dock of Indian Navy - The Aircraft Carrier Dock at the Naval Dockyard in Mumbai.**
- It is capable of docking aircraft carrier INS Vikramaditya and IAC-I, the indigenous aircraft carrier which is under construction at Cochin shipyard.
- **A dry dock** is a berthing place to carry out refuelling and maintenance of a ship.

PRESIDENT'S COLOURS AWARD

- **President Ram Nath Kovind presented the prestigious President's Colours to the Corps of Army Air Defence** on the occasion of 25 years of Army Air Defence College.
- Presidential Colours are Regimental flags that are awarded to a regiment by the president during a ceremony.
- These are one of the greatest honours bestowed upon an armed force unit in recognition of exceptional service rendered by it to the nation, both during peace and war.

One of the youngest corps of Army, the Army Air Defence Corps bifurcated from the Regiment of Artillery in 1989 and established **the Army Air Defence College (AADC)**. The AADC is the training school for the personnel of the Air Defence Corps.

WAR CASUALTIES' HOUSING LIMIT

- **Defence Minister approved the proposal to extend the period of retention of government accommodation by Battle Casualties from all the three Services.**
- Families of Armed Forces personnel killed in action against enemy forces will now be able to retain government accommodation for **one year. Earlier, this period was three months.** The provision will also be available for those martyred in enemy air attacks.
- The government's decision will come as a relief as shifting homes after losing a breadwinner can be extremely difficult.

ICGS VARAHA

- **Defence Minister commissioned ICGS Varaha**, the fourth in the series of seven 98-m Offshore Patrol Vessels (OPV) of the Indian Coast Guard (ICG).
- The ship has been designed and built indigenously by Larsen & Toubro (L&T) at its Katupalli ship building yard in Chennai. It would be based at New Mangalore under the administrative and operational control of Commander Coast Guard region (west).
- It is fit with the latest navigation and communication equipment. It also has some of the most advanced sensors and machinery as well as a 33-millimetre (mm) gun.

In Hindu Mythology, 'Varaha' was the third incarnation of Lord Vishnu which took the form of Boar to protect mother earth by carrying her out of the sea on his tusks.

SAINIK SCHOOLS

- **Raksha Mantri Shri Rajnath Singh has approved a proposal for admission of girl children in Sainik schools w.e.f. academic session 2021-22 in a phased manner.**
- The Sainik Schools are a system of schools in India established and managed by the Sainik Schools Society, an organization under the Ministry of Defence.
- The objective of the Sainik Schools is to prepare the students to lead as officers in the Defence Services of the country.
- The first Sainik School was opened in UP in 1960 under UP state government and there after other Sainik school and Military Schools were opened. **UP Sainik School Lucknow located near Amausi Airport** is the only Sainik School under State Govt.

INNOVATIONS FOR DEFENCE EXCELLENCE (iDEX)

- **Defence ministry organised Def-Connect in New Delhi to showcase the accomplishments of the Innovations for Defence Excellence (iDEX) initiative.**
- iDEX was launched by the Government of India in 2018 to create an ecosystem to foster innovation in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes & academia.
- **iDEX is managed by a 'Defence Innovation Organization (DIO)'** which has been formed as a 'not for profit' company as per Section 8 of the Companies Act 2013 by the two founder members i.e. Defence Public Sector Undertakings (DPSUs) - HAL & BEL.

DILLI SERIES' SEA POWER SEMINAR

- **The sixth edition of the Dilli Series Seapower Seminar on "Role of Sea Power in Shaping of Nations" concluded at the Indian Naval Academy (INA Ezhimala).**
- Dilli Series Seminar is conducted at **INA Ezhimala** during Autumn Term every year, with an aim to expose young trainees to the vibrant maritime history and arouse in them a curiosity to explore further.
- It is named after the **Mount Dilli located within INA, Ezhimala premises.**

INA Ezhimala is the initial officer training establishment of the Indian Navy and the Indian Coast Guard, located in Ezhimala, Kannur district, Kerala.

ADVERSE LIST

- **Government has removed 312 Sikh foreign nationals from a "Central adverse list" maintained by Ministry of Home Affairs.** This will afford an opportunity to such Sikh foreign nationals to visit India and meet their family members.
- In future, Sikhs mentioned in the list could eventually apply for registration as Overseas Citizens of India (OCI) after they have held normal visa for a period of two years.
- **Central government has also discontinued the practice of maintenance of local adverse lists by the respective Indian missions in various countries.** All Indian missions have been advised to grant appropriate visa to all asylees whose names do not figure in the Central Adverse List.

Background:

- During 1980s, when Sikh militancy was at its peak, many Sikh Indian nationals and foreign nationals belonging to Sikh community fell to anti-India propaganda.

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- Some Sikh Indian nationals fled India to escape Indian authorities, became foreign nationals and took asylum outside India. They were placed in the adverse list till 2016, making them ineligible to avail visa services to visit India.
- The list prepared by the intelligence agencies was available with all Indian missions and was a major roadblock for persons seeking visas even for their family members who were not on the list.

SHORE BASED TEST FACILITY (SBTF)

- **The naval variant of the Light Combat Aircraft (LCA) Tejas made its first-ever short arrested landing on the Shore Based Test Facility (SBTF) in Goa. This is a big step for the LCA to eventually operate from INS Vikramaditya aircraft carrier.**
- **Arrested landing** means to rapidly decelerate an aircraft as it lands.
- **The Shore Based Test Facility (SBTF)**, which replicates the flight deck of an aircraft carrier is specifically built to train naval pilots in the complex manoeuvres of landing on the short flight deck of an aircraft carrier before they move on to the actual carrier. **INS Hansa, Goa is the only SBTF (shore-based test facility) in the country.**

The naval LCA made its maiden flight in April 2012 and two prototypes have been flying as part of the development. The first Naval Prototype (NP)-1 made a successful first flight from the SBTF in 2014.

AH-64E APACHE ATTACK HELICOPTER

- **The Indian Air Force (IAF) formally inducted the AH-64E Apache Attack Helicopter into its inventory at Air Force Station Pathankot.**
- **Timeline:** IAF has signed a contract with 'The Boeing Company' and US Government for 22 Apache Attack Helicopters. The first eight helicopters have been delivered on schedule and the last batch of helicopters is to be delivered by March 2020.
- **Deployment:** Apache attack helicopters are being purchased to replace the Mi-35 fleet and will be deployed in the Western regions of India.
- **Features:** The helicopter is capable of delivering variety of weapons which include fire and forget anti-tank guided missiles, air to ground Hellfire missiles, 70 mm Hydra rockets and air to air Stinger missiles. These helicopters are day/night, all weather capable and have high agility and survivability against battle damage.

INS 'NILGIRI'

- Defence Minister Rajnath Singh launched INS 'Nilgiri', at Mazagon Dock Shipbuilders Limited in Mumbai.
- INS 'Nilgiri' is the first of the Indian Navy's seven new stealth frigates under Project 17A.
- Project 17A frigates is a design derivative of the Shivalik class stealth frigates with much more advanced stealth features and indigenous weapons and sensors.

AFSPA IN J&K, LADAKH

- The central government has bestowed on itself the authority to declare any area in the newly-created Union Territories (UTs) of Jammu and Kashmir, and Ladakh as "disturbed" under the AFSPA.
- Administration of the Armed Forces (Jammu and Kashmir) Special Powers Act, 1990 (21 of 1990) in both the UTs is now vested with the **Department of Jammu, Kashmir and Ladakh Affairs under the Ministry of Home Affairs (MHA).**

- The AFSPA has been applicable to the erstwhile state since 1990. However, Leh and Kargil areas under the new UT of Ladakh were never declared as disturbed.
- With the bifurcation of the state, the police and law and order of both the UTs would be managed by the MHA through the respective Lieutenant Governors of the two UTs.

Armed Forces Special Powers Act (AFSPA)?

- It is a law which gives armed forces (Army, the Air Force and Central paramilitary forces) the special powers and immunity to maintain public order in “disturbed areas”.
- **When is it applied?** It can be applied only after an area has been declared “disturbed” under section 2 of the act.
- **What is a Disturbed area?** An area can be considered to be disturbed due to differences or disputes among different religious, racial, language or regional groups or castes or communities.
- **Who declares an area as disturbed?** Section (3) of AFSPA empowers the governor of the state/Union territory to issue an official notification declaring the state or a region within as a “disturbed area”, after which the centre can decide whether to send in armed forces.
- **The ‘special powers’ of armed forces under Section 4 are:**
 - **‘Power to use force, including open fire’** at an individual if he violates laws which prohibit (a) the assembly of five or more persons; or (b) carrying of weapons.
 - **‘power to arrest’** without a warrant; (Under section 5 the Armed Forces have to hand over the arrested person to the nearest Police Station “with the **least possible delay**”.
 - **‘power to seize and search’** without any warrant any premise.

These armed forces are immune from prosecution unless Union Government provides sanction to the prosecuting agencies

ENVIRONMENT

EARTH OVERSHOOT DAY

- According to the Global Footprint Network, Earth Overshoot Day has moved up the calendar by two months over the past 20 years to 29 July this year, the earliest date ever.
- Earth Overshoot Day marks the date when humanity's demand for ecological resources (fish and forests, for instance) and services in a given year exceeds what Earth can regenerate in that year.
- **Andrew Simms** originally conceived the concept of Earth Overshoot Day while working at the UK think tank New Economics Foundation.
- **Global Footprint Network** is an international sustainability organization that is helping the world live within the Earth's means and respond to climate change.

THE WORLD RESOURCES REPORT: CREATING A SUSTAINABLE FOOD FUTURE

- A new report titled "The World Resources Report: Creating a Sustainable Food Future" was released. It outlines solutions to ensure a sustainable food system by 2050.
- The report has been produced by World Resources Institute in partnership with the World Bank, UN Environment, UN Development Programme, and the French agricultural research agencies CIRAD and INRA.
- Providing adequate food to 10 billion people by 2050, without destroying the planet, will require closing three gaps:
 - **A 56 % "food gap"** between what was produced in 2010 and food that will be needed in 2050;
 - **A nearly 600 million-hectare "land gap"** between global agricultural land area in 2010 and expected agricultural expansion by 2050; and
 - **An 11-gigaton "greenhouse gas mitigation gap"** between expected emissions from agriculture in 2050 and the level needed to meet the Paris Agreement.
- **World Resources Institute (WRI)** is a global research non-profit organization that was established in 1982. It is headquartered in Washington, D.C.

PM KUSUM

- The Union Ministry of New and Renewable Energy (**MNRE**) issued operational guidelines for the implementation of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM Kusum) Scheme. **The scheme** was first announced in Union Budget 2018-19.
- Kusum Scheme aims to **promote use of solar energy among farmers** by
 - setting up of grid-connected renewable power plants each of 500KW to 2 MW in the rural area;
 - installation of standalone off-grid solar water pumps to fulfil irrigation needs of farmers not connected to grid; and
 - solarization of existing grid-connected agriculture pumps to make farmers independent of grid supply and also sell surplus solar power generated to Discom.

DRAFT NATIONAL RESOURCE EFFICIENCY POLICY

- The Ministry of Environment has proposed a draft National Resource Efficiency Policy 2019 which aims to transform country's waste management sector into a secondary resource recovery sector.
- This will be achieved by setting up a **National Resource Efficiency Authority (NREA)** with a core working group housed in the Ministry of Environment. It's mandate will be implementing resource efficient strategies for material recycling, reuse and land-filling targets for various sectors and set standards for reuse of secondary raw materials.
- NREA would be supported by an **Inter-Ministerial National Resource Efficiency Board** to guide on the aspects critical to its implementation.
- It is also planned to offer tax benefits on recycled materials, green loans to small and medium Enterprises (SMEs) and soft loans to construct waste disposal facilities, apart from setting up Material Recovery Facilities (MRF).

COMPOSITE WATER MANAGEMENT INDEX 2.0

- NITI Aayog has released the 2nd Round of Composite Water Management Index (CWMI 2.0). CWMI 2.0 ranks various states for the reference year 2017-18 as against the base year 2016-17.
- NITI Aayog first launched the Composite Water Management Index in 2018 as a tool to assess and improve the performance of States/ UTs in efficient management of water resources. This has been done by NITI Aayog in partnership with **Ministry of Jal Shakti, Ministry of Rural Development** and all the States/ Union Territories.

Rankings:

- **Gujarat** hold on to its rank one in the reference year (2017-18), followed by Andhra Pradesh, Madhya Pradesh, Goa, Karnataka and Tamil Nadu.
- In North Eastern and Himalayan States, **Himachal Pradesh** has been adjudged number 1 in 2017-18 followed by Uttarakhand, Tripura and Assam.
- The Union Territories have first time submitted their data and **Puducherry** has been declared as the top ranker.
- In terms of incremental change in index (over 2016-17 level), Haryana holds number one position in general States and Uttarakhand ranks at first position amongst North Eastern and Himalayan States.
- On an average, 80% of the states assessed on the Index over the last three years have improved their water management scores, with an average improvement of +5.2 points.

GROUND WATER YEAR BOOK - INDIA 2017-18

- According to latest Ground Water Year Book - India 2017-18, released by Central Groundwater Board (CGWB), India, the world's largest groundwater user, is seeing levels declining across the country.
- India accounts for 12% of global groundwater extraction, pumping some 230 billion cubic metres each year. At this rate, by 2030, nearly 60% of the aquifers will be in a critical state.
- Farmers in Punjab, Haryana and Rajasthan are facing the prospect of having no groundwater left for irrigation by 2025.

PLANT TO CONVERT PLASTIC WASTE INTO DIESEL

- Union Minister for Science and Technology inaugurated a waste plastics to diesel plant in CSIR-Indian Institute of Petroleum (IIP), Dehradun.
- **Technology:** Using the technology, polyolefinic waste can be converted into diesel. This type of waste accounts for about 70 % of total plastic waste in the country and is the least bio-degradable.

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- The technology has been developed by the scientists of the CSIR-IIP, Dehradun under the GAIL's sponsorship. IIP and GAIL have planned to roll out the technology nation-wide after six months of operation of the pilot plant.

DISPUTE RESOLUTION MECHANISM (DRC) FOR SOLAR/WIND SECTOR

- Union Minister of State for Power and New & Renewable Energy (IC) has approved a proposal to set up a three member Dispute Resolution Committee (DRC) for solar/wind sector.
- **Eligibility:** The upper age for the DRC members shall be 70 years. The Committee members of DRC shall be chosen from the eminent persons located in NCR of Delhi so as to avoid expenditure on Air Travel & accommodation.
- **The DRC will consider** all cases of appeal against decisions given by SECI on Extension of Time requests based on terms of contract; all requests of Extension of Time not covered under the terms of contract.
- The recommendations of the DRC along with Ministry of New & Renewable Energy (MNRE) observations, will be placed before Minister (NRE) for final decision.

INDIAN GREY WOLF

- The first Indian grey wolf to be seen in Bangladesh in eight decades has been beaten to death by farmers after preying on their livestock.
- **Scientific Name:** Indian Grey Wolf (*Canis lupus pallipes*) is a subspecies of grey wolf.
- **Distribution:** It has a wide distribution range that extends from the Indian subcontinent to Israel. There are about 3,000 of the animals in India, some in captivity. They disappeared from Bangladesh in the 1940s. According to the IUCN, the Indian grey wolf was last seen in Bangladesh in 1949.
- IUCN status: **Least Concern.**
- India government places it in **Schedule I Part I of the Wildlife (Protection) Act of 1972.**

CORINGA MANGROVES

- The Andhra Pradesh government has begun the process to get UNESCO's World Heritage Site status for Godavari Mangroves at Coringa Wildlife Sanctuary, near Kakinada.
- Coringa Wildlife Sanctuary has the **second largest stretch of mangrove forests** in India with 24 tree species, after Sundarbans. The sanctuary also has an 18-km-long sand pit where **olive ridley sea turtles nest** from January to March every year.

BLACK SOFTSHELL TURTLE

- The Ugratara Temple, in Guwahati, Assam, organised a special darshan of 34 hatchlings of the rare black softshell turtle as these hatchlings will be reintroduced into the wild.
- **Scientific Name:** *Nilssononia nigricans*; **Common name:** Bostami turtle Or Mazari.
- It is a species of freshwater turtle. These turtles are called "softshell" because their shell is light and flexible. This allows them to move more easily in open water.
- IUCN conservation status: **Extinct in the wild.**
- **Distribution:** It is found only in the ponds of some temples in Assam and Bangladesh.

DESERTIFICATION

World Day to Combat Desertification:

- The day is observed every year on June 17 to promote public awareness of international efforts to combat desertification.

- **Theme for this year:** Let's grow the future together.
- This year, the **United Nations Convention to Combat Desertification (UNCCD)** celebrates the **25 years of progress** made by countries on sustainable land management.
- Desertification is the degradation of land in arid, semi-arid and dry sub-humid areas. **Desertification does not refer to the expansion of existing deserts. Goal 15 of the 2030 Agenda for Sustainable Development** states our resolve to halt and reverse land degradation.

Established in 1994, the United Nations to Combat Desertification (UNCCD) is the sole **legally binding international agreement** linking environment and development to sustainable land management. The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found.

The UNCCD is particularly committed to a bottom-up approach, encouraging the participation of local people in combating desertification and land degradation. As the dynamics of land, climate and biodiversity are intimately connected, the UNCCD collaborates closely with the other two Rio Conventions; the Convention on Biological Diversity (**CBD**) and the United Nations Framework Convention on Climate Change (**UNFCCC**), to meet these complex challenges with an integrated approach and the best possible use of natural resources.

Bonn Challenge

- On the occasion, India launched a flagship project, part of a larger international initiative called the Bonn Challenge, to enhance India's capacity for forest landscape restoration (FLR).
- **Bonn Challenge** is a global effort to bring 150 million hectares of the world's deforested and degraded land under restoration by 2020, and 350 million hectares by 2030.
- The flagship project will be **implemented during a pilot phase of three-and-a-half years in the five pilot states of** Haryana, Madhya Pradesh, Maharashtra, Nagaland and Karnataka. This will eventually be scaled up across the country.

Target set:

- Union Environment Minister Prakash Javadekar announced that India has committed to **rejuvenate 50 lakh hectares (5 million) of degraded land between 2021 and 2030.**
- India faces a severe problem of land degradation, or soil becoming unfit for cultivation. About 29% or about 96.4 million hectares are considered degraded.

ASIATIC GOLDEN CAT

- Scientists have discovered that Golden is no longer the only colour the elusive Asiatic golden cat can be associated with. Its coat comes in five other shades in Arunachal Pradesh.
- Scientific name: *Catopuma temminckii*; IUCN Status: **Near threatened.**
- **Distribution:** It is found across eastern Nepal through north-eastern India to Indonesia. Bhutan and China were known to have two morphs of the golden cat — one the colour of cinnamon and the other with markings similar to the ocelot, a small wild cat found in the Americas.

SUSTAINABLE LIVELIHOODS AND ADAPTATION TO CLIMATE CHANGE (SLACC)

- Hyderabad-based National Institute of Rural Development and Panchayati Raj (NIRDPR) has launched a training programme of SLACC to help Rural Poor Farm-based Households adapt to Climate Change and sustain their livelihoods.
- It has been launched under the National Rural Livelihood Mission.
- 638 drought and flood-prone villages of Madhya Pradesh and Bihar are being covered on pilot basis under this first of its kind initiative. It will be scaled up nationwide in due course.

GREEN RATING FOR INTEGRATED HABITAT ASSESSMENT (GRIHA)

- Union Minister Nitin Gadkari addressed the 10th edition of regional GRIHA summit held in Nagpur. The theme of this year's summit is "Transformation Strategies for Built Environment".
- GRIHA is a rating tool to promote green buildings in India that helps people assess the performance of their building against certain nationally acceptable benchmarks.
- It is given by the GRIHA Council, a **not-for-profit society**, jointly setup by The Energy and Resources Institute (TERI) and the Ministry of New and Renewable Energy (MNRE).

FRUIT BAT

- Scientists are examining if the recent case of infection by Nipah virus in Kerala came from a guava he had eaten as the guava itself could have been infected by a fruit bat.
- The Fruit Bat are widely found in South and South East Asia, and are also known as **flying foxes**.
- **Fruit Bat vs Other bats:** Fruit bats locate their food with their sense of smell. On the other hand, insectivorous bats locate their prey through echolocation.
- The Nipah virus is zoonotic — it spreads primarily between animals and humans — and fruit bats are known to spread it.

STATE ROOFTOP SOLAR ATTRACTIVENESS INDEX (SARAL)

- Union Power Minister launched the State Rooftop Solar Attractiveness Index (SARAL) to incentivise rooftop solar by creating healthy competition among the States.
- **Bodies involved:** SARAL has been designed collaboratively by the Ministry of New and Renewable Energy (MNRE), Shakti Sustainable Energy Foundation (SSEF), Associated Chambers of Commerce and Industry of India (ASSOCHAM) and Ernst & Young (EY).
- **Methodology:** The Index evaluates states based on their attractiveness for rooftop development. SARAL currently captures five key aspects (1) Robustness of policy framework, (2) Implementation environment, (3) Investment climate, (4) Consumer experience and (5) Business ecosystem.
- **Rankings:** **Karnataka** has been placed at the first rank in the Index. Telangana, Gujarat and Andhra Pradesh have got 2nd, 3rd and 4th rank respectively.

ILLEGAL TRADE IN TIGER

- A new report by Traffic, an environmental NGO, has quantified the illegal global trade in tigers and tiger parts over a 19-year period between 2000 and 2018.
- Although Tigers are listed in Appendix I of CITES, which bans all commercial international trade for member countries, recent years have revealed an increase in tiger captive breeding to fuel demand for various tiger products.
- Overall, 2,359 tigers were seized from 2000 to 2018 across 32 countries and territories. Apart from live tigers and whole carcasses, tiger parts were seized in various forms such as skin, bones or claws.
- **India is the country with the highest number of seizure incidents (463, or 40% of all seizures) as well as tigers seized (625).**

OCEAN ENERGY

- Minister of New and Renewable Energy has approved a proposal to declare ocean energy as Renewable Energy.
- It has clarified that energy produced using various forms of ocean energy such as tidal, wave and ocean thermal energy conversion will be considered as Renewable Energy.

- It will be eligible for meeting the **non-solar Renewable Purchase Obligations (RPO)**.
- The decision will give a boost to ocean energy in the country.

OCEAN PLASTICS CHARTER

- After subscribing to the Ocean Plastics Charter in 2018, Canada announced that single-use plastics will be banned in the country from 2021.
- Ocean Plastics Charter is a **non-binding charter** which calls on participating countries and the EU to commit to making all plastics reusable, recyclable or recovered by 2030.
- **Members:** Canada, France, Germany, Britain and Italy, along with the European Union, subscribed at last year's G7 summit in Quebec to this new charter.
- **Need of charter:** Each year a million birds and more than 100,000 marine mammals worldwide suffer injury or death by becoming entangled in plastic or ingesting it through the food chain. Single-use items represent some 70 % of the plastic waste littering the marine environment.

FLYGSKAM

- Climate activists have stepped up efforts to convince travellers to boycott air travel, with Swedish schoolgirl **Greta Thunberg** making “flygskam, or flight shame” a buzzword in Scandinavian country.
- According to European Environment Agency figures, the Aviation industry has been under fire over its **carbon emissions, which at 285 g of CO2 emitted per km travelled by a passenger** far exceed all other modes of transport. Road transportation follows at 158 and rail travel is at 14.

GOLDEN LANGUR

- For the first time since it became law in 2005, MGNREGA will have non-human beneficiaries — the rare golden langur in a reserve forest in western Assam's Bongaigaon district to ensure that the golden langurs of the Kakoijana Reserve Forest do not have to risk their lives to find food.
- **Scientific Name:** Trachypitecus geei.
- **Distribution:** The geographic range of golden langurs is limited to Assam, India and neighbouring Bhutan where they live year-round.
- **Conservation Status:** In 2003, they were considered **endangered** by the IUCN Red List, and listed as Appendix I on the CITES website.
- **Chakrashila sanctuary:** Chakrashila is India's first wildlife sanctuary with golden langur as the primary species. Chakrashila has about 600 golden langurs whose population is scattered across western Assam and the foothills of Bhutan.

GROUNDWATER MEETS OCEANS

- Researchers from The Ohio State University in the U.S. have announced the creation of a **global map which shows where groundwater meets oceans – the first such analysis of its kind that may help protect both drinking water and the seas.**
- **Key findings of the map:**
 - Nearly one-half of fresh submarine groundwater discharge flows into the ocean near the tropics.
 - Regions near active fault lines send greater volumes of groundwater into the ocean than regions that are tectonically stable.
- Dry, arid regions have very little groundwater discharge, opening the limited groundwater supplies in those parts of the world to saltwater intrusion.

#SELFIEWITHSAPLING

On the eve of World environment Day, 2019, Union Environment Minister launched a people's campaign #SelfiewithSapling urging all to plant a sapling and post the selfie with the sapling on social media.

World Environment Day (WED):

- **Objective of the day:** World Environment Day is the United Nations day for encouraging worldwide awareness and action to protect our environment.
- **Date of observance:** Every year on 5th of June.
- **Why June 5?** To mark the first day of The United Nations Conference on the Human Environment which was held in Stockholm, Sweden from June 5–16 in 1972.
- **First year of observance of WED:** 1974.
- **The host:** Every World Environment Day has a different host country, where the official celebrations take place. This year's host is China.
- **Theme of this year:** Air pollution.

BLUE WHALE

- A young biologist has recreated a blue whale from the skeletal remains of dead blue whales washed ashore on the Andhra Pradesh coast, replicating its natural anatomy structure.
- **Common Name:** Blue whale; Baleine bleue (Fr); Ballena azul (Sp).
- **Scientific Name:** Balaenoptera musculus.
- **Location:** They are found in all oceans except enclosed seas and the Arctic.
- **Size:** The blue whale is the largest animal ever known to have existed. They can weigh up to 200 tonnes (whereas an adult male African elephant weighs 6 tonnes).
- **Voice:** Blue whales are the loudest animals on earth.
- IUCN Status: **Endangered**; In India, they fall in **Schedule I of Wildlife (Protection) Act, 1972**.

HERACLES INEXPECTATUS

- The remains of a super-sized parrot that stood more than half the height of an average human and roamed the Earth 19 million years ago have been discovered in New Zealand.
- The parrot has been named **Heracles inexpectatus** to reflect its Herculean size and strength and the unexpected nature of the discovery. It is the largest parrot ever discovered. **The flightless birds were at least one metre tall, and weighed up to seven kilograms.**

STUDY TO CHECK ANTIBIOTIC RESISTANCE IN GANGA

- The Union Govt has commissioned a study to assess the microbial diversity along the entire length of Ganga and test if stretches of the river contain microbes that may promote "antibiotic resistance".
- **Duration:** The project is expected to last two years.
- **It is will be undertaken by:** Motilal Nehru Institute of Technology, Allahabad; National Environmental Engineering Research Institute (NEERI), Nagpur; Sardar Patel Institute of Science & Technology, Gorakhpur, as well as start-up companies, Phixgen and Xcelris Labs.
- It will be undertaken under the National Mission for Clean Ganga of Jal Shakti Ministry.

ORCHIDS OF INDIA

Orchids of India: A Pictorial Guide was published recently by the Botanical Survey of India. It is the first comprehensive census of orchids of India. Its Key highlights are:

- The 1,256 species or taxa of orchids belong are found in India. 388 species of orchids are endemic to India of which about one-third (128) endemic species are found in Western Ghats.
- **While north-east India rank at the top in species concentration, the Western Ghats have high endemism of orchids.**
- **The highest number of orchid species is recorded from Arunachal Pradesh** with 612 species, followed by Sikkim 560 species and West Bengal.
- The Himalayan bio geographic zone is the richest in terms of orchid species in India.
- **Categories:** Orchids can be broadly categorised into three life forms: (1) epiphytic, (2) terrestrial and (3) mycoheterotrophic. About 757 species or 60% of all orchids found in the country are epiphytic, 447 are terrestrial and 43 are mycoheterotrophic.

Do you know? The entire orchid family is listed under appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and hence any trade of wild orchid is banned globally.

DRAFT ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

- The Environment Ministry has unveiled a draft ESMF for coastal zone management.
- **Bodies involved:** The draft is part of a **World Bank-funded project** named **ENCORE** (Enhancing Coastal and Ocean Resource Efficiency Program). The document was prepared by the **Society for Integrated Coastal Management**, an Environment Ministry-affiliated body.
- **Background:** So far three coastal States, namely **Gujarat, Odisha and West Bengal**, have prepared Integrated Coastal Zone Management (ICZM) Plans with support from the World Bank. Such plans would be prepared for the selected coastal stretches in other States/UT.
- **The document lays out guidelines for coastal States** to adopt when they approve and regulate projects in coastal zones.
- **The key activities proposed for coastal zone development that consist of investments by States include:** mangrove afforestation/shelter beds, habitat conservation activities such as restoration of sea-grass meadows, rearing/rescue centres for turtles and other marine animals, creation of infrastructure for tourism, beach cleaning and development etc.

PET BOTTLES

- A comprehensive evaluation by the CSIR-Central Food Technological Research Institute (CFTRI), Mysore has determined that PET (Polyethylene Terephthalate) bottles are safe.
- The CFTRI analysis concluded that antimony, arsenic, barium, cadmium, chromium, cobalt, lead, mercury, selenium and zinc “were below” their detection limits (BDL) of 0.001 mg/kg. BPA (bis-phenol A) was below its detection limit of 0.02 mg/kg.
- They were also below the **EU (European Union) regulation norms of the “specific migration limit”**, which is the maximum amount of a substance that can migrate from a food packaging material or food container into food.

BPA (bis-phenol A)?

- BPA is a synthetic organic compound and used in the manufacture of PET bottles.
- But it is now phased out after research found a link between the presence of BPA and the disruption of hormone regulation, as well as breast cancer.

MICROPLASTICS IN THE ARCTIC

- According to a new study published in Science Advances, microplastic particles have been detected in the Arctic and the Alps, carried by the wind and later washed out in the snow.
- **Microplastic particles** are defined as shreds less than five millimeters in length.
- Every year, several million tonnes of plastic litter course through rivers and out to the oceans, where they are gradually broken down into smaller fragments through the motion of waves and the ultraviolet light of the sun.

STUBBLE BURNING

- According to ICAR, India achieved considerable reduction in crop residue burning incidents in 2018 due to implementation of **Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue** in the State of Punjab, Haryana, Uttar Pradesh & NCT of Delhi.
- **What is it?** It is a Central Sector Scheme launched by the Indian Council of Agricultural Research (ICAR) for the period from 2018-19 to 2019-20.
- **Objective:** To tackle air pollution and to subsidize machinery required for in-situ management of crop residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi.
- **Strategy:** Distribution of in-situ crop residue management machinery to the farmers on subsidy, establishment of Custom Hiring Centres (CHCs) of in-situ crop residue management machinery and undertaking Information, Education and Communication (IEC) activities.
- **Achievements under the scheme:** More than 4500 villages in Punjab and Haryana were declared as Zero Stubble Burning Villages during 2018.

VIKRAMSHILA GANGETIC DOLPHIN SANCTUARY (VGDS)

- Ministry of Shipping is safeguarding the population of Ganges River Dolphin in Vikramshila Gangetic Dolphin Sanctuary (VGDS) by restricting the speeds of vessels and blowing sirens and horns.
- **The Vikramshila Gangetic Dolphin Sanctuary (VGDS), from Sultanganj to Kahaliganj on the Ganga in Bihar**, is the only dolphin sanctuary in the country. Experts have pegged the population of the Ganges dolphin in VGDS from 150 to 200.
- **National Waterway-1** connecting Haldia to Varanasi passes through the Vikramshila Gangetic Dolphin Sanctuary (VGDS).

IMPRESSED TORTOISE

- Wildlife experts have discovered the Impressed Tortoise in **Arunachal Pradesh**. This species of tortoise have never been previously sighted in India.
- **Scientific Name:** Manouria Impressa.
- IUCN Redlist status: **Vulnerable**.
- **Distribution:** It occurs in mountainous forest areas in Southeast Asia in Burma, southern China, Thailand, Laos, Vietnam, Cambodia, Malaysia and now has been found in India.
- **Features:** The species has a golden brown shell and skin. Adults are much smaller than their relatives the Asian forest tortoise (Manouria emys).

TAMIZH MARAVAN

- Tamil Nadu has officially designated Tamil yeoman as its '**State Butterfly**.'
- Tamil yeoman or the 'Tamizh Maravan' is a species of nymphalid butterfly.
- **Scientific name:** Cirrochroa thais.

- **Distribution:** It is found in found in the Western Ghats of India and Sri Lanka.
- With the recent decision, Tamil Nadu has become the **fifth state in the country to declare its state butterfly**. Maharashtra was first to declare Blue Mormon as its state butterfly, followed by Uttarakhand (Common peacock), Karnataka (Southern bird wings) and Kerala (Malabar banded peacock).

SPECIAL RHINO PROTECTION FORCE (SRPF)

- A Special Rhino Protection Force (SRPF) has been deployed in the Kaziranga National Park (KNP) to control rhino poaching as well as tiger poaching since Kaziranga is also a tiger reserve.
- The Assam government would be paying the salaries of the SRPF members and the amount would be reimbursed by the **National Tiger Conservation Authority (NTCA)**, which recommended setting up of the special force.
- KNP houses the largest population of One Horned Rhinoceros in the world and has about 68% of the entire world population of One-horned Rhinoceros.

WHALING

- Japanese whalers brought back two minke whales to the northern Japanese port of Kushiro. It was the first commercial hunt since 1988, when after commercial whaling was banned by the **International Whaling Commission (IWC)**.
- **History:** IWC was set up under the **International Convention for the Regulation of Whaling (ICRW)** which was signed in Washington DC in 1946.
- **Objective:** To provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry.
- **HQ:** Impington, near Cambridge, England.
- **Ban:** In 1982 the IWC adopted a moratorium on **commercial whaling (Whale Hunting)**. However, it **allows non-zero whaling quotas for aboriginal subsistence and also member nations may issue 'Scientific Permits' to their citizens**.

WORKING ON A WARMER PLANET

The International Labour Organization (ILO) recently released a report titled “Working on a Warmer Planet - The Impact of Heat Stress on Labour Productivity and Decent Work..” **Key Highlights of the Report are:**

- Heat stress is defined as generally above 35 degrees Celsius, in places with high humidity.
- India is projected to lose 5.8 per cent of working hours in 2030 due to global warming, particularly impacting agriculture and construction sectors. In absolute terms, India is expected to lose the equivalent of 34 million full-time jobs in 2030 in productivity.
- Working hours will be lost because it is too hot to work or because workers work at a slower pace.

EARTH ALLIANCE

- Hollywood actor Leonardo DiCaprio is joining with billionaire investors and philanthropists Laurene Powell Jobs and Brian Sheth to create Earth Alliance.
- As a non-profit environmental organization, it will work globally to protect ecosystems and wildlife, ensure climate justice, support renewable energy and secure indigenous rights to the benefit of all life on Earth.”
- **Working:** It will provide grants, educational opportunities and fund campaigns and films, as well as work with grassroots organizations and individuals in places most affected by biodiversity loss and climate change.

ARCTIC FOX

- The journey of a young arctic fox, which trekked more than 2,175 miles from Norway to Canada in just 76 days, has stunned researchers and shed new light on the movement of the species over vast distances of sea ice.
- **Common Name:** Arctic Fox, coastal fox, blue fox, polar fox and snow fox.
- **Scientific Name:** *Vulpes lagopus*.
- IUCN Red List Status: **Least concern**.
- It is native to the Arctic regions of Northern Hemisphere and common throughout the Arctic tundra biome.

DESERT LOCUST

- Union Minister for Agriculture & Farmers informed Lok Sabha that till date, there is no evidence of crop damages by desert locust.
- Desert Locust is one of about a dozen species of **short-horned grasshoppers (Acridoidea)** that are known to change their behavior and form swarms of adults or bands of hoppers (wingless nymphs).
- The swarms that form can be dense and highly mobile.
- The Latin name for Desert Locust is *Schistocerca gregaria* (Forsk.)

ELEKTORORNIS CHENGUANGI

- *Elektorornis chenguangi* – an extinct small bird which lived 99 million years ago, with a weird elongated toe – has been described in a study published in the journal Current Biology.
- In 2014, the fossil of *Elektorornis chenguangi* were discovered in Myanmar's Hukawng Valley.
- **Its elongated toe structure has never been observed in other birds, living or extinct.** *Elektorornis chenguangi* may have used the long, sensitive digit to probe cracks in trees for insects and grubs.

LESSER FLORICAN; GREAT INDIAN BUSTARD

The Supreme Court has constituted a high powered committee to frame an emergency response plan for the protection of Great Indian Bustard and the Lesser Florican.

Lesser florican:

- **Scientific Name:** *Sypheotides indicus*.
- **Distribution:** It is endemic to India.
- IUCN Status: **Endangered**.
- **Weight:** It is the smallest bustard in the world, barely weighing 500-750 gms.

Great Indian Bustard:

- **Scientific Name:** *Ardeotis nigriceps*.
- **Distribution:** Today, its population is confined mostly to **Rajasthan and Gujarat**. Small population also occur in **Maharashtra, Karnataka and Andhra Pradesh**. It is the **State bird of Rajasthan**.
- **Conservation status:**
 - Listed in Schedule I of the Indian Wildlife (Protection) Act, 1972,
 - Listed in Appendix I of CITES,
 - Listed as **Critically Endangered** on the IUCN Red List

DRACAENA CAMBODIANA

- Researchers have discovered *Dracaena cambodiana*, a dragon tree species in the Dongka Sarpo area of West Karbi Anglong in Assam.
- This plant yields dragon's blood — a bright red resin used since ancient times as medicine, body oil, varnish, incense and dye. Sap of this plant turns bright red after coming in contact with air.
- This is for the first time that a dragon tree species has been reported from India.

ALL INDIA TIGER ESTIMATION – 2018

PM Modi released the results of the fourth cycle of All India Tiger Estimation - 2018. Data was collected using an Android based application- M-STripES (Monitoring system for Tigers' Intensive Protection and Ecological Status). **Key Findings are:**

- The count of tigers in India has risen to 2967, in 2018, according to this census.
- The 33% rise in tiger numbers is the highest ever recorded between cycles which stood at 21% between 2006 to 2010 and 30% between 2010 and 2014.
- **Madhya Pradesh** saw the highest number of tigers at 526, closely followed by **Karnataka** at 524 with **Uttarakhand** at number 3 with 442 tigers.
- **Chhatisgarh and Mizoram** saw a decline in their tiger numbers while tiger's numbers in Odisha remained constant. All other States witnessed a positive trend.
- At the landscape level, all 5 landscapes showed an increase with the Central Indian landscape recording the highest increment.
- India achieved its commitment to the **St. Petersburg Declaration**, of doubling Tiger population, much in advance to the 2022 deadline.

4TH CYCLE OF MEETR

- PM Modi released report of the 4th cycle of the Management Effectiveness Evaluation of Tiger Reserves (MEETR).
- **Pench Tiger Reserve**, Madhya Pradesh scored the highest and Sathyamangalam Tiger Reserve, Tamil Nadu showed the highest increment in management since the last cycle.
- 42% of the tiger reserves fell in the Very Good management category, 34% in the Good category, 24% in the Fair category while no tiger reserve was rated Poor.
- In the last five years, there has been an increase in the "protected areas." In 2014, there were 692 protected areas, which increased to more than 860 in 2019. The "Community Reserves" have also grown from 43 in 2014 to more than 100 now.

IPCC REPORT: LAND AND CLIMATE CHANGE

- A new report by the Intergovernmental Panel on Climate Change (IPCC) presents the evidence on how the different uses of land are affecting and getting affected by climate change. This is the first time that IPCC has focused solely on the land sector.
- Agriculture, forestry and other types of land use account for 23% of human greenhouse gas emissions. At the same time natural land processes absorb carbon dioxide equivalent to almost a third of carbon dioxide emissions from fossil fuels and industry.
- **Food Security:** Climate change is affecting all four pillars of food security: availability (yield and production), access (prices and ability to obtain food), utilization (nutrition and cooking), and stability (disruptions to availability).

NEMATODES

- The first global analysis of nematodes was published in the journal Nature. Nematodes are roundworms and their size can vary from a tiny 0.2 millimetre to a few metres.
- **Key findings:**
 - There are about 57 billion nematodes for every human being on Earth.
 - Their total biomass comes to around 300 million tonnes which is about 80% of the combined weight of Earth's humans.
 - They are responsible for 2.2% of the total carbon emission from soils.
 - At 38% of the total, sub-Arctic regions have the highest abundance of nematodes.

TARDIGRADES

- An Israeli spacecraft called Beresheet crashed onto the Moon in April. Now it's been revealed that the mission was carrying a cargo of dehydrated microscopic lifeforms known as tardigrades. It was reported that they may still be alive.
- Tardigrades are colloquially known as **water bears or moss piglets**. They are a phylum of water-dwelling eight-legged segmented micro-animals.
- **Physical description:** Tardigrades are usually about 0.5 mm (0.02 in) long when fully grown. They are short and plump, with four pairs of legs, each ending in claws (usually 4 to 8) or sucking disks.
- **Distribution:** They have been found everywhere, from mountain tops to the deep sea and mud volcanoes, from tropical rain forests to the Antarctic. Tardigrades are among the most resilient animals known.

CLOUDED LEOPARDS

- A recent research paper published on clouded leopards by 20 researchers from the world has helped understanding their habitats and migration corridors.
- **Sub Species:** Classically considered a single species, the Clouded Leopard has recently been split into two species.
 - **Neofelis Nebulosi:** It is restricted to mainland Southeast Asia.
 - **Neofelis Diardi:** It is found on the islands of Sumatra and Borneo.
- **Physical Description:**
 - It is named after the distinctive 'clouds' on its coat - ellipses partially edged in black, with the insides a darker colour than the background colour of the pelt.
 - It has short legs and broad paws which make it excellent at climbing trees.
- **Range:** Historically, their range covered most of Southeast Asia from Nepal & southern China through Thailand, Indonesia, and Borneo. In India, it occurs in north-east and West Bengal. It is the state animal of **Meghalaya**. **Dampa tiger reserve in Mizoram** has one of the highest population densities.
- Conservation status: Both the species are listed as **Vulnerable** in IUCN red list.
- In 2018, India added clouded leopards to its Recovery Programme for Critically Endangered Species to aid more research and strengthen conservation efforts.

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

- The Eighteenth Conference of the Parties (CoP18) of the CITES was recently held in Geneva. CITES is as an international agreement aimed at ensuring “that international trade in specimens of wild animals and plants does not threaten their survival”.
- The text of the Convention was agreed in Washington, DC, in 1973 and entered into force in 1975. Thus, the convention is sometimes referred to as the Washington Convention. The convention has 183 parties and is **legally binding** on the Parties.

CITES Appendix:

- **Appendix I** includes species “threatened with extinction”. Trade in specimens of these species is permitted only in exceptional circumstances.
- **Appendix II** provides a lower level of protection.
- **Appendix III** contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

Key Highlights of COP18, CITES:

- It was decided to move the **smooth-coated otter (*Lutrogale perspicillata*)** from CITES Appendix II to CITES Appendix I. Smooth-coated otter numbers in the wild had fallen by at least 30% over the past 30 years.
- **The Tokay gecko (*Gekko gecko*)** will be included in CITES Appendix II.
- The Indian star tortoise, smooth-coated otters and Asian small-clawed otters was upgraded to CITES Appendix I.

BANGKOK DECLARATION

- **The Bangkok Declaration on Combating Marine Debris in ASEAN Region** was adopted by leaders of the 10-member Association of Southeast Asian Nations (ASEAN), to “strengthen national laws and regulations as well as enhance regional and international cooperation” to prevent and significantly reduce marine debris.
- Neither the declaration nor its accompanying Framework of Action specifically mention **bans on single-use plastic or imports of foreign waste**, as environmental groups previously demanded ahead of the summit.

WMO ARCHIVE OF WEATHER AND CLIMATE EXTREMES

- The United Nations’ World Meteorological Organization (WMO) has officially evaluated temperature record extremes at Mitribah, Kuwait, as 53.9 °C (± 0.1 °C margin of uncertainty) and the Turbat Pakistan as 53.7 °C (± 0.4 °C).
- **The Mitribah, Kuwait temperature is now accepted by the WMO as the highest temperature ever recorded for the continental region of Asia.**
- According to the Weather and Climate Extremes archive, the hottest temperature ever recorded was in Furnace Creek, Death Valley, California at 56.7°C on 10 July 1913.



World Meteorological Organization (WMO)

- **What is it?** WMO is the specialised agency of the United Nations for meteorology (weather and climate), operational hydrology and related geophysical sciences.

- **Membership:** 193 Member States and Territories; **Secretariat:** Geneva.
- **Background:** It was established by the ratification of the WMO Convention in 1950.

ADRATIKLIT BOULAHFA

- Scientists from the London's Natural History Museum (NHM) have described Adratiklit boulahfa, a new species of stegosaurus. It is dated to 168 million years ago, which makes it the **oldest known member of that group of dinosaurs** ever known.
- It is also the first stegosaurus to be found in North Africa. Its remains were discovered in the Middle Atlas mountains of Morocco.
- **Genus:** The scientists believe it is not only a new species but also belongs to a new genus. Adratiklit's closest relatives is the European stegosaurus Dacentrurus.
- **Name:** The name is derived from the words used by the Berber (an ethnic group indigenous to North Africa) for mountains (Adras), lizard (tiklit) and the area where the specimen was found (Boulahfa).

MICROPLASTICS IN DRINKING WATER

The WHO released its first report into the effects of microplastics on human health.

What are microplastics (view of WHO)?

- As a category, microplastics encompass a wide range of materials composed of different substances, with different densities, chemical compositions, shapes and sizes.
- There is no scientifically-agreed definition of microplastics, although they are frequently defined as plastic particles < 5 mm in length. A subset of microplastics < 1 µm in length are often referred to as nanoplastics.

Key findings of WHO report:

- The level of microplastics in drinking water is not yet a health risk for humans.
- Microplastics larger than 150 micrometres are not likely to be absorbed by the human body but the chance of absorbing very small microplastic particles, including nano-sized plastics, could be higher.

JAL SHAKTI ABHIYAN

- With rampant water scarcity in the spotlight, Union Jal Shakti Minister announced the commencement of the Jal Shakti Abhiyan.
- Jal Shakti Abhiyan is a campaign for water conservation and water security. The focus of the campaign will be on water stressed districts and blocks.
- **Timeline:**
 - The campaign will run through citizen participation during the monsoon season, from 1st July, 2019 to 15th September, 2019.
 - An additional Phase 2 will be run from 1st October, 2019 to 30th November, 2019 for States receiving the North East retreating monsoons.
- **Bodies involved:** The campaign is a collaborative effort of various Ministries of the Govt of India and State Governments, being coordinated by the Department of Drinking Water and Sanitation (DDWS).
- **Primary Strategy:** Government will implement the following **five important water conservation interventions** in water stressed blocks –
 - water conservation and rainwater harvesting,
 - renovation of traditional and other water bodies/tanks,

- reuse of water and recharging of structures,
- watershed development and
- intensive afforestation.
- According to Jal Shakti Minister, there is no additional funding or specific targets for the campaign to achieve. Instead, the campaign is meant to “bring sensitivity on the subject, and give focussed approach”.

INDIA STATE OF FOREST REPORT 2019

Union Environment Minister released the India State of Forest Report 2019, a biennial report by the Forest Survey of India (FSI) which assesses the country's forest resources. **Key findings are:**

- The total tree and forest cover in the country has increased by 5,188 square kilometres in the last two years which includes an increase of 3,976 sq. km (0.56 per cent) of forest cover and 1,212 sq. km (1.29 per cent) of tree cover.
- The total tree and forest cover is 25 % of the geographical area of the country.
- Karnataka tops the list of states followed by Andhra Pradesh and Kerala in terms of increase in forest cover.
- Forest cover in the hill districts of the country is 2,84,006 sq. km, which is 40.30% of the total geographical area of these districts. The current assessment shows an increase of 544 sq. km (0.19 per cent) in 140 hill districts of the country.
- There has been a decrease of forest cover to the extent of 765 sq. km (0.45%) in the north-east region. Except Assam and Tripura, all states in the region show a decrease in the forest cover.

CARBON STOCK IN INDIAN FORESTS (not including tree cover)

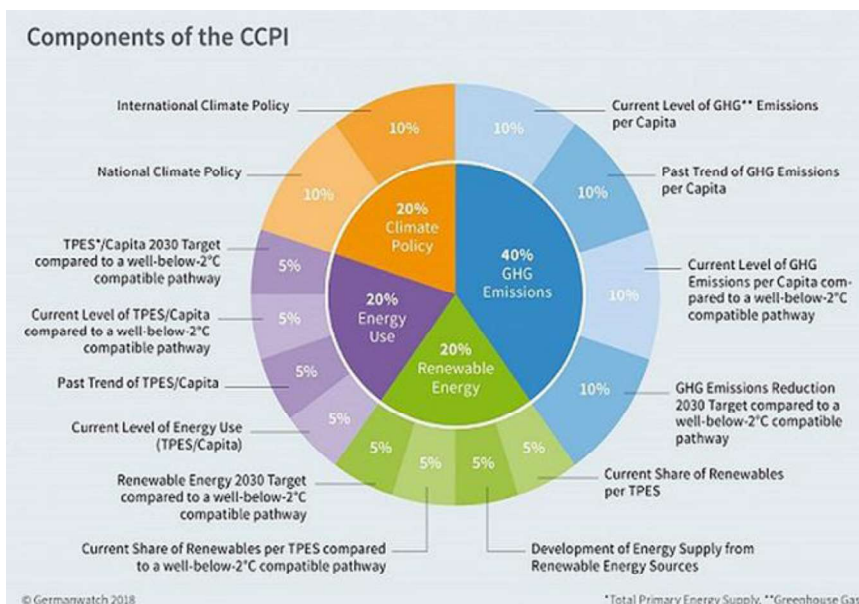
Year	Carbon stock (in mn tonnes)
2005	6,621.5
2013	6,941
2017	7,082
2019	7,124

Forest Survey of India (FSI), founded in 1981 and headquartered at Dehradun, Uttarakhand, is an organisation under union Ministry of Environment for conducting forest surveys.

CLIMATE CHANGE PERFORMANCE INDEX (CCPI)

2019 Climate Change Performance Index (CCPI) was jointly released by Germanwatch, NewClimate Institute and Climate Action Network at the COP25 climate summit in Spanish capital Madrid. **Key Findings are:**

- **India for the first time ranks among the top 10 in CCPI.** India was ranked 9th in the high category showing that emissions are still comparatively low.
- As none of the countries assessed is already on a path compatible with the Paris climate targets, the first three places of the ranking remain unoccupied.
- Sweden (4th) and Denmark (5th) achieved overall high or very high ratings.



- While only two G20 countries, the UK (7th) and India (9th), are ranked in the high category, eight G20 countries are remaining in the worst category of the index. Australia (56th out of 61), Saudi Arabia and above all the US perform particularly poor.
- China, the largest global emitter slightly improves its ranking in the index to 30th place.

GLOBAL SULPHUR CAP COMPLIANT FUEL OIL

- Minister of Shipping has taken steps to clear the uncertainty of the Shipping industry arising out of IMO regulations to reduce the level of sulphur oxide emissions.
- International Maritime Organization (IMO) regulations to reduce sulphur oxides (SOx) emissions from ships first came into force in 2005, under Annex VI of the **International Convention for the Prevention of Pollution from Ships (known as the MARPOL Convention)**.
- Since then, the limits on sulphur oxides have been progressively tightened. **From 1 January 2020, the limit for sulphur in fuel oil used on board ships operating outside designated emission control areas will be reduced to 0.50% m/m.**
- This will significantly reduce the amount of sulphur oxides emanating from ships and should have major health and environmental benefits for the world, particularly for populations living close to ports and coasts.

ATAL JAL

- The Union Cabinet has given its approval for the implementation of the Atal Bhujal Yojana (ATAL JAL), a Central Sector Scheme.
- **Objective:** To improve ground water management through community participation in identified priority areas in seven States, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.
- **Implementation Period:** of 5 years (2020-21 to 2024-25).
- **Funding:** Out of the total outlay of Rs. 6000 crore, 50% shall be in the form of World Bank loan, and remaining 50% shall be through Central Assistance from regular budgetary support. The entire amount shall be passed on to the States as Grants.
- **Implementing body:** The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti.

ATAL JAL has two major components:

1. **Institutional Strengthening and Capacity Building** for sustainable ground water management in the States including improving monitoring networks, capacity building, strengthening of Water User Associations, etc.
2. **Incentivising the States** for achievements in improved groundwater management practices namely, data dissemination, preparation of water security plans etc.

JAL JEEVAN MISSION (JJM)

- The Prime Minister released the Operational Guidelines of Jal Jeevan mission (JJM).
- **Aim:** The Union Cabinet on 13.08.2019 approved Jal Jeevan Mission (JJM) to provide Functional Household Tap Connection (FHTC) to every rural household by 2024.
- **Target:** JJM aims at providing potable water in adequate quantity i.e. 55 litre per capita per day (lpcd) of prescribed quality i.e. BIS Standard of IS: 10500 on regular basis.
- **Strategy:** by time bound completion of schemes taken up under National Rural Drinking Water Programme (NRDWP).

For its implementation, following institutional arrangement is proposed:

- National Jal Jeevan Mission at the Central level;
 - State Water and Sanitation Mission (SWSM) at State level;
 - District Water and Sanitation Mission (DWSM) at district level; and
 - Gram Panchayat and/ or its sub-committees i.e. Village Water Sanitation Committee (VWSC)/ Paani Samiti at village Level.
- **Funding:** The fund sharing pattern is 90:10 for Himalayan and North-Eastern States; 50:50 for other States and 100% for UTs. The fund released by Centre to the State is to be deposited in one Single Nodal Account (SNA) that will be maintained by SWSM along with State matching share to be transferred within 15 days of Central release.

COP25

- International climate talks at COP25 closed with no deal on carbon markets. The negotiators postponed until next year a key decision on global carbon markets.
- The 2019 United Nations Climate Change Conference, also known as COP25, was the 25th United Nations Climate Change conference. It was held in Madrid, Spain, from 2 to 13 December 2019 under the presidency of the Chilean government.
- The conference incorporates the 25th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the 15th meeting of the parties for the Kyoto Protocol (CMP15), and the second meeting of the parties for the Paris Agreement (CMA2).

Article 6 Of Paris Agreement (Carbon Markets):

- Provisions relating to setting up a new carbon market are described in Article 6 of Paris Agreement. These provisions allow for two different approaches of carbon trading.
- **Article 6.2** enables bilateral arrangements for transfer of emissions reductions, while ensuring that they do not double-count the reductions. Article 6.4 talks about a wider carbon market in which reductions can be bought and sold by anyone.
- **Article 6.8** provides for making 'non-market approaches' available to countries to achieve targets. They could include any cooperative action, like collaboration on climate policy or common taxation, that are not market-based.
- The disagreement is over the transition of unsold carbon credits from the Kyoto regime to the new market. Countries like India and China want their unsold carbon credits to be valid in the new market while the developed countries are opposing it on the ground that many of these credits were bogus and did not represent actual emission reductions.

Carbon markets?

- Carbon markets allow the buying and selling of emission reductions in the form of carbon credits, and enable countries struggling to meet their climate targets to buy these credits from countries that are in a position to reduce their emissions beyond their own targets.
- Such a carbon market existed under the 1997 Kyoto Protocol as well but that regime is coming to an end next year. The current negotiations are about creating a similar market under the successor Paris Agreement regime.

GLOBAL CARBON BUDGET 2019

Global Carbon project released the Global Carbon Budget for 2019. **Key highlights are:**

- **Global CO₂ emissions from fossil fuels and industry** have increased every decade from an average of 11.4 GtCO₂ in the 1960s to an average of 34.7±2 yr-
- **Regional fossil fuel emissions:** In 2018, global CO₂ emissions were dominated by emissions from China (28%), the USA (15%), the EU (28-member states; 9%) and India (7%). Growth rates of these countries from 2017 to 2018 were +2.3% for China, +2.8% for the USA, -2.1% for the EU28, and +8.0% for India.
- **Net CO₂ emissions from deforestation and other land-use change** were 5.5±2.7 GtCO₂ on average during 2009-2018, accounting for about 14% of all emissions from human activity (fossil fuel, industry, land use change).
- **CO₂ removals by natural sinks:** Of the total emissions from human activities during 2009-2018, 45% accumulated in the atmosphere, 23% in the ocean and 29% on land.
- **Atmospheric CO₂ concentration in 2019** are 47% above pre-industrial levels.
- **The cumulative carbon emissions** are the sum of the total CO₂ emitted during a given period of time. Total cumulative emissions from 1850 to 2019 were 1649 GtCO₂ from fossil fuels and industry, and 751 GtCO₂ from land use change.

The Global Carbon Project?

- The Global Carbon Project is an organization and a Global Research Project of Future Earth and a research partner of the World Climate Research Programme.
- It was established in 2001 to fully understand the carbon cycle. Its projects include global budgets for three dominant greenhouse gases — carbon dioxide, methane, and nitrous oxide. It publishes **Global Carbon Budget and Global Carbon Atlas**.

OPERATION 'CLEAN ART'

- Wildlife Crime Control Bureau (WCCB) conducted Operation Clean Art, the first pan India operation to crack down on the smuggling of mongoose hair.
- There are six species of mongoose found in India. The mongoose is listed under Schedule II of the Wildlife Protection Act, 1972 - making its hunting, possession, transportation and trade a punishable offence.
- Mongoose hair is in high demand among artists worldwide because of the quality of brushes they help create, which define lines clearly and hold paint properly.

Wildlife Crime Control Bureau is a statutory body headquartered in Delhi under the Union Ministry of Environment and Forests. Under Section 38 (Z) of the Wild Life (Protection) Act, 1972, it is mandated to collect intelligence related to organized wildlife crime.

TORREFACTION TECHNOLOGY

- To find a solution to the issue of Pollution from stubble burning in winter, India is testing a Swedish technology — torrefaction that can convert rice stubble into 'bio-coal'.
- The torrefaction technology involves heating up straw, grass, saw mill residue and wood biomass to 250 degrees Celsius - 350 degrees Celsius.
- This changes the elements of the biomass into 'coal-like' pellets. These pellets can be used for combustion along with coal for industrial applications like steel and cement production. So far, the technology has only been substantially tested in Scandivia as a 16,000 ton/year plant.
- The Office of the Principal Scientific Advisor (PSA) to Government of India has funded a pilot project in Punjab to evaluate the feasibility of the Torrefaction technology.

HEALTH AND POLLUTION

The Global Alliance on Health and Pollution (GAHP) released The 2019 Pollution and Health Metrics: Global, Regional and Country Analysis report. **Key findings are:**

- In 2017, pollution was responsible for 15% of all deaths globally, and 275 million Disability-Adjusted Life Years.
- India had most deaths — about 2.3 million — caused by pollution in 2017. India is followed by China in the number of pollution deaths, with about 1.8 million.
- Chad tops the list of countries with the most pollution-related deaths in proportion to their population, whereas India is at number 10 with 174 deaths for every 1,00,000 people.

Global Alliance on Health and Pollution (GAHP) is a collaborative body made up of more than 60 members. it is incorporated as a foundation in Geneva, Switzerland. It was formed in 2012 by the World Bank, the European Commission, UN Environment, the Ministries of Environment and Ministries of Health of more than 25 low- and middle-income countries.

WILDLIFE CRIMES

- The Union Ministry of Environment informed parliament about the wildlife crimes.
- In 2018, 388 cases of wildlife-related crimes were registered under the Wildlife Protection Act. Overall, the number of cases of wildlife crime has come down since 2016, when 565 were registered, and risen slightly since 2017, when 342 were registered.
- In nearly one in every three cases —123 of the 388 — the species involved was leopards or tigers. Leopards alone accounted for over one in five cases, at 81.

Indian leopard (Scientific Name: Panthera pardus)

- **Melanism:** Melanism is a common occurrence in leopards, wherein the entire skin of the animal is black in colour, including its spots. A melanistic leopard is often called black **panther or jaguar**, and mistakenly thought to be a different species.
- **Habitat:** In India, the leopard is found in all forest types, from tropical rainforests to temperate deciduous and alpine coniferous forests. It is also found in dry scrubs and grasslands, the only exception being desert and the mangroves of Sundarbans.
- **Conservation Status:** Listed on a par with Tigers under Schedule 1 of the Wildlife Protection Act (WPA), 1972; Listed in Appendix I of CITES; Listed as Vulnerable on the IUCN Red List.

TRACHISCHIUM APTEII

- Researchers have discovered a new species of non-venomous burrowing snake, named Trachischium apteii, in Tally Valley Wildlife Sanctuary in Arunachal Pradesh.
- Trachischium are commonly called slender snakes. Seven species are distributed across the Himalayas, and the Indo-Burma and Indo-China regions.
- Trachischium apteii was named so to honour the contribution of Deepak Apte, noted marine biologist and Director of the BNHS.

PEREGRINE FALCON

- According to the study, published in the Journal of Experimental Biology, the peregrine falcon has the fastest vision in the animal kingdom, registering 129 Hz (blinks per second). In comparison, humans see up to a maximum of 50 to 60 blinks per second.
- **Scientific name:** Falco peregrinus; **Common name:** Peregrine Falcon, peregrine.

- **Family:** It is a widespread bird of prey (raptor) in the family Falconidae.
- **Speed:** The Peregrine is renowned for its speed, reaching over 320 km/h (200 mph) during its characteristic hunting stoop (high-speed dive), making it the fastest bird in the world and the fastest member of the animal kingdom.
- **Range:** It can be found nearly everywhere on Earth, except extreme polar regions, very high mountains, and most tropical rainforests. **IUCN Red List status:** Least Concern.

UNCCD COP14

- **The 14th Conference of Parties, COP14, to the UN Convention to Combat Desertification was held in Greater Noida.**
- **United Nations Convention To Combat Desertification (UNCCD)** is the first and only internationally legally binding framework set up to combat desertification and mitigate the effects of drought and desertification. **Secretariat location:** Bonn, Germany.
- **Timeline:**
 - **1992:** Rio conference of 1992 resulted in 5 documents. One of them was Agenda 21. UNCCD (United Nations Convention to Combat Desertification) stems from a direct recommendation of agenda 21.
 - **1994:** UNCCD was finally adopted in Paris, France on June 17, 1994. That's why June 17 has been observed as the 'World Day to Combat Desertification (WDCD)'. It was ratified in December 1996.
- **Conference of the Parties (COP):** It is the supreme decision-making body. It reviews the implementation of the Convention. It meets on a biannual basis.

Delhi Declaration:

- **COP14 to UNCCD concluded in Greater Noida with member countries adopting the Delhi Declaration.**
- **Countries committed to achieve Land Degradation Neutrality (LDN) by 2030.** Such neutrality is defined by the UN as ensuring that enough land is available across the world to ensure a sustainable future.
- It calls for implementing the UN Ecosystem Restoration (2021-2030) program.
- It takes note of the launch of the **Peace Forest Initiative** and its potential contribution to increasing cooperation on land degradation neutrality.

Commitments made by India:

- PM Modi announced that between now and 2030, **India will raise target of restoring land with degraded status from 21 million hectares to 26 million by 2030.**
- India will setup a **global technical support institute at the Indian Council for Forest Research and Education for the member countries of the UNCCD** for their capacity building and support regarding the Land Degradation Neutrality Target Setting Program.

Drought Toolbox:

- **Drought Toolbox was officially launched during the COP14.** It can be used by countries to assess drought risks in their regions much in advance. It can accurately evaluate the vulnerability of different geographic regions to drought.
- The toolbox uses 30 parameters, including soil moisture, rainfall data and temperature data of the present and past. The framework for the toolkit includes three key aspects: (1) 'Monitoring and Early Warning' system, (2) 'Vulnerability and Risk Assessment' and (3) 'Risk Mitigation Measures'.

4P1000 INITIATIVE & TICD

- On the sidelines of COP 14 of UNCCD, TRIFED and Union Tribal Ministry launched TICD (TRIFED's Initiative to Combat Desertification) under "The 4P1000 Initiative: The Tribal Perspective through Bamboonomics."
- TRIFED, by partnering with the German Cooperation (GIZ), will involve the tribal community under its Pradhan Mantri Van Dhan Yojna (PMVDY) for rehabilitating the degraded land while supplementing the income of tribal community.

4P1000?

- The 4P1000 Initiative: The international initiative "4per1000", launched by France in 2015 at the COP 21, consists of federating all voluntary stakeholders of the public and private sectors under the framework of the Lima-Paris Action Plan (LPAP).
- The aim of the initiative is to demonstrate that an annual growth rate of 0.4% in the soil carbon stocks, in the first 30-40 cm of agricultural soil, would significantly reduce the CO₂ concentration in the atmosphere related to human activities.
- The Executive Secretariat of the "4 per 1000" initiative is hosted by the CGIAR System Organization, an international organization based in Montpellier.

UN CLIMATE ACTION SUMMIT, NEW YORK

Governments and private sector leaders have unveiled initiatives aimed at reducing planet-warming emissions at the UN Climate Action Summit in New York. Key pledges made were:

- **The Climate Investment Platform** was officially announced. It will seek to directly mobilize US\$ 1 trillion in clean energy investment by 2025 in 20 Least Developed Countries in its first year.
- **The "Three % Club"**, a coalition of countries and businesses will work to drive a three % annual global increase in energy efficiency.
- **The Cool Coalition** will set ambitious national cooling targets for its members with the potential to avoid 1 degree of warming by 2050.
- **65 countries** and major sub-national economies such as California committed to cut greenhouse gas emissions to net zero by 2050.
- **India** pledged to increase renewable energy capacity to 175GW by 2022 and committed to further increasing to 450GW, and announced that 80 countries have joined the International Solar Alliance.
- **Russia** announced that they will ratify the Paris Agreement, bringing the total number of countries that have joined the Agreement to 187.

GANDHI SOLAR PARK

- **PM Modi along with others world leaders inaugurated the Gandhi Solar Park at the United Nations (UN) headquarters on the occasion of Gandhi's 150th birth anniversary.**
- The 50 kWh roof-top solar park has 193 solar panels—each representing a member of the multilateral body. The \$1 million gift to the UN comes at a time when India has emerged as a clean energy champion.

WIND AUGMENTATION PURIFYING UNIT (WAYU)

- **Union Environment Ministry said that Roadside air purifiers (WAYU) have failed to address air pollution at traffic intersections and dense traffic zones in Delhi.**

VAJIRAM & RAVI

- **Developers:** The National Environmental Engineering Research Institute (NEERI), a Nagpur-based laboratory of the Council of Scientific and Industrial Research (CSIR), had developed WAYU to address air pollution at traffic intersections and dense traffic zones.
- **Timeline:** Prototypes of the device were first unveiled in September 2018.
- **Working:** It comprises a fan that sucks in air and sieves out dust and particulate matter using three filters of varying sizes. The air then moves into another chamber where carbon monoxide and hydrocarbons are oxidised into the less harmful carbon dioxide using activated carbon coated with titanium dioxide. The purified air is then released.
- **Features:** Developers of WAYU claimed that the devices could reduce PM10 values from 600 micrograms per cubic metre (ug/m³) to 100 ug/m³; and PM2.5 values from 300 ug/m³ to 60 ug/m³ in 30 minutes.

MIHIR SHAH COMMITTEE

- **The Union Water Resources Ministry has formed a committee chaired by Mihir Shah to draft a new National Water Policy (NWP).**
- **National Water Policy (NWP)** currently in force was drafted in 2012.
 - It introduced the concept of an **Integrated Water Resources Management** approach that took the “river basin/ sub-basin” as a unit for planning, development and management of water resources.
 - It also proposed that a portion of river flows ought to be kept aside to meet ecological needs.
 - It also stressed for a minimum quantity of potable water for essential health and hygiene to all its citizens to be made available within easy reach of households.

WASTELANDS ATLAS – 2019

- **The Union Minister for Agriculture released the Wastelands Atlas – 2019.**
- The Department of Land Resources in collaboration with National Remote Sensing Centre (NRSC), Department of Space has published Wastelands Atlases of India - 2000, 2005, 2010 & 2011 editions. The new wastelands mapping exercise is fifth in the series.
- It estimated the spatial extent of wastelands for entire country to the tune of 55.76 Mha (16.96 % of geographical area of the Country i.e. 328.72 Mha) for the year 2015-16 as compared to 56.60 Mha (17.21%) in the year 2008-09.
- During this period 1.45 Mha of wastelands are converted into non wastelands categories.
- There is a net conversion of 0.84 Mha (0.26%) of different wasteland categories in the country during 2008-09 to 2015-16.
- A reduction in wasteland area was observed in the categories of land with dense scrub, waterlogged and marshy land, sandy areas, degraded pastures / grazing land and gullied and / or ravinous land.
- The wastelands have undergone positive change in the states of Rajasthan, Bihar, Uttar Pradesh, Andhra Pradesh, Mizoram, Madhya Pradesh and Jammu & Kashmir
- Majority of wastelands have been changed into categories of ‘croplands’ (0.64 Mha), ‘forest-dense / open’ (0.28 Mha), ‘forest plantation’ (0.029 Mha), ‘plantation’ (0.057 Mha) and ‘industrial area’ (0.035 Mha) etc.

INDIAN AIR QUALITY INTERACTIVE REPOSITORY (IndAIR)

- **The National Environmental Engineering Research Institute (NEERI) along with the Council of Scientific and Industrial Research (CSIR) has launched India’s first web repository documenting air quality studies done in the last 60 years.**

- Indian Air quality Interactive Repository (IndAIR) is CSIR-Neeri's web facility.
- IndAIR reveals air pollution was recognised as a subject in India even in 1905, when a study was carried out for Bengal Smoking Nuisance Act. The studies by S C Roy of the meteorological office detailed on cloud seeding to deal with famine-ridden areas in 1954.

National Environmental Engineering Research Institute (NEERI)?

- The CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) is a pioneer laboratory in the field of environmental science and engineering and part of Council of Scientific and Industrial Research (CSIR). NEERI falls under the Ministry of Science and Technology (India) of central government.
- It was established in Nagpur in 1958 and has five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai.

FRIDAYS FOR FUTURE MOVEMENT

- **Swedish climate activist Greta Thunberg, associated with Fridays for Future movement, was honoured at a Stockholm ceremony held by the Nordic Council.**
- Fridays for Future (FFF) is also known variously as the school strike for the climate, Youth for Climate, Climate Strike, Youth Strike for Climate.
- It is an international movement of school students who take time off from class to participate in demonstrations to demand action to prevent further global warming.
- Publicity and widespread organising began after Swedish schoolgirl Greta Thunberg staged a protest in August 2018 outside the Swedish Riksdag, holding a sign that read "School strike for the climate".
- In June 2019, Fridays for Future and Greta Thunberg were honoured with Amnesty International's Ambassador of Conscience award.

NELLOPTODES GRETAE

- Scientists at the Natural History Museum in London have officially called the insect Nelloptodes gretae to honour the 16-year-old Swedish activist's "outstanding contribution" in raising global awareness of climate change.
- The arthropod, which has no eyes or wings, is less than 1mm long and belongs to the Ptiliidae family, which is made up of some of the world's smallest beetles. The beetle was first found in 1965 by British naturalist Dr William C Block in Nairobi, Kenya.

OZONE HOLE

- NASA recently reported that this ozone hole, which usually grows to about 20 million sq km in September, was less than half that size this year, the smallest it has ever been during this time after being discovered in the 1980s.
- NASA said that this could have happened because of an extraordinarily high temperatures in the stratosphere this year, rather than the ongoing human efforts to contain the ozone depletion.

Ozone:

- Ozone (a molecule of three oxygen atoms) is found mainly in the upper atmosphere, an area called stratosphere, between 10 and 50 km from the earth's surface.
- By absorbing the harmful ultraviolet radiations from the sun, the ozone molecules eliminate a big threat to life forms on earth. UV rays can cause skin cancer and other diseases and deformities, in plants and animals.

Ozone Hole:

- The 'ozone hole' is not really a hole. It is a region in the stratosphere, directly above Antarctica, where the concentration of ozone has been measured to become extremely low in certain months.
- Use of industrial chemicals like chlorofluorocarbons (CFCs) in refrigeration, air-conditioning, foams, fire-extinguishers and solvents were the likely culprits.
- A 1989 global agreement, called Montreal Protocol, organised international consensus on phased elimination of these chemicals. Two years ago, an amendment to the Montreal Protocol cleared the way for a faster elimination of another set of similar compounds, called hydrofluorocarbons, or HFCs, which were being used as temporary replacements for CFCs.

WHITE BELLBIRD

- **According to a researchers, the white bellbird makes the loudest call ever recorded in birds, reaching 125 dB, which is way beyond the level (85 db) considered safe for human ears. Previous record was held by screaming phias.**
- **Scientific Name:** Procnias albus; **IUCN status:** Least Concern.
- It is a species of bird in the family Cotingidae found in forests in the Guianas, with small numbers in Venezuela and the Brazilian state of Pará.

INDIA PLANS FIRST-EVER SNOW LEOPARD SURVEY

- **India will commission its first-ever snow leopard survey to estimate the population and geographical range of the snow leopard.**
- It is a member of the **genus 'Panthera'** to which tiger, leopard and lion also belong. Its **Scientific name is "Panthera uncia"**.
- **Range:**
 - They inhabit alpine and subalpine zones at elevations from 3,000 to 4,500 m (9,800 to 14,800 ft). It is native to the mountain ranges of Central and South Asia.
 - The 12 range countries are Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Russia, Tajikistan and Uzbekistan.
 - India is home to 10% of the global population in less than 5% of its global range.
- **Conservation status:**
 - In 2017, status of Snow leopard in the Red List of the IUCN was changed from 'endangered' to 'vulnerable'.
 - Listed in Schedule I of Wildlife (Protection) Act 1972,
 - Listed in Appendix I of the CITES, which makes trading of animal body parts (i.e., fur, bones and meat) illegal in signatory countries.
- **Project snow leopard:** It was launched in 2009 in the 5 Himalayan states of Jammu & Kashmir, HP, Uttarakhand, Sikkim and Arunachal Pradesh to conserve India's high altitude wildlife populations such as Snow Leopard, Asiatic Ibex, Chiru, Takin etc.

SAHARAN SILVER ANT

- **Researchers have announced that the Saharan silver ant (Cataglyphis bombycina), an ant that lives in the Sahara Desert is the world's fastest known ant species.**
- It can clock a 855 millimetres — nearly a metre — per second. Measured another way, it covers 108 times its own body length per second. It does this by swinging its tiny 5-mm long appendages at speeds of up to 1,300 mm per second.

mHariyali

- **Ministry for Housing & Urban Affairs launched the mobile app, 'mHariyali' for 'Environment Protection in Government Colonies.'**
- It is aimed to encourage Public engagement in planting trees and other such Green drives. People can now upload information/photos of any plantation done by them, which is linked to app and will be displayed on the website www.epgc.gov.in.
- The App provides for automatic geo-tagging of plants. This app will also enable nodal officers to periodically monitor the plantation.

PLOGGING

- **Fit India Plogging Run, which was launched on October 2, 2019 as part of the Fit India Movement, after PM Modi urged people to start plogging for a litter-free India.**
- **'Plogging' is a combination word** formed from 'jogging' and 'plocka upp', which is Swedish for 'pick up'. It refers to an emerging international trend, in which someone picks up trash while jogging or brisk walking as a way of cleaning up litter while also taking care of fitness.
- **Ripu Daman Bevli:** During the event, Minister for Youth Affairs & Sports felicitated Ripu Daman Bevli, popularly known as the Plogman of India and named him the **Plogging Ambassador of India**.
- The minister also launched the nation-wide **Plogging Ambassador Mission**. Under it, Indians who have been running and cleaning their cities, towns or districts, will be nominated as Plogging Ambassadors of their region.

C40 CITIES CLIMATE LEADERSHIP GROUP (C40)

- **Delhi chief minister Arvind Kejriwal attended the C40 Cities World Mayors' Summit in Copenhagen through a video link and announced formation of a task force to monitor implementation of 'Clean Air Cities Declaration' signed at the meet.**
- C40 is a network of the world's megacities committed to addressing climate change.
- The C40 group was started in 2005 by the then Mayor of London, Ken Livingstone.
- It has 96 members. Delhi NCR, Bengaluru, Jaipur, and Kolkata are part of the C40.

C40 World Mayors' Summit 2019:

- The C40 World Mayors' Summit was held in Copenhagen (Denmark's capital) where city leaders from around the world share ideas on green urban development.
- C40 has convened six Mayors Summits, hosted by London (2005), New York (2007), Seoul (2009), Sao Paulo (2011), Johannesburg (2014) and Mexico City (2016).
- The C40 Clean Air Cities Declaration declares that clean air is a "human right" and pledged to drastically reduce air pollution by 2025.

GANGA AAMANTRAN ABHIYAN

- 'Ganga Aamantran Abhiyan', an **open-water rafting and kayaking expedition** on the Ganga River was organized by **Jal Shakti Ministry** in October- November 2019.
- This is the first ever effort by National Mission for Clean Ganga to raft across the entire stretch of the river to spread the message of River Rejuvenation..
- **The expedition encompassed the five Ganga basin states** including Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal with stops at Rishikesh, Haridwar, Kanpur, Allahabad, Varanasi, Patna, Sonapur and Kolkata.

GREEN CRACKERS

- To resolve the crisis of air pollution, the Government of India launched green firecrackers developed by Council of Scientific and Industrial Research (CSIR).
- The emissions testing facilities for the new fire crackers have been set up at CSIR-NEERI. Further, a **Raw Materials Compositional Analysis (RACE) facility has been launched in Sivakasi** to facilitate manufacturers for testing their chemicals.

Do you know?

- In October, 2018, the Supreme Court pronounced its verdict on firecrackers ban. The court said that only green crackers would be allowed for sale.
- What the Supreme Court essentially means is that **a low-polluting firecracker within the permitted decibel and emission norms is a green cracker.**

CLOWNFISH

- A new study has concluded that clownfish cannot adapt to a rapidly changing environment as it does not have the genetic capacity to do so.
- **Clownfish (family: Pomacentridae)**, also known as anemonefish are highly popular due to their striking colour combinations of white, orange, yellow and brown.
- There are a total of 28 species of clownfish, the most renowned of these is '**Common Clownfish**', which was popularised by Walt Disney movie '**Finding Nemo**'.
- **Distribution:** Clownfish are found in tropical and subtropical areas of the Pacific and Indian Oceans. The greatest diversity of clownfish is found close to Papua New Guinea.

Clownfish breed only in sea anemones, sharing a symbiotic bond. The anemone benefits because clownfish can defend the anemone from fish that might eat it. Clownfish are the only fish that do not get stung by the nematocysts of the anemone.

IMMERSION OF IDOLS IN GANGA

- **The National Mission for Clean Ganga (NMCG) has issued a 15-point directive to prevent the immersion of idols in the Ganga or its tributaries during festivals, including Dussehra, Diwali, Chhath and Saraswati Puja.**
- The directive has been issued under Section 5 of The Environment (Protection) Act, 1986 to 11 Ganga basin states (Uttarakhand, UP, Bihar, Jharkhand, West Bengal, Delhi, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Haryana and Rajasthan).
- **Key Points of directives:**
 - Idol immersion into river Ganga and its tributaries and on their banks is being banned. If any person violates above directions, then Rs 50,000 as environment compensation should be levied.
 - Alternative arrangements in an environmental-friendly manner should be made for designated idol-immersion sites by constructing temporary confined ponds.

Do you know?

- In 2017, the National Green Tribunal banned the disposal of any waste in the Ganga.
- The National Mission for Clean Ganga (NMCG) is the implementation wing of National Ganga Council which was set up in 2016 under the River Ganga (Rejuvenation, Protection and Management) Authorities order 2016.

EMISSIONS GAP REPORT 2019

UN Environment Programme (UNEP) released its annual Emissions Gap Report for the year 2019.

Key Highlights of the report are:

- **Anticipated emissions:** Greenhouse gas emissions have risen 1.5 % per year over the last decade. Even if all current unconditional commitments under the Paris Agreement are implemented, temperatures are expected to rise by 3.2°C over pre-industrial levels.
- **The United States** is the highest producer of greenhouse gases when measured on a per capita basis. Overall, **China** is the world's largest producer.
- **India** is the third-largest emitter behind the United States and China respectively. India's per capita emissions, however, are significantly below the United States and China.
- To meet the 1.5°C temperature goal of the Paris Agreement, global greenhouse gas emissions must fall by 7.6 % each year between 2020 and 2030.
- To deliver on these cuts, the levels of ambition in Nationally Determined Contributions (NDCs) must increase at least fivefold for the 1.5°C goal and threefold for the 2°C.

Do you know?

- Each year, the Emissions Gap Report assesses the gap between anticipated emissions in 2030 and levels consistent with the 1.5°C and 2°C targets of the Paris Agreement.
- **For the first time, it looks at how large annual cuts would need to be from 2020 to 2030 to stay on track to meeting the Paris goals.**

IPCC REPORT ON OCEANS AND CRYOSPHERE

The Intergovernmental Panel on Climate Change (IPCC) presented the special report on the Ocean and Cryosphere in a Changing Climate Context. **Key findings of the report:**

- The global mean sea level had risen by 16 cm between 1902 and 2015, and that the rate of increase had doubled in the last one decade.
- The sea levels were rising because of thermal expansion of ocean waters due to rising temperatures as well as due to melting of glaciers and polar ice.
- Between 2006 and 2015, the Greenland ice sheet lost ice-mass at an average rate of 278 billion tonnes every year, while the Antarctic ice sheet lost a mass of 155 billion tonnes on an average every year.
- Snow over areas outside of these two regions, like the glaciers in the Himalayas, together lost an average of 220 billion tonnes of ice every year.

Do you know?

- **The cryosphere** is an all-encompassing term for those portions of Earth's surface where water is in solid form, including sea ice, lake ice, river ice, snow cover, glaciers, ice caps, ice sheets, and frozen ground (which includes permafrost).
- **The Intergovernmental Panel on Climate Change (IPCC)** is an intergovernmental body of the United Nations. It was established in 1988 by the World Meteorological Organization (WMO) and the UN Environment Programme (UNEP). HQ: Geneva, Switzerland.

E-WASTE CLINIC

- **The Bhopal Municipal Corporation (BMC) and the Central Pollution Control Board (CPCB)** have joined hands to set up the country's first e-waste clinic in Bhopal. The clinic is being conceived in compliance with the **Solid Waste Management Rules, 2016.**

- Electronic waste will be collected door-to-door or could be deposited directly at the clinic in exchange for a fee. This would enable segregation, processing and disposal of waste from both household and commercial units.
- This three-month pilot project, if successful, would be replicated elsewhere in the country.

LEADERSHIP GROUP FOR INDUSTRY TRANSITION

- **A new leadership group was announced at the UN Climate Action Summit to guide the greenhouse gas emitting industries toward the low-carbon economy.**
- This new Leadership Group for Industry Transition is a global public-private effort to ensure heavy industries and mobility companies can find a workable pathway to deliver on the Paris Agreement
- This initiative was announced by India and Sweden together with Argentina, Finland, France, Germany, Ireland, Luxembourg, South Korea and the UK, as well as a group of companies including Dalmia Cement, Heathrow Airport, Mahindra Group etc.
- This initiative will be supported by the World Economic Forum, the Energy Transitions Commission, Mission Innovation, Stockholm Environment Institute, and the European Climate Foundation among many others.

WATER QUALITY REPORT FOR STATE CAPITALS & DELHI

- **Union Minister of Consumer Affairs released the Water Quality Report for State Capitals & Delhi as analysed by Bureau of India Standards (BIS).**
- A vast majority of the samples have failed to comply with the requirements of IS 10500:2012 in one or more parameters.
- In Delhi, all the 11 samples did not comply with the requirements of the Indian Standard. All the 10 samples drawn from Mumbai were found to comply with the requirements.

Do you know?

- The samples of drinking water were tested as per **Indian Standard 10500:2012 (Specification for Drinking Water) as set by the Bureau of India Standards (BIS).**
- The Union Government wants to make BIS Standards mandatory for Tap Water so as to ensure quality drinking water for all households.

THE ZERO-CARBON ACT (NEW ZEALAND)

- **New Zealand's Parliament passed The Zero-Carbon Act.** According to the New Zealand government, this is the first legislation in the world to make a legally binding commitment to living within 1.5 degrees Celsius of global warming.
- The Act include aims to reduce all greenhouse gases (except methane) to net zero by 2050 and reduce emissions of biogenic methane up to 24-47 % below 2017 levels by 2050 and to 10 % below 2017 levels by 2030,

Biogenic methane is emitted by livestock, waste treatment and wetlands. The Act proposes separate targets for biogenic methane because methane is a short-lived gas and degrades into the atmosphere over the decades even though it is a more potent greenhouse gas than carbon dioxide.

ETHANOL FROM B-HEAVY MOLASSES

- The Union Minister for Environment has declared that no separate environmental clearance is required to produce additional ethanol from B-heavy molasses as it does not contribute to the pollution load.

- With this, sugar mills are expected to undertake production of ethanol from B-heavy Molasses and other by-products/products.
- Molasses is a viscous product resulting from refining sugarcane or sugar beets into sugar. Molasses varies by amount of sugar, method of extraction, and age of plant.

SECOND ASSEMBLY OF INTERNATIONAL SOLAR ALLIANCE (ISA)

- **The Ministry of New and Renewable Energy (MNRE) hosted the second Assembly of International Solar Alliance (ISA) in New Delhi.**
- The Assembly is the supreme decision making body of the ISA, and gives directions on various administrative, financial and programme related issues.
- Union Minister for New and Renewable Energy and Power is President of the ISA Assembly. The first Assembly of the ISA was held in October 2018.

International solar alliance (ISA)?

- The ISA, is an Indian initiative that was launched by the Prime Minister of India and the President of France in 2015 at Paris, France on the side-lines of the COP-21, with 121 solar resource rich countries lying fully or partially between the tropic of Cancer and tropic of Capricorn as prospective members.
- The overarching objective of the ISA is to collectively address key common challenges to the scaling up of solar energy in ISA member countries.
- It is located in National Institute of Solar Energy (NISE) campus, Gurugram.

ECOLOGICAL FLOW NOTIFICATION

Union Government has advanced the deadline for implementation of ecological flow notification for Ganga – which came into effect in October 2018 – from October 2021 to December 2019. Norms for minimum environmental flow (e-flow) for Ganga:

- The e-flows are the acceptable flow regimes that are required to maintain a river in the desired environmental state.
- The e-flow notification specifies that the **upper stretches of the Ganga — from its origins in the glaciers and until Haridwar — would have to maintain:**
 - 20% of the monthly average flow of the preceding 10-days between November and March, which is the dry season;
 - 25% of the average during the 'lean season' of October, April and May; and
 - 30% of monthly average during the monsoon months of June-September.
- Any dam or structure meant for diversion of river flows for the purpose of irrigation, hydro-power and domestic or industrial use will now have to maintain the minimum flow. However, **mini and micro projects, which do not alter the flow significantly are exempted.**
- The **Central Water Commission (CWC)** is the designated authority for supervision, monitoring, regulation of flows. Power projects will be assessed by the CWC quarterly for compliance after December 2019.
- The central government through **National Mission for Clean Ganga (NMCG)** may direct release of additional water in the river Ganga to meet special demand as and when required.

GLOBAL TIGER FORUM (GTF)

- **Union Environment Minister released a report on Status of Tiger Habitats in high altitude ecosystems.** This study was led by the Global Tiger Forum (GTF). The study reveals that even ecology at high altitude is compatible for the tiger growth.
- **What is it?** GTF is the only inter- governmental international body established with members from willing countries to embark on a global campaign to protect the remaining 5 sub-species of Tigers distributed over 13 Tiger Range countries of the world.
- The GTF was formed in 1993. In 1997, the GTF became an independent organization.
- **Administration:** The GTF has a General Assembly meeting every 3 years and Standing committee meetings at least once a year. A Chairperson, usually a Minister from one of the Tiger Range countries heads GTF for a fixed tenure of 3 Years.
- **Secretariat:** New Delhi.

GILL-OXYGEN LIMITATION THEORY (GOLT)

- **In a new research paper, Scientists have explained the biological reasons why fish species will shift towards the poles due to impact of climate change. Scientists have described this with the Gill-Oxygen Limitation Theory (GOLT).**
- According to GOLT, warming waters have less oxygen. Therefore, fish have difficulties breathing in such environments. Additionally, such warming, low-oxygen waters also increase fish's oxygen demands because their metabolism speeds up.
- This is because, as fish grow, their demand for oxygen increases. However, the surface area of the gills does not grow at the same pace as the rest of the body. The larger the fish, the smaller its surface area relative to the volume of its body. So, the fish move to waters whose temperatures resemble those of their original habitats.
- As the global sea surface temperature has increased by approximately 0.13°C per decade over the past 100 years, "suitable" waters are more and more found towards the poles and at greater depths.

SCIENCE & TECH

Scientific And Useful Profound Research Advancement (SUPRA)

- The Science and Engineering Research Board (SERB) has proposed a new scheme, SUPRA, with the objective of funding exploration of new scientific & engineering breakthroughs with global impact.
- The scheme will fund disruptive ideas that can lead to new areas of study, new scientific concepts, new products and technologies.
- Funding will be provided normally for a period of three years, which could be extended to 2 years (5 years total) as assessed by an expert committee.
- **Science and Engineering Research Board** Is a statutory body set up in 2009 under the Department of Science and Technology to promote research in different scientific disciplines.

RAMANUJAN MACHINE

- Scientists from Israel Institute of Technology have developed a concept called Ramanujan Machine, named after the Indian mathematician Srinivasa Ramanujan.
- The Ramanujan machine is more of a concept than an actual machine—it exists as a network of computers running algorithms dedicated to **finding conjectures** about fundamental constants in the form of continued fractions.
- The purpose of the machine is to come up with conjectures (in the form of mathematical formulas) that humans can analyze, and hopefully prove to be true mathematically.

Srinivasa Ramanujan

- Srinivasa Ramanujan (1887-1920) was a self-taught mathematician who grew up in India and was "discovered" by fellow mathematician G.H. Hardy.
- After moving to England, he became a fixture at Cambridge, where he shook up the math world with his unorthodox mathematics—instead of pounding away at math proofs, he obtained results to famous problems through intuition, sometimes in dreams and then let others find the proofs for them.
- Because of this, he was sometimes described as a **conjecture machine**.

BROADBAND READINESS INDEX (BRI)

- The Department of Telecom (DoT) and the Indian Council for Research on International Economic Relations (ICRIER) signed a MoU to develop a Broadband Readiness Index (BRI) for States and UT.
- This index will appraise the condition of the underlying digital infrastructure and related factors at the State/UT level. The first BRI estimate will be made in 2019 and subsequently every year until 2022.
- **The BRI consists of two parts.**
 - Part I will focus on **infrastructure development** based on the measurement of 9 parameters (given below).
 - Part II consists of **demand side parameters** such as percentage of households using computers with internet connection, internet users as a percentage of the population, smart phones density etc.

- **Stakeholders involved in its development:** State governments and industry associations like the Tower and Infrastructure Providers Association (TAIPA), the Internet Service Providers Association of India (ISPAI) and the Cellular Operators Association of India (COAI).

Proposed BRI Indicators

1. Availability of State Policy on RoW and Towers (based on DoT RoW Rules 2016)
2. Percentage of ROW cases given permission within 60 days of the first application
3. Availability of a centralized IT Portal for ROW clearances across all Government land and building owning authorities.
4. Adoption of the National Building Code 2016 by the State
5. Percentage of mobile towers connected with fibre
6. Number of fibre kms per sq. KM/ per capita/ per 100 households
7. Percentage of public institutions / offices connected by FTTX (Hospitals including PHCs, Police stations, Schools and CSCs)
8. Percentage of towers receiving grid supply (Duration: Urban 20 hours; Rural 12 Hours)
9. NagarNet and JanWiFi
 - a. NagarNet –Number of Public Wi-Fi Hotspots in urban areas
 - b. JanWiFi – Number of Public Wi-Fi Hotspots in rural areas

VIBRATIONAL OPTICAL COHERENCE TOMOGRAPHY (VOCT)

- Researchers from a Rutgers University in U.S. have developed a 'virtual biopsy' device that can quickly and non-invasively determine whether a skin tumour is cancerous and needs to be removed surgically.
- The first-of-its-kind experimental procedure, called VOCT, creates a 3D map of the lesion's width and depth under the skin with a tiny laser diode, without using a scalpel.
- The procedure also makes use of soundwaves to test the lesion's density and stiffness since cancer cells are stiffer than healthy cells. The ability to analyse a skin tumour non-invasively could make biopsies much less risky and distressing to patients.

YUVA VIGYANI KARYAKRAM (YUVIKA) – YOUNG SCIENTIST PROGRAMME

- The Indian Space Research Organization (ISRO) has, for the first time, opened its laboratories for Indian school students to undergo two-week residential training during their summer holidays from this year. The training module has been devised as part of its YUVIKA.
- **Objective:** YUVIKA was launched in March 2019 to impart basic knowledge on Space Technology, Space Science and Space Applications to the school children.
- **Strategy:** It is proposed to select 3 students each from each State/UT to participate in this programme every year covering CBSE, ICSE and State syllabus.
- **Eligibility:** Those who have just finished 9th standard (in the academic year 2018-19) and waiting to join 10th standard (or those who have started 10th Std just now).

PRESSURISED INTRAPERITONEAL AEROSOL CHEMOTHERAPY (PIPAC)

- According to doctors, chemotherapy by aerosol, although still being tested, has shown promising results against certain cancers with fewer side effects. Several hospitals in France are trialling PIPAC, a technique developed in Germany in 2013.

- **Technique:** Under PIPAC, the drugs are not injected into the bloodstream. Instead, the patient is put under general anaesthetic and treatment is introduced by laparoscopy and chemotherapy is introduced into the peritoneal cavity by an aerosol spray.
- **Benefits:** It is a minimally invasive without harmful side effects normally “associated with the circulation of the treatment within the blood”.

CCR5

- According to an analysis by scientists from the University of California, Berkeley, the genetic mutation that a Chinese scientist attempted to create in twin babies born last year is associated with a 21% increase in mortality in later life.
- **Name:** C-C chemokine receptor type 5 is also known as CCR5 or CD195.
- **What is it?** It is a protein on the surface of white blood cells.
- **Functions:** It is involved in the immune system as it acts as a receptor for chemokines. A genetic approach involving intrabodies that block CCR5 expression has been proposed as a treatment for HIV-1 infected individuals.
- **Location in Humans:** The CCR5 gene that encodes the CCR5 protein is located on the short (p) arm at position 21 on chromosome 3.

Lulu and Nana controversy:

- The Lulu and Nana controversy revolves around twin Chinese girls born in October 2018, who have been given the pseudonyms Lulu and Nana. The twins are the world's first germline genetically edited babies.
- The girls' parents were participants in a clinical project run by He, in which he offered standard in vitro fertilization services and in addition, used CRISPR-Cas9, a technology that can modify DNA, to modify the CCR5 gene in the embryos to confer genetic resistance to the HIV virus.
- The work was widely condemned as unethical, dangerous, and premature.

COSPAS-SARSAT

- The Indian Air Force (IAF) and other search teams are going through pictures and data sent by Earth Observation (EO) satellites under COSPAS-SARSAT to find missing An-32 transport aircraft.
- COSPAS (COsmicheskaya Sisteyama Poiska Avariynich Sudov) is a Russian acronym for Space System for Search of Distress Vessels. SARSAT means Search and Rescue Satellite-Aided Tracking.
- **What is it?** COSPAS-SARSAT is an international satellite-based search and rescue system that uses satellites to detect and locate emergency beacons carried by ships, aircraft, or individuals.
- **Components:** The system consists of a network of satellites, ground stations, mission control centers, and rescue coordination centers.
- **Functioning:** Distress alerts are detected, located and forwarded to over 200 countries and territories at no cost to beacon owners or the receiving government agencies.
- **Timeline:** Cospas-Sarsat was conceived and initiated by Canada, France, the United States, and the former Soviet Union in 1979. The agreement of the organization was signed in 1988.
- **Headquarters:** Montreal, Quebec, Canada.

PARTHENOGENESIS

- The New England Aquarium in the US recently announced that a “virgin” anaconda named Anna had given birth. This is only the second known case of parthenogenesis in green anacondas.

- **Parthenogenesis is defined as** “a reproductive strategy that involves development of a female (rarely a male) gamete (sex cell) without fertilisation. In animals, parthenogenesis means development of an embryo from an unfertilised egg cell.
- About 2,000 species are known to reproduce through parthenogenesis. It occurs commonly among lower plants and invertebrate animals and rarely among higher vertebrates”.
- Babies born through parthenogenesis are clones of the mother because there has been no exchange and rearrangement of genetic information with another individual.

GRAVITATIONAL LENSING

- Using NASA’s **James Webb Space Telescope**, researchers plan to investigate how new stars are born. For this, they will take the help of “gravitational lensing” phenomenon.
- Gravitational Lensing is a natural phenomenon that magnifies light around galaxies. It occurs when a huge amount of matter, such as a massive galaxy or cluster of galaxies, creates a gravitational field that distorts and magnifies the light from objects behind it, but in the same line of sight.
- This makes dim, faraway objects that otherwise would be undetectable, like an individual star, visible. The effect allows researchers to study the details of early galaxies too far away to be seen otherwise with even the most powerful space telescopes.

NOMENCLATURE OF LUNAR FEATURES

- ISRO released images of the lunar surface captured by the Terrain Mapping Camera-2 of the Chandrayaan-2 spacecraft orbiting the Moon.
- The images show impact craters named after various scientists — (Arnold) Sommerfeld (Germany), (Daniel) Kirkwood (US), Mitra (India), (Charles) Hermite (France) etc.
- **Mitra (1890-1963), born in Bengal, was a physicist and Padma Bhushan winner.**
- The system of nomenclature of lunar features is now standardised. According to a resolution by the International Astronomical Union in 1973,
 - **Crater and crater-like formations** are given the names of astronomers or eminent scientists , posthumously.
 - **Mountains** are given names corresponding to the geographical names of mountains of the Earth.
 - **Extensive dark surfaces** are given names that correspond to the mental states of humans.

C-Sat-Fi; XGSPON and CiSTB

Union Minister for Communications launched the following innovations developed by Centre for Development of Telematics (C-DOTs):

- **C-Sat-Fi (C-DOT Satellite WiFi):** C-Sat-Fi is based on the optimal utilization of wireless and satellite communication to extend connectivity to the remote islands and difficult terrains.
- **XGSPON (10 G Symmetrical Passive Optical Network):** It is an effective solution to fulfil the rapidly increasing demands of high network speeds for applications like IPTV, HD Video Streaming, Online Gaming and other cloud based services.
- **CiSTB (C-DOT’s Interoperable Set Top Box):** Based on a portable smart card like a mobile SIM, this solution will revolutionize the experience of the Cable TV operators by offering them a high degree of choice, ease and convenience without having to replace the once installed STB.

McrBC

- A team of scientists at the Indian Institute of Science Education and Research (IISER) have determined the atomic structure of McrBC, which prevents viral infections in bacteria.
- McrBC is a **complex bacterial protein** which helps prevent viral infections in a bacterial cell and functions as a **molecular scissor**.
- This pathbreaking development is a major step towards understanding the working of the molecular scissors and has long-term implications in **‘phage therapy.’**
- Phages are groups of viruses that infect and kill bacterial cells and phage therapy is the therapeutic use of bacteriophages to treat bacterial infections.

BIOMETRIC SEAFARER IDENTITY DOCUMENT (BSID)

- India has become the **first country in the world** to issue Biometric Seafarer Identity Document (BSID), capturing the facial bio-metric data of seafarers.
- The new document will give a foolproof identification to Indian seafarers which will facilitate their movement, provide ease of getting jobs and help in identifying them from any location in the world, while protecting their dignity and privacy.
- The new card is in confirmation of the **Convention No. 185 of the International Labour Organisation** on BSID. India ratified the Convention in October 2015.
- In India the BSID project has been taken up by Ministry of Shipping in collaboration with Centre for Development of Advanced Computing (CDAC), Mumbai. The Government notified the **Merchant Shipping (Seafarers Bio-metric Identification Document) Rules in 2016**.

JIOFIBER

- Reliance Industries has unveiled its wired broadband service Jio GigaFiber starting at ₹700 a month going up to ₹10,000 a month depending on the usage plans. This will combine wired broadband, television content, landline calling, multi-player gaming and video conferencing.
- Jio’s thrust on wired broadband also assumes significance given the government’s focus on fibre in its **National Digital Communications Policy**, announced in May 2018. The policy’s goals include
 - universal broadband for all,
 - deployment of 5 million public Wi-Fi hotspots by 2020 and 10 million by 2022 through a National Broadband Mission and
 - implementing a “Fibre First Initiative” to take fibre to the home.

NEXT GENERATION SEQUENCING (NGS) FACILITY

- Union Minister of Science and Technology inaugurated the Next Generation Sequencing (NSG) facility at the Centre for Cellular and Molecular Biology (CCMB) in Hyderabad. This NGS facility is the fourth such facility in the country.
- **Genome sequencing** is figuring out the order of DNA nucleotides or bases in a genome—the order of As, Cs, Gs, and Ts that make up an organism's DNA.
- **Next Generation Sequencing (NGS)** allows parallel Genome sequencing, resulting in the generation of Giga bases of data in a short amount of time.
- **Benefits:** This has reduced the cost per genome significantly, making genomic data more accessible to individual researchers. Decreasing costs are making genomics an attractive and integral part of any successful bioscience research project.

INTERNET SAATHI

- Google India's 'Internet Saathi' programme has now added two more states -- Punjab and Odisha. With this, the programme has now reached 20 states.
- It was launched by Google India, along with Tata Trusts, as a pilot project in 2015.
- **Objective of the programme:** It aims to educate rural women on how to use the Internet. These women, in turn, impart training to other women in their community and neighbouring villages.

PERSEIDS METEOR SHOWER

- On August 12th and 13th, the Perseid meteor shower reached its peak.
- The Perseids are one of the brighter meteor showers of the year. They occur every year between July 17 and August 24 and tend to peak around August 9-13.
- Made of tiny space debris from the comet Swift-Tuttle, the Perseids are named after the constellation Perseus. This is because the direction, or radiant, from which the shower seems to come in the sky lies in the same direction as Perseus.
- The Perseids are widely sought after by astronomers and stargazers because most years at its peak, one can see 60 to 100 meteors in an hour from a dark place.

RANSOMWARE

- According to data compiled by the Internet Society's Online Trust Alliance, globally, losses from ransomware rose by 60% last year to \$8 billion.
- Ransomware is a kind of malware (software that damages the functions or gains unauthorised access to a computer system). It is used to encrypt important documents or files within a system (Crypto ransomware) or simply lock the original user out of the system (Locker ransomware).
- The user is then asked for a ransom in return for decrypting the files. Once the ransom is paid within a stipulated period, then the system is either unlocked or the system's contents are deleted or the system is entirely corrupted.
- Unlike other cyber-attacks, in this form of attack, the user is notified of the attack. Ransomware spreads easily when it encounters unpatched or outdated software.

MRD

- Scientists announced the discovery in Ethiopia of a nearly complete skull of an early human ancestor that lived 3.8 million years ago, a species boasting an intriguing mixture of apelike and human like characteristics.
- The fossil dubbed MRD, belongs to the species Australopithecus anamensis, which first appeared roughly 4.2 million years ago.
- This species is considered the direct ancestor of the species Australopithecus afarensis (nicknamed Lucy), earthed in 1974 in Ethiopia. Lucy dates from about 3.2 million years ago.
- **The dating of the skull also reveals that Anamensis and its descendent species, Lucy, coexisted for a period of at least 100,000 years.** This discovery challenges the long-held notion of linear evolution, in which one species disappears and is replaced by a new one.

COPROLITE

- Scientists have found the oldest parasite DNA ever recorded. The discovery was made in the "coprolite" of a prehistoric puma in Argentina.
- Coprolites are fossilised faeces belonging to animals that lived millions of years ago.

- Scientists can analyse and study their shape and size. Depending on the location they were found in, Scientists can figure out the animal from which they came as well as uncover what those animals ate.

MARS SOLAR CONJUNCTION

- **The daily exchange of data between antennas on Earth and those on NASA spacecraft at Mars got much quieter for a few weeks because of Mars solar conjunction.**
- During Mars solar conjunction, Mars & Earth will be on opposite sides of the Sun. Solar conjunction occurs every 2 years. The Sun expels hot, ionised gas from its corona, which extends far into space.
- During solar conjunction, this gas can interfere with radio signals when engineers try to communicate with spacecraft at Mars, corrupting commands and resulting in unexpected behaviour from those space explorers.
- To be safe, engineers hold off on sending commands when Mars disappears far enough behind the Sun's corona that there's increased risk of radio interference. The hold on issuing commands is called a "command moratorium".

FLYING CARS

- Alaka'i Technologies announced a new flying transportation named 'Skai' (pronounced "sky") near Los Angeles.
- 'Skai' is a hydrogen powered, electric vehicle. With six rotors on the roof, the Five-seater Skai has a range of 644 km. Like a drone, the vehicle takes off and lands vertically.

L 98-59b

- NASA's Transiting Exoplanet Survey Satellite (TESS) has discovered a new planet named L 98-59b.
- TESS is an all-sky survey mission that will discover thousands of exoplanets around nearby bright stars. TESS was launched in April 2018 aboard a SpaceX Falcon 9 rocket.
- **Size:** L 98-59b is around 80% Earth's size. It is between the sizes of Mars and Earth. It is the tiniest of TESS finds so far.
- **Location:** It orbits a bright, cool, nearby star named L 98-59. The host star, is about one-third the mass of the Sun and lies about 35 light-years away.

TITAN; DRAGONFLY MISSION

- NASA has announced that it will send a multi-rotor vehicle called 'Dragonfly' to Saturn's moon Titan (Saturn's largest moon). The mission will be launched in 2026 and arrive in 2034.
- **Location:** Titan orbits Saturn, which orbits the Sun at a distance of about 886 million miles, about 10 times farther from the Sun than Earth orbits.
- **Size:** Titan, with a diameter of 5,150 km, is Saturn's largest moon and the second largest moon in the solar system after Jupiter's moon **Ganymede**. It is bigger than planet Mercury.
- **Surface composition:** Titan is an icy moon with a surface of rock-hard water ice, but Titan also likely has a liquid water ocean beneath its surface.
- **Atmosphere:** Titan is the only moon in the solar system known to have a substantial atmosphere, which is mostly nitrogen like Earth's.
- **Orbiting Solo:** Titan has no known moon, but it's possible for a moon to have moons.

FAST RADIO BURSTS (FRBs)

- A team of international astronomers have determined for the first time the precise source of a single/ one-off fast radio bursts (FRBs).

VAJIRAM & RAVI

- **Fast radio bursts** are intense bursts of radio emission that have durations of milliseconds and exhibit the characteristic dispersion sweep of radio pulsars.
- FRBs flash for only a micro-instant but can emit as much energy in a millisecond as the Sun does in 10,000 years. They originate in far-away galaxies.
- The first was discovered in 2007 and so far over 80 have been detected.
- **The signal has been named FRB 180924** - they're named for the date of detection - and it originated in the outskirts of galaxy roughly 3.6 billion light-years from Earth. **It's only the second fast radio burst ever to have been traced to a location.**

PUNCH MISSION

- Dipankar Banerjee, an Indian solar physicist, has been selected as a Co-Investigator of PUNCH mission by NASA. The mission is expected to be launched in 2022.
- PUNCH stands for **Polarimeter to Unify the Corona and Heliosphere**. It will image and track the solar wind and also the coronal mass ejections – which are huge masses of plasma that get thrown out of the Sun's atmosphere. The coronal mass ejections can affect and drive space weather events near the Earth.
- **Features:** PUNCH will consist of a 'constellation' of four suitcase-sized microsats that will orbit the Earth in formation and study how the corona, which is the atmosphere of the Sun, connects with the interplanetary medium.

ARTIFICIAL GRAVITY

- Researchers are working on making the concept of artificial gravity a reality.
- Artificial gravity means spacecraft generating their own gravity by spinning around in space. The concept of artificial gravity has so far as existed only in science fiction.
- Under it, a short-radius centrifuge will rotate around the room, gathering more and more speed. The angular velocity generated by the centrifuge will push astronauts' feet toward the base of the platform — almost as if he was standing under his own weight.
- It will one day help keep astronauts healthy as they venture into space, allowing humans to travel farther from Earth than ever before and stay away longer.

VIKRAM SARABHAI

- Google celebrated 100th birth anniversary of scientist and innovator Vikram Sarabhai, with a doodle.
- Born in Ahmedabad in 1919, Dr. Sarabhai earned his doctorate at Cambridge.
- He founded the **Physical Research Laboratory (PRL) in Ahmedabad** in 1947.
- **He is considered as the father of India's space program.**
 - He established the **Indian National Committee for Space Research in 1962**, which was later renamed the Indian Space Research Organization (ISRO).
 - He helped set up the **Thumba Equatorial Rocket Launching Station in Thiruvananthapuram**, with its inaugural flight in 1963.
 - He had worked on India's first satellite, **Aryabhata**, but he never lived to see its launch in 1975, which happened four years after his death.
- **Other institutions founded:** Apart from ISRO and PRL, he pioneered the setting up of several institutions, such as the Indian Institute of Management in Ahmedabad, Community Science Centre, and Darpan Academy for Performing Arts (which he set up with his wife Mrinalini, a renowned dancer).

- **Awards and honours:** He received the Padma Bhushan in 1966 and was conferred the Padma Vibhushan posthumously in 1972. In 1973, a crater on the moon was named after him.

INTERPLANETARY SHOCK

- Recently, **NASA's Magnetospheric Multiscale (MMS) mission made the first high-resolution measurements of an interplanetary shock.**
- Interplanetary shocks are a type of collisionless shock — ones where particles transfer energy through electromagnetic fields instead of directly bouncing into one another.
- These shocks, made of particles and electromagnetic waves, are launched by the Sun, which continually releases streams of charged particles called the solar wind.
- These collisionless shocks are a phenomenon found throughout the universe, including in supernovae, black holes and distant stars.

MOSAIC MISSION

- **Scientists from 17 nations will take part in the year-long MOSAIC mission as they anchor the RV Polarstern ship to a large piece of Arctic sea ice to study climate**
- The **MOSAIC mission stands for Multidisciplinary drifting Observatory for the Study of Arctic Climate.**
- Its objective is to study the impact of climate change on the Arctic and how it could affect the rest of the world.

NAPRT1

- After 18 years of research, Indian and Australian scientists in a collaborative effort have identified a new gene directly linked to schizophrenia.
- This study identified a gene called NAPRT1 – that encodes an enzyme involved in vitamin B3 metabolism – is directly linked to schizophrenia, a chronic and severe mental disorder that affects how a person thinks, feels, and behaves.

Deep Learning for Galaxy Cluster Extraction and Evaluation (DEEP-CEE)

- Researchers have developed “Deep-CEE”, an Artificial Intelligence-powered tool to identify galaxy clusters quickly.
- This Artificial Intelligence-powered tool that has been trained to “look” at colour images and identify galaxy clusters quickly. It is based on neural networks, which are designed to mimic the way a human brain learns to recognise objects by activating specific neurons when visualising distinctive patterns and colours.
- Galaxy clusters are some of the most massive structures in the cosmos, but despite being millions of lightyears across, they can still be hard to spot.

PLOONET

- Some moons around distant, giant planets can break free of their orbits and end up circling the host star like a planet instead. An international team of astronomers have described these hypothetical moons as ploonets.
- Ploonets form when moons orbiting a planet escape their orbit. They are flung into a wider orbit around the host star and end up circling like a planet instead. The researchers however, concede that ploonets remain hypothetical.

ALGOBAT

- Researchers at Canada's University of British Columbia are developing a high performing 'AlgoBAT' using computer modelling and optimisation algorithms.
- The idea was to optimise the geometry of the bat, specifically the back profile in order to minimise the vibration caused by ball's impact. Therefore, more energy would transfer to the ball and the ball would fly further.
- For this, scientists used computer modelling of the bat and optimisation algorithms to maximise the performance of the cricket bat they have named AlgoBAT.

APOLLO 11

- July 20, 2019 was the fiftieth anniversary of man's first landing on the Moon.
- **Apollo-11 Timeline: Launch:** July 16, 1969; **Moon landing:** July 20; **Earth landing:** July 24.
- **Launch rocket:** Apollo 11 was launched by a Saturn V rocket from Kennedy Space Center, Florida, on July 16, and was the fifth crewed mission of NASA's Apollo program.
- **Crew members:** Neil Armstrong and Buzz Aldrin were taken to the Moon by the Apollo-11 mission in 1969. Their third colleague, Michael Collins, remained in the command module in the lunar orbit.
- Neil Armstrong and Buzz Aldrin were the first of the six two-astronaut teams that landed on the Moon over the next three years. **The last human Moon landing was made by the Apollo 17 mission on April 20, 1972**, after which the Apollo project was called off.

THIRTY METER TELESCOPE

- Recently, Hawaii saw protests against plans to start construction of a Thirty Meter Telescope atop **Mauna Kea**, the US state's highest mountain at 14,000 feet.
- **Who are involved?** The telescope is being built by an international collaboration of government organisations and educational institutions, at a cost of \$1.4 billion.
- **Name:** "Thirty Metre" refers to the 30-metre diameter of the mirror. Once completed, it would be three times as wide as the world's largest existing visible-light telescope.
- **Application:** One of its key uses will be the **study of exoplanets**, many of which have been detected in the last few years, and whether their atmospheres contain water vapour or methane — the signatures of possible life.

GLOBAL INNOVATION INDEX-2019

- The Global Innovation Index (GII) 2019 was launched in New Delhi. This is the first time that the GI is being launched in an emerging economy.
- The theme of the 2019 GI is Creating Healthy Lives - The Future of Medical Innovation.
- **Bodies involved:** The GI rankings are published every year by Cornell University, INSEAD and the UN World Intellectual Property Organization (WIPO) and GI Knowledge Partners.
- **Methodology:** This is the 12th edition of the GI rankings of 129 economies based on 80 indicators ranging from intellectual property filing rates to mobile-application creation, education spending and scientific and technical publications.
- **Top ranked countries:** Switzerland remains number one in the GI index followed by Sweden, the United States of America.
- **Indian scenario:** India maintains its top place in the Central and Southern Asia region as the 52nd ranked economy this year. India jumped five places to improve its position from 57th last year to 52nd

in 2019. From 81 in 2015, India's 29-place move up the GII represents the biggest jump by any major economy.

INDIA'S R&D EXPENDITURE ECO-SYSTEM REPORT

Economic Advisory Council to the Prime Minister (PMEAC) released the report titled India's Research and Development (R&D) expenditure eco-system report. Key findings are:

- India's investment in R&D is a fraction of India's GDP. It has remained constant at around 0.6% to 0.7% of India's GDP. This is below the expenditure of countries like the US (2.8), China (2.1), Israel (4.3) and Korea (4.2).
- Government expenditure, ***almost entirely the Central Government***, is the driving force of R&D in India which is in contrast to the advanced countries where private sector is the dominant and driving force of R&D spend.

NEW SPACE INDIA LIMITED (NSIL)

- Presenting the General Budget 2019-20 in the Parliament, Union Minister of Finance said that a Public Sector Enterprise viz. New Space India Limited (NSIL) has been incorporated as a new commercial arm of Department of Space to tap the benefits of the Research & Development carried out by ISRO.
- **Mandate:** To spearhead commercialization of various space products including production of launch vehicles, transfer to technologies and marketing of space products.
- **Headquarters:** Bengaluru.
- NSIL is the second commercial entity of the Department of Space (DoS) after Antrix Corporation Limited, which was set up in 1992 to market the products and services of the Indian Space Research Organisation (ISRO).

FEDOR

- Russia launched an unmanned rocket carrying life-sized robot to the International Space Station (ISS) from Baikonur cosmodrome in Kazakhstan.
- **The robot, named Fedor – short for Final Experimental Demonstration Object Research – is the first ever sent into space by Russia.** Fedor is also known as Skybot F850.
- Fedor copies human movements, a key skill that allows it to remotely help astronauts.

AKADEMIK LOMONOSOV

- **Russia launched the world's first floating nuclear reactor**, sending it on an epic journey across the Arctic, despite environmentalists warning of a "Chernobyl on ice."
- Loaded with nuclear fuel, the Akademik Lomonosov with a crew of 69 left the port of Murmansk to begin its 5,000 km voyage to Pevek in Siberia. The reactor's trip is expected to last between 4 and 6 weeks.
- When it arrives in Pevek, it will replace a local nuclear plant and a closed coal plant.

DEEP OCEAN MISSION

- The 'Deep Ocean Mission (DOM)' has received in-principle approval from the government. The Mission is to be led by the Union Earth Sciences Ministry.
- **Objective:** The mission proposes to explore the deep ocean similar to the space exploration started by ISRO about 35 years ago. A major thrust of the mission will be looking for **Polymetallic Nodules (PMN)**.

Polymetallic Nodules (PMN)?

- India has been allotted a site of 75,000 sq. km. in the Central Indian Ocean Basin (CIOB) by the UN International Sea Bed Authority for exploitation of polymetallic nodules (PMN).
- These are rocks scattered on the seabed containing iron, manganese, nickel and cobalt.
- Being able to lay hands on even 10% of that reserve can meet the energy requirement for the next 100 years.

The United Nations Convention on the Law of the Sea (UNCLOS)?

- UNCLOS is also called the Law of the Sea Convention or the Law of the Sea treaty.
- The Convention defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.
- The Convention, concluded in 1982, came into force in 1994.
- While the UN provides support for meetings of states party to the Convention, it has no direct operational role in the implementation of the Convention.

UN International Sea Bed Authority (ISA)?

- **Formation:** ISA is an autonomous international organization established by the United Nations Convention on the Law of the Sea (UNCLOS) in 1994.
- **Objective:** to regulate all mineral-related activities in the international seabed area.
- **Headquarters:** Kingston, Jamaica.
- **Members:** It has 168 members. U.S., being a non-signatory to UNCLOS is not a member of ISA.
- It was given observer status to the United Nations in 1996.

MICRODOT TECHNOLOGY

- The Ministry of Road Transport has issued a draft notification to amend Central Motor Vehicle Rules, allowing motor vehicles and their parts to be affixed with permanent and nearly invisible microdots.
- Microdot technology involves spraying the body and parts of the vehicle or any other machine with microscopic dots, which give a unique identification.
- The microdots and adhesive will become permanent fixtures/affixation which cannot be removed without damaging the asset, that is the vehicle itself.
- These nearly invisible microdots can only be read physically with a microscope and identified with ultra violet light source.
- Use of this technology will help check theft of vehicles and also use of fake spare parts.
- The notification says that the microdots, if affixed, will have to comply with AIS 155 requirements.
- The Ministry has sought comments / objections on the draft notification within 30 days.

PSLV-C48/RISAT-2BR1

- India's Polar Satellite Launch Vehicle (PSLV-C48), successfully launched RISAT-2BR1 along with nine commercial satellites of Israel, Italy, Japan and USA from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota.
- These 9 satellites were launched under commercial arrangement with NewSpace India Limited (NSIL), the commercial arm of Indian Space Research Organisation (ISRO).
- It was PSLV's 50th flight and 48th successful flight since its first successful launch in 1994. It was the 75th launch from Sriharikota.

- This was the 2nd flight of PSLV in 'QL' configuration (with 4 solid strap-on motors).

RISAT-2BR1:

- RISAT-2BR1 is a radar imaging earth observation satellite carrying an X-band synthetic aperture radar, an Indian version of Israel's TecSAR satellite, with radial rib reflector 3.6 metre mesh antenna. The mission life of RISAT-2BR1 is 5 years.
- The satellite will provide services in the field of Agriculture, Forestry, Disaster Management and military reconnaissance.

INTERCONNECT USAGE CHARGE (IUC)

- The Telecom Regulatory Authority of India (TRAI) deferred implementation of zero-interconnect usage charge (IUC) regime by a year, besides kick-starting a consultation on the need to fix minimum tariff for mobile calls and data.
- For wireless to wireless domestic calls, termination charge would continue to remain as ₹0.06 per minute up to December 31, 2020. From January 1, 2021 onwards the termination charge for wireless to wireless domestic calls shall be zero. The BAK (bill and keep) or zero IUC regime was to come into effect from January 1, 2020.

Interconnect usage charge (IUC)?

- These charges are paid by a telecom services provider whose subscriber makes a call to the service provider whose subscriber receives the call. There are various components of IUC: Origination charges; Transit charges (carriage charges); **Termination charges**; International termination charges and International settlement rates.
- Currently only calls made via wireless to wireless devices attract IUC in India.
- TRAI wants to bring IUC to zero because it is assumed all networks have moved to VoLTE, or voice over LTE (Long Term Evolution). Jio is entirely a VoLTE network, but Vodafone and Airtel continue to offer their legacy 2G and 3G networks as well.

NATIONAL BROADBAND MISSION (NBM)

The Union Minister for Communications launched the National Broadband Mission. **Some of the objectives of the Mission are:**

- **Broadband access to all villages by 2022.**
- Laying of incremental **30 lakhs route km of Optical Fiber Cable** and increase in **tower density from 0.42 to 1.0 tower per thousand of population by 2024.**
- **Develop innovative implementation models for Right of Way (RoW)** and to work with States/UTs for having consistent policies pertaining to expansion of digital infrastructure including for RoW approvals required for laying of OFC.
- **Develop a Broadband Readiness Index (BRI)** to measure the availability of digital communications infrastructure and conducive policy ecosystem within a State/UT.
- **Creation of a digital fiber map** of the Digital Communications network and infrastructure, including Optical Fiber Cables and Towers, across the country.
- **Investment from stakeholders of USD 100 billion** (Rs 7 Lakh Crore) including Rs 70,000 crore from Universal Service Obligation Fund (USOF).

CORE CATCHER

The Moscow-based Rosatom State Corporation announced that it had installed a "core catcher" at Unit 3 of Tamil Nadu's Kudankulam Nuclear Power Plant (KKNPP).

Corium:

- Molten core material, or corium, is lava-like material that gets formed in the core of a nuclear reactor in the event of a meltdown accident. The corium so formed can remain radioactive for several decades, even centuries.
- Such an accident occurs when the nuclear fission reaction taking place inside a reactor is not sufficiently cooled, and the buildup of heat causes fuel rods to melt down.

Core Catcher:

- Core melt localisation device (CMLD) or a core catcher device is designed to localise and cool the molten core material in case of a meltdown accident.
- It is a cone shaped metal structure which is double walled, with the gap between the two walls filled with FAOG (ferric and aluminium oxide granules).
- The core catcher is filled with a ceramic mixture also including ferric oxide and aluminium oxide, called 'sacrificial material'. The sacrificial material prevents the corium from trickling through and also acts as a cooling mechanism.

SHARJAH; BARJEEL

- The International Astronomical Union (IAU) announced that one of the newly discovered stars – HIP 79431 – was named as "Sharjah" and the planet affiliated with this star was named "Barjeel."
- **The Emirate of Sharjah** is one of the emirates of the United Arab Emirates. **It is the only emirate that overlooks the coastline on the Persian Gulf to the west and the Gulf of Oman (Indian Ocean) to the East.**
- **A barajeel** is a wind tower used to direct the flow of the wind so that air can be recirculated as a form of air conditioning.

JEHOLBAATAR KIELANAE

- Researchers have unearthed well-preserved middle ear bones from a new species of an extinct rodent that lived 145-66 million years ago in what is now northeastern China.
- The study looked at fossils of **Jeholbaatar kielanae**, an **extinct rodent-like mammal** and noted that these animals had a middle ear that is distinct from those of its relatives.
- The fossil clues provide solid evidence of the morphology and formation of the inner ear bones, which are fully detached from the lower jaw. The new fossil reveals a transitional stage in the evolution of the **surangular — a "reptilian" jawbone.**
- This advance may lead to better understanding of the evolution of hearing.

HYPERSONIC WEAPONS

- President Vladimir Putin said that Russia is the only country in the world that has hypersonic weapons. He said this after Russia's first regiment of Avangard hypersonic missiles has been put into service.
- The missile flies 10 times faster than the speed of sound, has a range of more than 2,000 kilometers (1,250 miles) and can carry a nuclear or a conventional warhead.

Mach Number:

- Mach number (designated as M or Ma) is the **ratio of the speed of the body to the speed of sound** in the undisturbed medium through which the body is traveling. E.g. If the body is flying at Mach 2, then its speed is twice the speed of sound in air (which is 332 m/s or 1195 km/hr).
- It is named in honor of **Ernst Mach** (1838-1916), a physicist from Austria.

- **Types of Aircrafts/missiles based on Mach Number (Source-NASA):** Subsonic ($M < 1$); Transonic ($M = 1$); Supersonic ($1 < M < 3$); High Supersonic ($3 < M < 5$); Hypersonic ($M > 5$) and High Hypersonic ($M \sim 25$)

WI-FI CALLING

- Bharti Airtel has introduced Voice over Wi-Fi (VoWiFi), a first for India.
- **Meaning:** It uses high speed Internet connection, available via broadband, to make and receive high definition (HD) voice calls. Users don't have to pay extra for these calls as it is using a Wi-Fi network.
- **Comparison with other platforms:** This is not much different from a voice call using WhatsApp or any other over-the-top messaging platform, but here the call is from one number to another, and not using an app.
- **Benefits:** Airtel Wi-Fi calling claims to enhance indoor voice calling experience for smartphone customers. Since these calls use stable Wi-Fi connections, call drops are not expected to be a problem.

VIRTOPSY

- Union Health Minister told Rajya Sabha that AIIMS, New Delhi and ICMR are working together on a technique for post-mortem without incising/dissecting the body. This technique is likely to become functional in the next six months.
- **What is it?** Virtopsy is a word combining 'virtual' and 'autopsy' means autopsies carried out without dissecting the body to find the cause of the death.
- **How is it done?** In a Virtopsy, doctors use radiation to examine the innards to reach a conclusion about the cause of death. A CT or an MRI machine could be used, in the same way that they are used to scan a living human's body.
- **Benefits:** It is less time consuming, aids better diagnosis, and renders respect to religious sentiments.

ELECTRO-KINETIC STREAMING POTENTIAL

- Researchers at the Indian Institute of Technology-Guwahati (IIT-G) have developed materials that can produce energy from flowing or stagnant water in households. The decentralised energy model can generate energy in every household and the excess energy thus produced can be evacuated to energy-deficient areas nearby.
- The team employed “**electro-kinetic streaming potential**” to harvest energy from flowing tap water and “contrasting inter-facial activities” entailing different types of semiconducting materials to generate power from stagnant water.
- Under it, when fluids stream through tiny channels that are charged, they can generate an electrical voltage, which may be harnessed through miniaturised generators. The electro-kinetic materials have not been harnessed until now.

STRANDHOGG

- The Union Home Ministry has sent an alert to all States warning them about the vulnerability of the Android operating system to a bug called 'StrandHogg.'
- StrandHogg allows real-time malware applications to pose as genuine applications and access user data of all kind. These malware can then potentially listen to their conversations, access photo album, read/send messages, make calls, record conversations and get login credentials to various accounts.

EXTRA NEUTRAL ALCOHOL (ENA)

- Anticipating shortage of domestic supplies, Alcohol manufacturers have written to NITI Aayog asking for reduction in import duty to make it cost-effective for them to import Extra Neutral Alcohol (ENA) from global markets.
- ENA is a colourless food-grade alcohol that does not have any impurities. It has a neutral smell and taste, and typically contains over 95 % alcohol by volume. It is derived from different sources — sugarcane molasses and grains.
- ENA is the primary raw material for making alcoholic beverages. It also serves as an essential ingredient in the manufacture of cosmetics and personal care products such as perfumes, toiletries, hair spray, etc.

GSLV-MK III - M1 / CHANDRAYAAN-2 MISSION

- **Chandrayaan-2's Vikram lander lost contact with ground stations minutes before its planned touchdown on the lunar surface.** The Orbiter would continue to observe the moon's surface and its exosphere for a year by encircling the Moon.
- **What is it?** Chandrayaan-2 is India's second mission to the moon.
- **Components:** It comprises a fully indigenous Orbiter, Lander (Vikram) and Rover (Pragyan). The Rover Pragyan is housed inside Vikram lander.
- **Mission Objective:** To demonstrate the key technologies for end-to-end lunar mission capability, including soft-landing and roving on the lunar surface.

GSLV Mk III is a three-stage launch vehicle developed by ISRO. The vehicle has two solid strap-ons, a core liquid booster and a cryogenic upper stage. The vehicle is designed to carry 4 ton class of satellites into Geosynchronous Transfer Orbit (GTO) or about 10 tons to Low Earth Orbit (LEO).

Mission Journey

- India's Geosynchronous Satellite Launch Vehicle, GSLV MkIII-M1 successfully launched Chandrayaan-2 spacecraft on July 22, 2019 into its planned orbit from Satish Dhawan Space Centre SHAR, Sriharikota in Andhra Pradesh.
- The lander Vikram, named after the Father of Indian Space Programmes Dr Vikram Sarabhai was supposed to make a soft landing in a high plain between two craters — Manzinus C and Simpelius N — at a latitude of about 70° South on 7th September 2019.
- The rover Pragyaan had two devices to probe the elemental composition of lunar soil near its landing site and derive the elemental abundance there.
- The mandate of the Orbiter is to move around the moon for over a year. It has eight payloads including two cameras for mapping the moon and six other devices to study the lunar exosphere and ionosphere, detecting the presence of water or ice and to map the lunar mineralogy.

GEOTAIL

- **ISRO tweeted that an instrument on Chandrayaan-2, CLASS, had detected charged particles during the mission. This happened in September, during the orbiter's passage through the "geotail".**
- The geotail is a region in space that allows the best observations. The region exists as a result of the interactions between the Sun and Earth.
- **Once every 29 days, the Moon traverses the geotail for about six days.** When Chandrayaan-2, which is orbiting the Moon, crosses the geotail, its instruments can study the properties of the geotail.

How the region is formed?

- The Sun emits the solar wind, which is a continuous stream of charged particles. These particles are embedded in the extended magnetic field of the Sun.
- Since the Earth has a magnetic field, it obstructs the solar wind plasma. This interaction results in the formation of a magnetic envelope around Earth.
- On the Earth side facing the Sun, the envelope is compressed into a region that is approximately three to four times the Earth radius.
- On the opposite side, the envelope is stretched into a long tail, which extends beyond the orbit of the Moon. It is this tail that is called the geotail.

INDIA INNOVATION INDEX 2019

- **NITI Aayog and Institute for Competitiveness released the India Innovation Index (III) 2019 which examines the innovation ecosystem of Indian states and UTs.**
- The Index is calculated as the average of the scores of its **two dimensions** –
 - **The Enablers** are the factors that underpin innovative capacities, grouped in five pillars: (1) Human Capital, (2) Investment, (3) Knowledge Workers, (4) Business Environment, and (5) Safety and Legal Environment.
 - **The Performance dimension** captures benefits that a nation derives from the inputs, divided in two pillars: (6) Knowledge Output and (7) Knowledge Diffusion.
- Among the major states, **Karnataka is the most innovative state**. Maharashtra performs the best in the dimension of Enablers.
- **Sikkim and Delhi take the top spots among the north- eastern & hill states, and union territories/city states/small states respectively.**

YANK

- **Biologists and biomedical engineers are proposing to define a new term, “yank”.**
- ‘Yank’ is a proposed new term for changes in force over time, so that scientists can study muscle behaviour better.
- ‘Yank’ could be useful in understanding spasticity, a common muscle impairment in multiple sclerosis, spinal cord injury, stroke and cerebral palsy. The objective is to quantify something that our muscles and nerves can feel and respond to.

QUANTUM SUPREMACY

- **Using the company's state-of-the-art quantum computer, called Sycamore, Google has claimed "quantum supremacy" over the most powerful supercomputers in the world by solving a problem considered virtually impossible for normal machines.**
- Quantum supremacy is the point at which quantum computers can solve problems that are practically unsolvable for “classical” computers to complete in any reasonable timeframe. At least 49 qubits are required to cross the quantum supremacy line.

Qubits vs bits:

- Qubits behave very differently to bits in classical computers. Bits represent either a “1” or a “0,” and computers read and perform operations on one bit at a time.
- In contrast, qubits can represent a combination state made up of both “1” and “0,” due to the peculiar quantum effects in which properties like particle position, direction, and momentum are not well-

defined. This allows for a system to be in multiple states at the same time, called **quantum indeterminacy**.

2I/BORISOV

- **According to the International Astronomical Union (IAU), 2I/Borisov is the second interstellar object to be officially detected in our solar system, after 'Oumuamua. It is also the first observed interstellar comet.**
- **Name:** In 2I/Borisov, I stands for "interstellar", and 2 for being the second interstellar object ever discovered, after 'Oumuamua, which was detected in October 2017. The name Borisov honors its discoverer, Crimean amateur astronomer Gennady Borisov.
- **Features:** It's between 2 and 16 kilometres in diameter. its chemical composition is similar to the Solar System's long-period comets that originate in the distant Oort Cloud, rather than the short-period comets that come from closer in.

FIRST INDIGENOUS FUEL CELL SYSTEM

- **President of India unveiled the first Indigenous High Temperature Fuel Cell System at Vigyan Bhawan, New Delhi.** This development would replace Diesel Generating (DG) sets and help reduce India's dependence on crude oil.
- **The system has been developed by** Council of Scientific and Industrial Research (CSIR) **under** India's flagship program named "New Millennium Indian Technology Leadership Initiative (NMITLI)."
- The 5.0 kW fuel cell system generates power in a green manner using methanol / bio-methane, with heat and water as bi-products for further use; amounting to greater than 70% efficiency, which otherwise may not be possible by other energy sources.
- It is based on High Temperature Proton Exchange Membrane (HTPEM) Technology.

GEMINI

- **Union Minister for Earth Sciences launched the Gagan Enabled Mariner's Instrument for Navigation and Information (GEMINI) device.**
- GEMINI device help to provide information related to disaster warnings when fishermen move away from the coast beyond 10 to 12 kilometres.
- The GEMINI device receives and transfers the data received from **GAGAN satellite/s** to a mobile through Bluetooth communication. A mobile application developed by INCOIS decodes and displays the information in nine regional languages.
- It has been **developed by Indian National Centre for Ocean Information Services (INCOIS), and Airports Authority of India (AAI).**

SATURN'S MOON

- **The International Astronomical Union (IAU) confirmed 20 new moons orbiting Saturn, making it the planet with the most moons in our Solar System, at 82.**
- Until their confirmation, the planet with the most moons was Jupiter, at 79.
- Now our Solar System's planets together have 205 confirmed moons now. Saturn and Jupiter, with 161 between them, account for nearly 80% of these.
- Another 20% are orbiting Uranus (27) and Neptune (14). Of the remaining three moons, one is Earth's own while the other two are with Mars.

Why Mercury and Venus does not have a moon?

- Mercury is so close to the Sun and its gravity that it wouldn't be able to hold on to its own moon. Any moon would most likely crash into Mercury or maybe go into orbit around the Sun and eventually get pulled into it.
- It is not yet clear, however, why Venus does not have a moon.

PLANET NINE

- **Researchers have proposed a new theory according to which Planet Nine might be a primordial black hole. Planet Nine is a hypothetical planet in the outer region of the Solar System. No observation of Planet Nine had been announced.**
- Its gravitational effects could explain the unusual clustering of orbits for a group of extreme trans-Neptunian objects (eTNOs), bodies beyond Neptune that orbit the Sun at distances averaging more than 250 times that of the Earth.

Primordial Black Hole is one that is believed to have formed immediately after the creation of the universe. Like Planet Nine, primordial black holes too have been predicted to exist — including by the late Stephen Hawking — but none has been spotted as yet.

MINOR PLANET

- **A minor planet (Asteroid 300128) between the orbits of Mars and Jupiter has been named after the legendary vocalist Pandit Jasraj.**
- Minor planets, also known as **Small Solar System body**, are celestial objects orbiting the Sun that are **not large enough for their gravity to pull them into a spherical shape** (Planets or 'dwarf planets' are almost spherical).
- **Small Solar System bodies include** asteroids, comets, and several other celestial objects that go around the Sun.

Pandit Jasraj?

- Pandit Jasraj (born 1930) is an Indian classical vocalist, belonging to the Mewati gharana. he has been awarded Sangeet Natak Akademi Fellowship (2010), Padma Vibhushan (2000) and Sangeet Natak Akademi Award (1987).
- He created **Jasrangi**, a form of jugalbandi styled on the ancient system of moorchhana, between a male and a female vocalist, who each sing different ragas at the same time.

- Names of celestial bodies are finally approved by the **International Astronomical Union (IAU)**, a global organisation of professional astronomers based in Paris. it was formed in 1919.
- **Rabindranath Tagore** also have minor planets named after him.

EINSTEIN CHALLENGE

- **PM Modi has thrown an "Einstein Challenge" for thinkers, entrepreneurs and tech leaders to propagate the ideas of Mahatma Gandhi through innovations.**
- He recalled Albert Einstein's famous words on Gandhi: "Generations to come will scarce believe that such a one as this ever in flesh and blood walked upon this earth,"

PSLV-C47 / CARTOSAT-3 MISSION

- **India's Polar Satellite Launch Vehicle, in its forty ninth flight (PSLV-C47), successfully launched Cartosat-3 and 13 commercial nanosatellites of USA from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota. This is the 21st flight of PSLV in 'XL' configuration (with 6 solid strap-on motors).**

The 13 Commercial Nanosatellites were launched under commercial arrangement with **New Space India Limited (NSIL)**, the commercial arm of ISRO.

- **Cartosat-3 satellite** is a third generation agile advanced satellite having high resolution imaging capability. The mission life of the Cartosat-3 is 5 years. This is the 9th satellite of Cartosat series developed by ISRO.
- Cartosat-3 will address the increased user's demands for large scale urban planning.

GOLDEN RATIO

- **Researchers have discovered that the Golden Ratio exists within the human skull, putting it in the same category as pinecones, galaxies, and hurricanes—all of which exhibit the special number in their shape makeup.**
- The golden ratio, represented by the Greek letter phi, can be defined in terms of a line, divided into two unequal segments in a way that their lengths meet a simple condition.
- When the ratio between these two lengths (the longer segment divided by the shorter one) happens to be the same as the ratio between the entire line and the longer segment, then the line is said to be divided in the golden ratio.
- For this condition to hold good, the ratio needs to be 1.61803... with the digits after the decimal going on forever; the golden ratio is what we call an "irrational number".
- The golden ratio appears in the work of artists and designers from Da Vinci to Corbusier, and also shows itself in nature in pineapple scales, rose petals and many more places.

INTERDISCIPLINARY CYBER PHYSICAL SYSTEMS (ICPS)

- **Department of Science & Technology (DST) has launched "Interdisciplinary Cyber Physical Systems (ICPS),"** a mechanism controlled or monitored by computer-based algorithms, tightly integrated with internet and its users.
- **Objective:** Adoption of Cyber Physical Systems (CPS) to address India specific issues; accelerate entrepreneurship and start-up ecosystem development in CPS,
- **States/districts covered:** ICPS is a Pan India programme that covers entire Central Ministries, State Governments, Industry and Academia.
- **Implementation period:** 5 years.
- **Strategy:** The Mission aims at establishment of 15 numbers of Technology Innovation Hubs (TIH), six numbers of Application Innovation Hubs (AIH) and four numbers of Technology Translation Research Parks (TTRP).

TRAIN-THE-TRAINER (TTT) PROGRAM IN ARTIFICIAL INTELLIGENCE

- **Ministry of Skill Development has signed an agreement with Global IT major IBM for nationwide Train-the-Trainer program in Artificial Intelligence.**
- The program will be executed over a period of one year under which IBM aims at training 10,000 faculty members from ITIs across the country on basic Artificial Intelligence (AI) skills towards using the technology in their day-to-day training activities.
- IBM will provide the necessary training at seven centres including six National Skills Training Institutes (NSTI) and one Industrial Training Institute (ITI) in Pune.

NATIONAL CENTRE FOR CLEAN COAL RESEARCH AND DEVELOPMENT (NCCCR&D)

- Department of Science & Technology (DST) has set up the National Centre for Clean Coal Research and Development (NCCCR&D) **at Indian Institute of Science (IISc)-Bengaluru** as a national level consortium on clean coal technologies.

- Clean coal technology is a collection of technologies being developed to lessen the negative environmental impact of coal energy generation.
- Carbon footprint of coal-based thermal power plants can be lowered by shifting towards high efficiency advanced ultra-supercritical (AUSC) steam power plants as well as supercritical carbon dioxide (s-CO₂) based Brayton cycle power plants.

CONTRACT FOR THE WEB

- **Tim Berners-Lee, inventor of the World Wide Web, has announced a “Contract for the Web”,** to create a global plan of action for all stakeholders to together commit to building a “better” Web. It is not a legal document, or a United Nations document.
- **Principles in the Contract:** The Contract consists of following 9 principles, three each for governments, private companies, and individuals and civil society to endorse.
 - **Governments will** “Ensure everyone can connect to the Internet”, “Keep all of the Internet available, all of the time”, and “Respect and protect people’s fundamental online privacy and data rights”.
 - **Companies will** “Make the Internet affordable and accessible to everyone” and “Develop technologies that support the best in humanity”.
 - **Citizens will** “Be creators and collaborators on the Web” and “Build strong communities that respect civil discourse and human dignity”

INDIGEN GENOME PROJECT

- The Council of Scientific & Industrial Research (CSIR) conducted Whole Genome Sequencing of 1,008 Indians from different populations across the country under the IndiGen Genome project.
- This has enabled benchmarking the scalability of genome sequencing and computational analysis at population scale in a defined timeline. The ability to decode the genetic blueprint of humans through whole genome sequencing will be a major driver for biomedical science and diagnosis of rare genetic diseases.

INTERDISCIPLINARY CENTRE FOR ENERGY RESEARCH (ICER)

- **Union Minister of Science & Technology dedicated an Interdisciplinary Centre for Energy Research (ICER) to the Nation** for conducting wide spectrum of energy research by knowledge network of elite researchers.
- It is located at the Indian Institute of Science (IISc)-Bengaluru.

MILASEN

- Milasen is said to be the first tailor-made treatment for a single patient. It is named after Mila Makovec, the only patient who will ever take it. She suffers from Batten disease.
- **This opens avenues for the development of personalised treatments for people with life-threatening rare diseases.**
- **Batten disease** is a rare, fatal and inherited disorder that affects the retina and the central nervous system (CNS). The disease is caused by mutations in CLN7 protein.

INDIA INTERNATIONAL SCIENCE FESTIVAL (IISF)

- **The Fifth India International Science Festival (IISF) was held in Kolkata under the theme RISEN India – Research, Innovation, and Science Empowering the Nation.**
- IISF is an annual event **organised jointly by** science & Technology related organizations of Government of India and Vijnana Bharati (Vibha) to instill scientific temper among the masses,

showcase India's contribution in the field of S&T and encourage translation of its benefits to people. The first IISF was held in 2015 at IIT.

- **Vijnana Bharati (VIBHA)** is a non-profit organisation, working for science popularization & implementation of modern technology & ancient sciences in India.

ARROKOTH

- **In a fitting tribute to the farthest flyby ever conducted by spacecraft, the Kuiper Belt object 2014 MU69 has been officially named Arrokoth.**
- The Kuiper Belt consists of a mass of icy objects that include Pluto, the dwarf planet.
- About 6.6 billion km from Earth in the Kuiper Belt beyond the orbit of Neptune, a rock moves in slow orbit around the Sun, once every 297 years.
- Its odd shape consists of two lobes, respectively measuring 21 km and 15 km across, which create an appearance of a doughnut.
- Provisionally named 2014 MU69 based on the year of its discovery, it was given the nickname 'Ultima Thule' last year following public suggestions made to NASA. Now, it has got an official name — Arrokoth. Arrokoth is the term for "sky" in the Native American languages Powhatan and Algonquian.

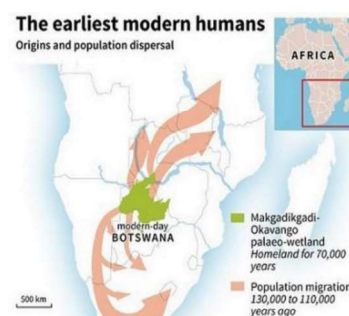
GLOBAL COOLING PRIZE (GCP)

- **Union Minister for Science & Technology announced the finalists of the 'Global Cooling Prize' (GCP) under the Mission Innovation (MI) programme.**
- **GCP was** launched in 2018 by Department of Science & Technology (DST) and Rocky Mountain Institute (RMI), a non-profit research institute based in the US.
- It aims to spur development of a residential cooling solution that has at least five times (5x) less climate impact than today's standard products.

Mission Innovation (MI) is a global initiative of 24 countries and the European Union to accelerate global clean energy innovation.

MAKGADIKGADI-OKAVANGO

- **Scientists have traced the ancestral home region of all living humans to a vast wetland that sprawled over much of modern day Botswana.**
- A prehistoric wetland called Makgadikgadi-Okavango, south of the Great Zambezi River, became a thriving home to Homo sapiens 200,000 years ago, and sustained an isolated, founder population of modern humans for at least 70,000 years.
- **The so-called L0 lineage** remained in the region until a shift in the climate, driven by changes in the Earth's tilt and orbit, brought rains producing green corridors that allowed the early humans to spread into new territories.
- The conclusions are based on an analysis of mitochondrial DNA, known as the 'mitogenome', the genetic material in tiny battery-like mitochondria found in most cells.



MASTODON

- Twitter told senior Supreme Court advocate Sanjay Hegde that his account, which was suspended twice in two days, will not be restored. Following this, several social media-users have opened accounts on Mastodon in solidarity with the senior advocate.

- Mastodon is an open-source social networking service which allows users to either host their own 'community' or join an already existing one.
- Many Twitter rebels are heading to Mastodon as the rules are set by the groups, and not by a central authority with the power of censorship.

HYGIEA

- **Astronomers using ESO's SPHERE instrument at the Very Large Telescope (VLT) have revealed that the asteroid Hygiea could be classified as a dwarf planet.**
- It lies in the asteroid belt between Mars and Jupiter. If it qualifies, Hygiea will be the smallest dwarf planet in the Solar System.
- As of today, there are officially five dwarf planets in our Solar System. The most famous is Pluto, downgraded from the status of a planet in 2006. The other four, in order of size, are Eris, Makemake, Haumea and Ceres.

Four Criteria set by IAU for a dwarf planet are
 (1) it orbits around the Sun, (2) it is not a moon,
 (3) it has not cleared the neighbourhood around its orbit and (4) it has enough mass that its own gravity pulls it into a roughly spherical shape.

EDGE COMPUTING

- **Nvidia, a tech company announced its EGX edge computing platform to help telecom operators adopt 5G networks capable of supporting edge workloads.**
- Edge computing enables data to be analysed, processed, and transferred at the edge of a network. The idea is to analyse data locally, closer to where it is stored, in real-time without latency, rather than send it far away to a centralised data centre.

Edge vs Cloud Computing: The existing Internet of Things (IoT) systems perform all of their computations in the cloud using data centres. Edge computing manages the data generated by IoT devices by storing and processing data locally. That data doesn't need to be sent over a network as soon as it is processed; only important data is sent.

PEGASUS

- **WhatsApp was used to spy on journalists and human rights activists in India earlier this year. The surveillance was carried out using Pegasus, a spyware developed by the Israeli cyberarms firm, NSO Group.**
- Pegasus works by sending an exploit link, and if the target user clicks on the link, the malware or the code that allows the surveillance is installed on the user's phone. Once Pegasus is installed, the attacker has complete access to the target user's phone.

Surveillance Laws In India

- Under the **Indian Telegraph Act, 1885** and the **Information Technology (IT) Act, 2000**, only the government, under certain circumstances, is permitted to conduct surveillance, and not private actors.
- **Hacking is prohibited under the IT Act.** Section 43 and Section 66 of the IT Act cover the civil and criminal offences of data theft and hacking respectively.
- The Supreme Court in a landmark decision in August, 2017 (**Justice K. S. Puttaswamy (Retd.) and Anr. vs Union Of India And Others**) unanimously upheld right to privacy as a fundamental right under Articles 14, 19 and 21 of the Constitution.

GOLDSCHMIDTITE

- **A new, curious mineral has been discovered inside a diamond unearthed from a mine in Koffiefontein, South Africa.** The mineral has been named goldschmidtite.

- It was found as single grain of the mineral in the diamond. it is described as dark green and opaque. It has an unusual chemical signature for a mineral from Earth's mantle.
- While the mantle is dominated by elements such as magnesium and iron, it has high concentrations of niobium, potassium and the rare earth elements.

ROUGH AND SMOOTH SOUNDS

- **Researchers have** identified which frequencies are perceived rough (distinct from each other) and which are perceived smooth (forming one continuous and single sound).
- While **smooth sounds (above 130 Hz)** induce responses in the brain's "classical" auditory system, **rough sounds (40-80 Hz)** activate a wider network involved in processing aversion and pain.

CENTRAL EQUIPMENT IDENTITY REGISTER (CEIR)

- **Union Telecom Minister launched Central Equipment Identity Register (CEIR) in a bid to curtail the rampant cloning and theft of mobile phones across the country.**
- Central Equipment Identity Register (CEIR) is a database of International Mobile Equipment Identities (IMEIs), the 15-digit numbers that uniquely identify each device.
- It will consist of three lists – white, grey and black.
 - Mobile phones with IMEI numbers in the white list will be permitted for use.
 - Those in the blacklist will be the ones that are reported stolen or lost and will not be allowed to access the network.
 - Those in the greylist will be the ones that do not conform to standards but will be permitted to connect under supervision.

WINTER-GRADE DIESEL

- Union Home Minister Shri Amit Shah launched the first Winter-Grade Diesel outlet for Ladakh region.
- The winter grade diesel is produced by Panipat Refinery of State-run Indian Oil Corporation Ltd (IOC). **It has a pour point of – 33 degree Celsius.** It does not lose its fluidity function even in the extreme winter weather of the region unlike the normal grade of Diesel which becomes exceedingly difficult to utilize.

MISCELLANEOUS: AWARDS, PERSON IN NEWS etc.

A. AWARDS

RAMON MAGSAYSAY AWARD 2019

- The 6 winners of the 2019 Ramon Magsaysay Award include India's Ravish Kumar, Myanmar's Ko Swe Win, Thailand's Angkhana Neelapajit, Philippines' Raymundo Pujante Cayabyab and South Korea's Kim Jong-Ki.
- Ramon Magsaysay award is popularly known as Asia's Nobel Prize.
- It was established in 1957 by New York based **Rockefeller Brothers Fund (RBF)**, with the consent of Philippine government. It is named after Ramon Magsaysay, the **third president (1953-57) of Philippines**.
- The first Awards were given in 1958. **Vinoba Bhave of India** was one of the recipients.
- Awardees are presented **with a certificate and a medal**.
- **Criteria:** It is given to **individuals and organizations** in Asia regardless of race, creed, sex, or nationality, who have achieved distinction in their respective fields. *(There are some instances where the winners came from Non-Asian countries, but accomplished something in Asia).*

BAL SAHITYA PURASKAR AND YUVA PURASKAR 2019

- Sahitya Akademi has selected 22 writers for the Sahitya Akademi Bal Sahitya Puraskar 2019 and 23 writers for Yuva Puraskar 2019.
- **Bal Sahitya Puraskar:** The Awards relate to books first published during the five years immediately preceding the year of Award.
- **Sahitya Akademi Yuva Puraskar:** The Award relates to books published by an author of the age of 35 and below as on 1st January of the year of the award.

NATIONAL SPORTS AWARDS-2019

- Government of India has announced National Sports Awards -2019 to be conferred upon the sportspersons, coaches, entities and university.
 - **Bajrang Punia and Deepa Malik** to get Rajiv Gandhi Khel Ratna Award.
 - Arjuna Awards 2018 were given to **Smriti Mandhana and Rohan Bopanna** for their outstanding achievements in the sports disciplines of Cricket and Tennis respectively.
 - National Sports Awards are given every year to recognize and reward excellence in sports. It comprises the following awards –
1. **Rajiv Gandhi Khel Ratna:** It is the highest sporting honour of India. It was instituted in 1991–92. The recipient(s) is/are honoured for their outstanding performance in the field of sports over a **period of four years** at international level.
 2. **Dronacharya Awards:** It was instituted in 1985 to honour eminent Coaches for producing medal winners at prestigious International sports events.
 3. **Arjuna awards:** It was instituted in 1961. To be eligible for the Award, a sportsperson should have had not only good performance over the previous four years at the International level but also should have shown qualities of leadership, sportsmanship and a sense of discipline.

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4. **Dhyan Chand Award:** It was instituted in 2002. It is an award for life-time achievements in sports.
5. **Tenzing Norgay National Adventure Award:** It is the highest national recognition for outstanding achievements in the field of adventure on land, sea and air.
6. **Maulana Abul Kalam Azad (MAKA) Trophy:** It was instituted in 1956-57 to honour the top overall performing university in the Inter-University Tournaments.
7. **Rashtriya Khel Protsahana Purushkar:** It was instituted from 2009 to recognize the corporate entities (both in private and public sector) and individuals who have played a visible role in the area of sports promotion and development.

MAHARSHI BADRAYAN VYAS SAMMAN

- President of India awarded the Certificate of Honour and Maharshi Badrayan Vyas Samman for the Year 2019.
- The awards were instituted in **1958 by Union Ministry of HRD**. These are **annually conferred** to recognise contribution of scholars in the field of **9 languages** (Sanskrit, Persian, Arabic, Pali, Prakrit, Classical Oriya, Classical Kannada, Classical Telugu and Classical Malayalam).
- These awards are **not given posthumously**. Also, these awards are **not given to scholars**
 - **who have received this award earlier**, or
 - **who are convicted** in a criminal case/against whom a criminal case is pending in a court.
- **Certificate of Honour is** for scholars aged 60 years and above. **Maharshi Badrayan Vyas Samman is** for young scholars between 30 to 45 years of age.

GALLANTRY AWARDS

- President of India awarded Vir Chakra to **Wing Commander Abhinandan Varthaman** for shooting down a Pakistani F-16 combat jet on February 27 – a day after the Balakot operation – before he was shot down and captured on the other side of Line of Control.
- He also approved 8 Tatrakshak medals to Indian Coast Guard Personnel.

Background

- Three gallantry awards namely Param Vir Chakra, Maha Vir Chakra and Vir Chakra were instituted by the Government of India on 26th January, 1950. Thereafter, other three gallantry awards i.e. Ashoka Chakra, Kirti Chakra and Shaurya Chakra were instituted in 1952.
- **Order Of Precedence** of these awards is the Param Vir Chakra, the Ashoka Chakra, the Mahavir Chakra, the Kirti Chakra, the Vir Chakra and the Shaurya Chakra.

PM's AWARDS FOR OUTSTANDING CONTRIBUTION FOR PROMOTION & DEVELOPMENT OF YOGA 2019

- On the occasion of the 2nd International Day of Yoga celebrations at Chandigarh, the Prime Minister had announced the institution of awards.
- Swami Rajarshi Muni of Life Mission, Gujarat, Ms. Antonietta Rozzi of Italy, Bihar School of Yoga, Munger and Japan Yoga Niketan, Japan are the recipients of the Award.
- The winners will be felicitated with of a Trophy and a Cash Award of 25 lakh rupees each.

55th JNANPITH AWARD

Malayalam poet Akkitham Achuthan Namboothiri, popularly known as Akkitham, has been chosen for the 55th Jnanpith Award.

- Instituted in 1961 by Bharatiya Jnanpith, it is a literary and research organization based in Delhi.

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- It is given annually to an author for their "outstanding contribution towards literature".
- It is bestowed **only on Indian writers writing in Indian languages included in the Eighth Schedule to the Constitution of India and English.**
- There are **no posthumous conferral.**
- Also only works published during the preceding twenty years is considered for the award.
- The award consists of cash prize is ₹11 lakh and a Bronze replica of Saraswati, the Hindu goddess of knowledge and wisdom.

GANDHI CITIZENSHIP EDUCATION PRIZE

- Portugal announced the setting up of a Gandhi Citizenship Education Prize to promote Gandhi's ideals. Every year, the prize would be inspired by Gandhi's thoughts.
- The first edition of the prize would be dedicated to animal welfare. Gandhi had said "the greatness of a nation can be judged by the way its animals are treated".

DSC PRIZE FOR SOUTH ASIAN LITERATURE

- Amitabha Bagchi won the DSC Prize for South Asian Literature 2019 for his 2018 novel, Half the Night is Gone.
- It is awarded annually to fiction from the South Asian region as well as from the diaspora. The award is for novels published in the year preceding the judging of the prize.
- It was instituted by Surina Narula and Manhad Narula in 2010; **Cash award:** \$25,000.

SAHITYA AKADEMI AWARDS

- Sahitya Akademi announced its annual Sahitya Akademi Awards in 23 languages. In Hindi, Nand Kishore has been awarded for his Poetry 'Chheelate Hue Apne Ko' and in English Shashi Tharoor has been awarded for his Non-Fiction 'An Era of Darkness'.
- The Awards were recommended by distinguished Jury members representing 23 Indian languages and approved by the Executive Board of the **Sahitya Akademi.**
- The Award carrying cash prize of Rs. 1,00,000/- relate to books first published during the five years immediately preceding the year of Award.

The Sahitya Akademi, India's National Academy of Letters, is an autonomous organisation setup by the Government of India in 1954 for the promotion of literature in the languages of India. it is registered as a society under the Societies Registration Act, 1860.

BOOKER PRIZE

- **The Testaments by Margaret Atwood and Girl, Woman, Other by Bernardine Evaristo have jointly won this year's Booker prize.** Evaristo is the first black woman to have won this prize. She is also the first black British author.
- Atwood has won the award for the second time – the first time she won was for her 2000 book, The Blind Assassin – and **she is now only the fourth writer to have won this prize twice. At 79, she is also the oldest writer to win it.**
- **Sharing of Booker Prize? The prize has been shared in the past in 1974 and in 1992.** However, since then the rules were tweaked to ensure there are no joint winners. That rule was eventually ignored by the Booker prize jury this year.

Man Booker Prize?

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- The Man Booker Prize was established in 1969 to award the best novel originally written in English and published in the UK and Ireland in the year of the prize, **regardless of the nationality of their author.**
- The novel must be an original work in English (not a translation). It must be published by a registered UK or Irish imprint; **self-published novels are not eligible.**
- The winner receives £50,000 as well as the £2,500 awarded to each of the shortlisted authors. In this case, thanks to the award being shared, the prize money would be split between the two winners.
- **Man Group** is an active investment management firm founded in 1783. It has sponsored the Man Booker Prize since 2002

RIGHT LIVELIHOOD AWARD

- **Swedish climate activist Greta Thunberg, was among four people named as the winners of a Right Livelihood Award. She shares the award with Davi Kopenawa (Brazil), Guo Jianmei (China) and Aminatou Haidar (Western Sahara).**
- **The annual Right Livelihood Award** was created in 1980 by Swedish-German philanthropist Jakob von Uexkull to honour courageous people and organisations offering solutions to the root causes of global problems, that the prize founder, felt were being ignored by the Nobel Prizes.
- **The prize known as "Alternative Nobel Prize",** has no categories. It is usually shared by four Recipients, but may vary from year-to-year.
- This year, the four laureates will received a cash award of 1 million Swedish crowns (\$103,000) each. Not always all Laureates receive a cash award. Often an Honorary Award is given to a person or group whose work the Jury wishes to recognise but who is not primarily in need of monetary support.

SARDAR PATEL NATIONAL UNITY AWARD

- **Government of India has instituted 'Sardar Patel National Unity Award'.**
- The Award, in the name of Sardar Vallabhbhai Patel, is the highest civilian award in India in the field of contribution to the unity and integrity of India. It seeks to recognize contributions to promote the cause of national unity and integrity.
- **An Award Committee** would be constituted by the Prime Minister, which would include the Cabinet Secretary, Principal Secretary to the PM, Secretary to the President, Home Secretary as Members and three-four eminent persons selected by the PM.
- **Cash prize:** The Award would consist of a medal and a citation. No monetary grant or cash award would be attached to this Award.
- **Eligibility:** All citizens, without distinction of religion, race caste, gender, place of birth, age or occupation, and any institution/organization would be eligible for the Award. Not more than three Awards would be given in a year. It would not be conferred posthumously except in very rare and highly deserving cases.

ASIA ENVIRONMENTAL ENFORCEMENT AWARD 2019

- **Senior Indian Forest Service (IFS) officer Ramesh Pandey has been selected for the Asia Environmental Enforcement Award by the United Nations Environment Programme (UNEP).** This is the fourth time the Awards will be given.
- The awards recognize excellence in enforcement by government officials and institutions/teams combating **transboundary environmental crime** in Asia.

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- **Categories:** This year's Awards will be given in 5 categories: (1) Collaboration; (2) Impact; (3) Innovation; (4) Integrity and (5) gender leadership. There will be also a separate category for Africa-Asia cooperation in the area of illegal trade in wildlife.
- The 2019 Awards are presented by UNEP in partnership with the UNDP, the United Nations Office on Drugs and Crime, INTERPOL, USAID and the Government of Sweden.

SHANTI SWARUP BHATNAGAR PRIZES 2019

- **President of India announced the Shanti Swarup Bhatnagar Awards 2019.**
- It is an annual award given by Council of Scientific and Industrial Research (CSIR).
- The prize is divided into seven disciplines, namely: (1) Physical Sciences, (2) Chemical Sciences, (3) Biological Sciences, (4) Medical Sciences, (5) Mathematical Sciences, (6) Engineering Sciences and (7) Earth, Atmosphere, Ocean and Planetary Science.
- Each discipline can have multiple winners (max. 2 individuals). **Prize money:** ₹5 lakh.
- The award is named after **Shanti Swarup Bhatnagar (1894 – 1955), the first director-general of the CSIR and the first Chairman of the UGC.** In 1954 he was awarded Padma Bhushan.

SASTRA-RAMANUJAN AWARD

- **The SASTRA Ramanujan prize for 2019 will be awarded to mathematician Adam Harper of England for his contributions to probabilistic number theory.**
- The prize, instituted in 2005 is awarded every year by SASTRA University, Tamil Nadu, on mathematicians from across the world who are less than 32 years of age, working in an area influenced by the Srinivasa Ramanujan. It carries an award of \$10,000.

DADASAHEB PHALKE AWARD

- **The Dadasaheb Phalke award will be presented this year to Amitabh Bachchan.**
- **It is** India's highest award in cinema named after Dadasaheb Phalke (1870–1944) who directed India's first full-length feature film, Raja Harishchandra.
- It is presented annually at the National Film Awards ceremony by the **Directorate of Film Festivals** (an organisation set up by the Ministry of Information and Broadcasting).
- The award prize consists of a golden lotus, a cash prize of ₹10 lakh and a shawl.
- The award first presented in 1969 is given to people for their "outstanding contribution to the growth and development of Indian cinema".

VYAS SAMMAN

- **The 28th Vyas Samman for the year 2018 was conferred on Hindi writer Leeladhar Jagoori for his poetry collection- Jitne Log Utne Prem.**
- The Vyas Samman, started in 1991, is given by K K Birla Foundation for an outstanding literary work in Hindi authored by an Indian citizen published during the last 10 years.
- It carries an award money of four lakh rupees.

DR. KALAM SMRITI INTERNATIONAL EXCELLENCE AWARD

- **PM of Bangladesh Sheikh Hasina was conferred the Dr Kalam Smriti International Excellence Award 2019.** The award, instituted in 2015 in the memory of former Indian President A.P.J. Abdul Kalam is given every year to honour statesmen or leaders who have shown excellence in their fields to achieve the best for their countries.

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- It is presented by Dale View, a non-governmental organisation registered under the Charitable Societies Act. It was created in 1978 in Kerala to bring about socio-economic development to rural areas through education.

GLOBAL GOALKEEPERS GOALS AWARD 2019

- PM Modi was honoured with the 2019 'Global Goalkeeper Award' by the Bill and Melinda Gates Foundation for his leadership and commitment to the Swachh Bharat Abhiyaan.
- The annual awards, in five categories, are presented to leaders and individuals for their efforts in achieving the Sustainable Development Goals (SDGs).
- **The five categories are:** Progress Award (age 16 – 30), Changemaker Award (age 16 – 30), Campaign Award (age 16 – 30), Goalkeepers Voice Award (any age) and Global Goalkeeper Award (any age):
- The Campaign, Changemaker and Progress Awards winners receive \$10,000 in unallocated funds for endeavours in their fields. The recipients of the Global Goalkeeper and Goalkeepers Voice Award will not receive a cash prize.

SWACHH SURVEKSHAN GRAMEEN AWARDS 2019

- **The Union Minister of Jal Shakti conferred the Swachh Survekshan Grameen 2019.**
- This ranking was done based on parameters like surveys of public places like schools, Anganwadis, PHCs, Haat/ Bazaars, Panchayat and citizen's perception of Swachhata.
- **The top ranked States and Districts which received awards are:**
 - **Top 3 States:** 1) Tamil Nadu, 2) Haryana, 3) Gujarat
 - **Top 3 Districts:** 1) Peddapalli, Telangana, 2) Faridabad, Haryana, 3) Rewari, Haryana.
 - **State with maximum citizen participation:** Uttar Pradesh.

11th INTERNATIONAL HRANT DINK AWARD

- **Meghalaya-based rights activist Agnes Kharshiing received the 11th International Hrant Dink Award which is** presented annually to individuals or organisations who take personal risks for making world free from discrimination and violence.
- The Award commemorates the memory of Turkish-Armenian journalist Hrant Dink, who was killed in 2007. It is presented annually by the Hrant Dink Foundation.

GURU NANAK DEV JI AWARD FOR PROMOTION OF PEACE

- **Punjab State Cabinet instituted Sri Guru Nanak Dev Ji Award for Promotion of Peace and Interfaith Understanding** in commemoration of the 550th Prakash Purb of Sri Guru Nanak Dev Ji. The award would carry a cash prize of 11 lakh rupees.

NOBEL PRIZE-2019

- Alfred Nobel (born in 1833) was a Swedish chemist, engineer, and inventor. He amassed a fortune during his lifetime, with most of his wealth from his 355 inventions, of which dynamite is the most famous.
- The Nobel Prizes in Chemistry, Literature, Peace, Physics and Physiology or Medicine were first awarded in 1901.
- In 1968, **Sveriges Riksbank (Swedish National Bank)** celebrated its 300th anniversary by donating a large sum of money to the Nobel Foundation to be used to set up a prize in honour of Nobel. The following year, the **Nobel Memorial Prize in Economic Sciences** was awarded for the first time.

- **Prize ceremony:** The prize ceremonies take place annually on 10 December, the anniversary of Nobel's death, in Stockholm, Sweden (with the exception of the peace prize, which is held in Oslo, Norway).

2019 LAUREATES

Category	Recipient	Given for (in the words of Nobel foundation)
PHYSICS	James Peebles, Michel Mayor and Didier Queloz	<ul style="list-style-type: none"> • James Peebles won one-half of the Prize for his work on Cosmic Microwave Background (CMB) radiation, which is electromagnetic radiation left over from the early universe once it had cooled sufficiently following the Big Bang. • The other half went to Michel Mayor and Didier Queloz for their discovery of an exoplanet that challenged preconceived ideas about planets. An exoplanet or extrasolar planet is a planet outside the Solar System.
CHEMISTRY	John B Goodenough, M Stanley Whittingham and Akira Yoshino.	<ul style="list-style-type: none"> • For development of the lithium-ion battery, which is now used from mobile phones to laptops and electric vehicles. • At the age of 97, John B Goodenough is the oldest ever Nobel laureate.
PHYSIOLOGY OR MEDICINE	William G Kaelin, Peter J Ratcliffe and Gregg L Semenza.	<ul style="list-style-type: none"> • For discovering how the body's cells sense and react to oxygen levels, work that has paved the way for new strategies to fight anemia, cancer and other diseases.
LITERATURE	Austria's Peter Handke won the 2019 Prize, and the postponed 2018 award went to Polish author Olga Tokarczuk.	<ul style="list-style-type: none"> • Olga Tokarczuk, the 15th woman to win the Nobel Literature Prize, also won the International Booker Prize in 2018. • The Nobel Prize in Literature is awarded to an author from any country who has produced "in the field of literature the most outstanding work in an ideal direction".
PEACE	Ethiopian Prime Minister Abiy Ahmed Ali	<ul style="list-style-type: none"> • For ending conflict with between Ethiopia and Eritrea, lifting emergency and granting amnesty to thousands of political prisoners.
ECONOMICS (Sveriges Riksbank Prize In Economic Sciences In	Abhijit Banerjee, Esther Duflo and Michael Kremer	<ul style="list-style-type: none"> • For their experimental approach to alleviating global poverty” by the use of Randomised Control Trials (RCTs). • Abhijit Banerjee is an Indian American economist. He was born in Bombay, India.

Memory Of Alfred Nobel)		<ul style="list-style-type: none"> Duflo and Banerjee wrote the book Poor Economics: Rethinking Poverty & The Ways to End it together. Duflo is only the second woman, after Elinor Ostrom in 2009, to win the economics Nobel.
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PAST INDIAN NOBEL LAUREATES:

LAUREATE	FIELD	RATIONALE	YEAR
C.V. Raman	Physics	For his work on the scattering of light and for the discovery of the effect named after him (Raman Effect)	1930
Subrahmanyan Chandrasekhan		For his studies on the structure and evolution of the stars. <i>Chandrashekhar limit (the maximum mass of a stable white dwarf star) is named after him.</i>	1983
Venkatraman Ramakrishnan	Chemistry	For studies of the structure and function of the ribosome.	2008
Har Gobind Khorana	Medicine	For interpretation of the genetic code and its function in protein synthesis.	1968
Amartya Sen	Economics	For his contributions to welfare economics.	1998
Abhijit Banerjee		For his experimental approach to alleviating global poverty” by the use of Randomised Control Trials (RCTs).	2019
Mother Teresa	Peace	For establishing missionaries of charity which worked for the welfare of destitute.	1979
Kailash Satyarthi		He was awarded jointly with Malala Yousafzai for protecting child rights. He founded the Bachpan Bachao Andolan.	2014
Rabindranath Tagore	Literature	For Authoring Gitanjali. He was the first non-European to win the Nobel Prize in Literature.	1913

Rajendra Kumar Pachauri served as the chairman of the Intergovernmental Panel on Climate Change (IPCC) from 2002-2015. During his tenure, IPCC was awarded the Nobel Peace Prize in 2007.

B. SPORTS

CONCUSSION

- In the second Ashes cricket Test match (2019), Marnus Labuschagne became the first ever “concussion substitute” and in fact, the first ever substitute player to bat in a Test innings.
- **The 4th International Conference on “Concussion in sport” held in Zurich in 2012**, defined concussion as a brain injury that may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an ‘impulsive’ force transmitted to the head.
- Concussion temporarily affects brain functioning. Its symptoms could include loss of consciousness, memory loss, headaches, difficulty with thinking, concentration or balance, nausea, blurred vision, sleep disturbances and mood changes.

WORLD ANTI-DOPING AGENCY (WADA)

- The World Anti-Doping Agency (WADA) banned Russia from international sporting events for 4 years after accusing Russia of falsifying data from an anti-doping laboratory.
- The ruling means Russian athletes will still be allowed to compete at the Tokyo Olympics as neutrals, but they will have to prove that they were not involved in the doping schemes as described by the **McLaren report**.
- In 2016, Professor **Richard McLaren**, an independent investigator working on behalf of WADA published a report showing that more than 1,000 Russians athletes in over 30 sports were involved in or benefited from state-sponsored doping between 2011 and 2015.

The World Anti-Doping Agency (WADA) is a foundation initiated by the International Olympic Committee to promote, coordinate and monitor the fight against drugs in sports. **HQ:** Montreal (Canada); **Established in:** 1999.

UN OLYMPIC TRUCE RESOLUTION

- International Olympic Committee (IOC) chief thanked President Ram Nath Kovind for co-sponsoring the United Nation Olympic Truce Resolution, which was recently adopted in the United Nation General Assembly.
- The resolution will aim to ensure a halt to all hostilities, allowing the safe passage of athletes and spectators for the Olympic and Paralympic Games Tokyo 2020.
- **The Olympic Truce, or ekecheria**, is based on an ancient Greek tradition, dating back to the original Olympic Games in Ancient Olympia in 776 BC.
- The Truce was revived by United Nations Resolution 48/11 of 25 October 1993.
- In 1999, the International Olympic Committee announced the establishment of the International Olympic Truce Foundation and the International Olympic Truce Centre in cooperation with Greece.

ELIUD KIPCHOGE

- **Ineos 1:59 Challenge** was a successful 2019 project to break the two-hour mark for the marathon distance sponsored by **Ineos, a multinational chemicals company**, and was held in Vienna, Austria, on 12 October 2019.
- **Under it, Kenya’s Eliud Kipchoge became the first human to complete the marathon, a distance of 42.195 kilometres, in less than two hours. He did it in one hour, 59 minutes and 40 seconds.**

WUSHU

- **Praveen Kumar** made history for India by becoming the first Indian man to win a gold medal in the Wushu World Championships recently held in Shanghai, China.

- Wushu, or Chinese Kungfu, is a hard and soft and complete martial art, as well as a full-contact sport. It has become an international sport through the International Wushu Federation (IWUF), which holds the World Wushu Championships every two years.
- Competitive Wushu is composed of two disciplines: taolu (forms) and sanda (sparring).
- **Taolu** involves martial art patterns, acrobatic movements and techniques for which competitors are judged and given points according to specific rules.
- **Sanda** is a modern fighting method and a full contact sport. Sanda contains boxing, kicks (kickboxing), and wrestling.

PINK BALL CRICKET

On November 22, Kolkata's Eden Gardens stadium hosted the first-ever International Day/Night Test in the country between India and Bangladesh. The first Day/Night Test match was played between Australia and New Zealand at the Adelaide Oval in 2015.

Why is Pink Ball is used for Day/Night Test?

- Test matches are played with a red ball. But in case of Day/Night Tests, because the natural light fades away and artificial lights come in effect a pink coloured ball is used.
- This is because a red ball takes on a brownish colour under yellow floodlights making it difficult to spot the ball against the colour of the pitch. The pink balls have better visibility and also deteriorate more slowly making it suitable for Test cricket.

Pink Ball Vs Red Ball:

1. There is no difference in the core of the ball [inside quilt], which is made of cotswool and cork. There is also no difference in the manner in which we stitch the two balls.
2. The difference is that the **red ball is stitched with a white thread while the pink ball is stitched with a black thread.**
3. **Wax is used on the red ball** which gives the red ball its cherry colour. But wax can't be used on pink balls as it would turn the pink ball black. This is why, instead, a **PU based coat [ball polish] is used on the pink ball** which prevents abrasions on the ball and helps maintain its colour till 40 overs.
4. **The seam of the pink ball** is more pronounced which is an equal mix of synthetic and linen. On the other hand, the seam on the red ball is entirely synthetic.

SOURAV GANGULY/ BOARD OF CONTROL FOR CRICKET IN INDIA (BCCI)

- **Former captain of the Indian cricket team, Sourav Ganguly, was formally appointed as the president of the Board of Control for Cricket in India (BCCI).**
- **He is only the second international cricketer to be elected president of the BCCI.** The Maharaja of Vizianagaram, Lt. Col. Pusapati Vijay Ananda Gajapathi Raju, was the first international cricketer to be elected to the post in 1954.
- With this, **Committee of Administrators (CoA)** – comprising Vinod Rai, Diana Edulji and Lt. Gen (Retd) Ravi Thodge – which was created by Supreme Court In 2017, at the behest of Justice Lodha, to implement the reforms in Cricket ended its 33-month tenure.

Board of Control for Cricket in India (BCCI)?

- The BCCI is registered as a society under the Tamil Nadu Societies Registration Act, 1975. It was established in 1928 as the central governing body regulating cricket in India.
- **Structure:** It is a consortium of state cricket associations and the state associations select their representatives who in turn elect the BCCI Chief.

- **Headquarters:** Wankhede Stadium, Mumbai.

CRIMINALISING MATCH-FIXING

- **In a first for a South Asian nation, Sri Lanka has criminalised several offences related to match-fixing.** Sri Lanka's Parliament passed The Prevention of Offences Related to Sports Bill that entails a prison term of up to 10 years for being directly or indirectly involved in match-fixing, in sport.

Global and Indian scenario:

- Match-fixing is a serious crime in a number of other cricketing nations, including England and Australia. **Although cricket betting is illegal in India**, it is legal in many other countries where session bets can be placed on matches happening in India.
- In 2018, in a report titled "Legal Framework: Gambling and Sports Betting including in Cricket in India", the **Law Commission** recommended that "match-fixing and sports fraud" be deemed as "criminal offences", and be dealt with "severe punishments".

SUPER OVER RULE

- **The International Cricket Council (ICC) has changed the super over rule following the uproar over the outcome of the men's World Cup 2019 final when England were declared winners against New Zealand on boundary count.**
- A Super Over is a tie-breaking method used in limited-overs cricket matches, where both teams play a single, additional over to determine the winner.
- As per new rule, in case of a super over tie there will be a repeated super over until one team has more runs than the other. In group stages, if the Super Over is tied, the match will be tied. In semifinals and finals, the Super Over will be repeated until one team has more runs than the other.

C. PERSON IN NEWS

Person	In News
Kanchan Chaudhary Bhattacharya	India's first woman Director General of Police (DGP) Kanchan Chaudhary Bhattacharya passed away at the age of 72. She was the second woman IPS officer in the country after Kiran Bedi.
Anshula Kant	Anshula Kant, Managing Director of State Bank of India (SBI), has been appointed as MD and Chief Financial Officer of the World Bank. Her work will include oversight of financial reporting and working closely with the World Bank CEO on the mobilization of the International Development Association (IDA).
Muthulakshmi Reddi	Google dedicated a Doodle to Dr. Muthulakshmi Reddi (1886 – 1968), a surgeon, educator, lawmaker and social reformer, on her 133rd birth anniversary. <ul style="list-style-type: none"> • Medical career: She was the first Indian girl student in the Department of Surgery at Madras Medical College. She became one of the first women doctors in India in 1912, and the first woman house surgeon in the Government Maternity Hospital, Madras.

	<ul style="list-style-type: none"> • Political career: She was the first woman member (and vice president) of the Madras Legislative Council, making her the first woman legislator in India. • Social reforms: <ul style="list-style-type: none"> ○ As member of Madras Legislative Council, she helped raise the minimum age for marriage for girls and pushed the Council to pass the Immoral Traffic Control Act, and the Devadasi system abolishment Bill. ○ In 1930, she established the Avvai Home to shelter and educate devadasi girls. ○ She co-founded the Women's Indian Association in 1918. • Honours: In 1956, she was awarded the Padma Bhushan. The Government of Tamil Nadu has recently announced that government hospitals in the State will celebrate her birth anniversary as 'Hospital Day' every year.
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D. COMMITTEES

Name Of Committee	Mandate
Bharat Bhushan Parsoon Committee	Constituted by Government of India to look into fare fixation of Rapid Metro Rail Gurgaon Limited.
Tapan Ray Panel	Constituted by RBI to review the regulatory and supervisory framework for core investment companies (CIC).
VG Kannan Committee	Constituted by RBI to review the entire gamut of Automated Teller Machines (ATM) charges and fees.
Aruna Sundararajan Committee	Constituted by Union Telecom Ministry to spell out revival plans for Telecom sector which has been undergoing financial stress for a long time.