



VAJIRAM & RAVI

(Institute for Civil Services Examination)

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the RECITALS

Explore Current Affairs Through Q&A



**Featured
Articles**



**Mains
Q & A**



**Prelims
Q & A**

**Bridging
Gaps**

*J&K Loses Special
Status Under Article 370*

Chief Of Defence Staff

Artificial Intelligence

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From the Desk of the Director

Dear Students

The preparation of current affairs magazine is an evolutionary process as its nature and content keeps changing according to the demands of Civil Service Exam. As you are aware about the importance of current affairs for the prelims as well as mains exam, our aim is to follow an **integrated approach** covering all stages of examination from prelims to interview. Keeping these things in mind, we, at Vajiram and Ravi Institute, are always in the process of evolving our self so as to help aspirants counter the challenges put forward by UPSC.

In fulfillment of our objective and commitment towards the students, we have introduced some changes in our current affairs magazine. The CA Magazines, now with the name of “**The Recitals**”, will have four sections. These are:

1. **Feature Article:** As you are aware of the fact that civil service mains exam has become quite exhaustive and analytical, especially since 2013 after the change in syllabus, we have decided to focus on 2-3 topics every month that will provide an insight into the issue so as to help students understand the core of the issue. This will help in Essay writing as well as Mains Exam.
2. **Mains Q&A:** New students quite often struggle to find out that in what way the given topic is useful for them and in what form questions can be framed from the article. To help those students, we at Vajiram and Ravi have designed an innovative way to teach current affairs. Now, we will cover the current issues through questions and answers so as to make it more targeted towards exam. This will not just provide the information and analysis on current issues but will also help in learning the art of answer writing. Further the related information on the topics on which questions have been framed but that is outside the purview of answer will be given in the Box as ‘**Extra Mile**’.
3. **Prelims Q&A:** This section will contain prelims based MCQs that will test your diligence while reading the current issues. These MCQs will be of UPSC standard and will contain detailed explanation. Students are advised to attempt these MCQs honestly and read the Explanation carefully. The idea is to also provide students with a question bank of around 600 current affairs MCQs (50 Qs × 12 months = 600 Qs) just before their prelims examination, which will act as revision on issues spanning over the entire year.
4. **Bridging Gaps:** This section will contain miscellaneous topics which has not been covered through Q&A. That is why it is called Bridging Gaps, meaning the left-over topics.

So, the new magazine is a complete overhaul of what we have been doing for so long. We hope that the new beginning will be to the liking of students.

Thanks

Best Wishes

J&K LOSES SPECIAL STATUS UNDER ARTICLE 370

“Ek desh mein do Vidhan, do Pradhan aur do Nishan nahi challenge,” was the slogan with which Shyama Prasad Mookerjee, founder of Bharatiya Jan Sangh (BJS), precursor of the BJP, marched to Jammu & Kashmir where he died in jail in 1953.

Why J&K Enjoyed Special Status: Digging Into History

- The special status of J&K was the result of the way it was integrated in India. On 26th Jan' 1947, when J&K was attacked by Azad Kashmir Forces with support of Pakistan, Maharaj Hari Singh of J&K was obliged to seek the help of India after executing an **Instrument of Accession, a legal assurance** that acquired jurisdiction over the State wrt matters of defence, external affairs, and communication.
- However, at the time of accession, India gave an **extra-legal assurance** that it was the people of state, acting through their Constituent Assembly, will determine-
 - a) Constitution of the State
 - b) Relationship with India (Jurisdiction of India over J&K)
- When the original constitution of India was framed in 1949, India kept its both assurances –
 - Legal assurance, made in Instrument of Accession, by Article 1.
 - Extra-legal assurance by Article 370
- Included in the Constitution on October 17, 1949, Article 370 exempts J&K from the Indian Constitution (**except Article 1 and Article 370 itself**) and permits the state to draft its own Constitution. Some important provisions of Article 370 are -
 - **Article 370 (1b)** restricts **Parliament's legislative powers** in respect of J&K. For extending a central law on subjects included in the Instrument of Accession (IoA), mere “consultation” with the state government is needed. But for extending it to other matters, “concurrence” of the state government is mandatory.
 - **Article 370(1)(c)** explicitly mentions that Article 1 of Indian Constitution applies to J&K through Article 370.
 - Under **Article 370 (1d)**, President may by order specify provisions of Indian Constitution that would be applicable to J&K, but only with the concurrence of State Government.

Please note that the State Govt in above provisions means the person for the time being recognized by the President as the Maharaja of J&K acting on the advice of Council of Minister for the time being

in office under Maharaja's proclamation dated 5th March 1948, under which the Maharaja appointed an interim government in the state, with Sheikh Abdullah as prime minister.

- Under **Article 370(3)**, President may, by public notification, declare that this article shall cease to be operative or shall be operative only with such exceptions and modifications and from such date as he may specify, on the recommendation of the Constituent Assembly of the State.
- Thus, the application of other articles (except 1 and 370) was placed on a tentative basis, subject to the eventual approval of the Constituent Assembly of State. Till then, however, *President in consultation with State Govt* can determine application of other articles. This was the interim arrangement to continue until the Constituent Assembly made its decision.
- The Constituent Assembly decided in its wisdom to retain Article 370 and ratified the accession to India in Feb 1954 and also the decision arrived at Delhi Agreement 1952, which was followed by the promulgation by the President of the **Constitution (Application to J&K) Order 1954**, placing on final footing the applicability of provisions of the Indian Constitution governing the relationship between Union and this State. The President has amended this order multiple times in 1963, 1964, 1965, 1966, 1972, 1974, and 1986. The President is empowered to decide what provisions of the Constitution of India would be applicable to the State and what are the exceptions, but with the State government's concurrence (**Art 370 (1d)**).
- **Article 35A** stems from Article 370, and was introduced through a Presidential Order in 1954. Article 35A empowers the Jammu and Kashmir legislature to define the permanent residents of the state, and their special rights and privileges— such as the bar on outsiders buying property and women marrying non-Kashmiris losing their property rights. Article 35A was not passed as per the amending process given in Article 368, but was inserted on the recommendation of J&K's Constituent Assembly through a Presidential Order. The Supreme Court is examining whether it is unconstitutional or violates the basic structure of the Constitution. Since Article 35A predates basic structure theory of 1973, as per Waman Rao (1981), it cannot be tested on the touchstone of basic structure.
- Now the Constituent Assembly was left with its second task – **making of State Constitution**. This was drafted and given effect from 26 Jan' 1957. Thus, was completed both the task assigned to Constituent Assembly in extra-legal assurance.

How Can Article 370 Be Revoked

Article 370 (3) reads as

“Notwithstanding anything in the foregoing provisions of this article, the President may, by public notification, declare that this article shall cease to be operative or shall be operative only with such exceptions and modifications and from such date as he may specify.

Provided that the **recommendation of the Constituent Assembly** of the State referred to in clause (2) shall be necessary before the President issues such a notification.”

Since such an Assembly was dissolved on January 26, 1957, one view is it cannot be deleted anymore. But the other view is that it can be done, but only with the concurrence of the State Assembly.

How The Current Government Changed Kashmir's Special Status Overnight

- The Constitution (Application to Jammu and Kashmir) Order, 2019, issued by President Ram Nath Kovind “in exercise of the powers conferred by Clause (1) of Article 370 of the Constitution”, has **not abrogated Article 370**. While this provision remains in the statute book, it has been used to withdraw the special status of Jammu and Kashmir. So, **although Article 370 remains, it is effectively dead**.
- This clause enables the President to specify the matters which are applicable to Jammu and Kashmir. As it can be issued only with the Jammu and Kashmir government’s concurrence, the notification uses the words “with the concurrence of the Government of the State of Jammu and Kashmir”. This presumably means the **Governor, who is now administering the State under President’s Rule, has given his concurrence on behalf of the State government**.
- The Order supersedes the 1954 Order. This effectively means that all the provisions that formed the basis of a separate “Constitution” for Jammu and Kashmir stand abrogated. The Order declares that all the provisions of the Constitution of India shall apply apply to Jammu and Kashmir too. With this, the discriminatory provisions under Article 35A are now unconstitutional.

However, some special measures were still needed for the scrapping of Article 370 altogether. Therefore, a few clauses were added to **Article 367** of the Constitution. Article 367 contains “Interpretations”. They contain guidance on how to read or interpret some provisions.

- The new clauses say, when applicable to Jammu and Kashmir, references to the **Sadr-i-Riyasat** of Jammu and Kashmir shall be construed as references to the **Governor** of the state, and “references to the **Government** of the said State shall be construed as including references to the **Governor** of Jammu and Kashmir acting on the advice of his Council of Ministers”.

- And most importantly, the reference to the “**Constituent Assembly**” in a proviso to Article 370 (3) has been amended to read “**Legislative Assembly of the State**”. This is the proviso that says the President can declare that Article 370 is no more operative only on the recommendation of the Constituent Assembly. As there is no Constituent Assembly in existence now, there is no body to “recommend” the demise of Article 370. Therefore, the State Assembly has to play that role.

Later on, Rajya Sabha approved **The Jammu and Kashmir Reorganisation Bill, 2019**. With the passage of this Bill in both the Houses, the state of Jammu and Kashmir will now cease to exist; it will be replaced by **two new Union Territories: Jammu and Kashmir, and Ladakh**. UTs have become states earlier; this is the first time that a state has been converted into a UT. The UT of Jammu and Kashmir will have an Assembly, like in Delhi and Puducherry.

Article 3 of the Constitution gives Parliament the power to amend the Constitution by a simple majority to change the boundaries of a state, and to form a new state. But this change requires that such a Bill be first referred to the concerned state Assembly by the President for ascertaining its views. Explanation II of Article 3 says Parliament’s power extends to forming Union Territories.

A wrong Way To End

The entire exercise of getting **Article 370 of the Constitution** effectively abrogated has been marked by **executive excess**.

- The first step was to declare by a presidential decree that the ‘Governor’ — without regard to the fact that he has no Council of Ministers now to aid and advise him — can speak for the State government and give his concurrence to any modification in the way the Constitution of India applies to Jammu and Kashmir.
- It also jumps over the fact that there is no constituent assembly now by merely reading the term as ‘legislative assembly’, and letting Parliament perform the role of the State legislature. If at all the words ‘constituent assembly’ in Article 370(3) have to be read down, it has to be done in such a way that its core meaning is saved. For example, it can be read down as meaning a ‘special majority’ of the State Legislative Assembly constituted by free and fair elections.

Thus the President’s power under Article 370 has been used both to create an enabling provision and to exercise it immediately to modify the Order, thereby dispensing with the role envisaged for the State Assembly. In sum, a purported process to change the constitutional status of a sensitive border State has been achieved **without any legislative input or representative contribution from its people**.

Can The Presidential Order Be Challenged In The Supreme Court? On What Grounds?

It has been challenged already.

- The possible grounds of challenge could include the argument that the conversion of Jammu and Kashmir into a Union Territory is in **violation of Article 3**, as the Bill was not referred by the President to the state Assembly. Also, can the Constituent Assembly mean Legislative Assembly? Are the Governor and the state government one and same?
- The constitutional relevance of Instrument of Accession will also be examined by the court. Whether Article 370 was part of the basic structure will likely be considered.
- The *use of Article 367 in amending Article 370* will also be examined.

Conclusion

It is hoped that by the equal inclusion of Jammu and Kashmir state under the same constitution as India's other twenty-eight states, India can ensure that its values of free and fair elections without intimidation, its values of diversity and religious harmony, and its fight against terrorism, can provide greater stability and security not only for the people of India, but for those throughout South Asia

Chief Of Defence Staff

Context

- While delivering the Independence Day speech from the ramparts of the Red Fort in Delhi, PM had announced the move to **appoint a Chief of Defence Staff (CDS)**.
- It is being held as **one of the single biggest reforms** in the armed forces which will help improve synergy among the three branches of the military.

Proposed CDS

- A CDS will be a high-ranking officer of either the Army, Navy or Air Force.
- The CDS will be senior to the service chiefs and will act as a **single point of contact** between the armed forces and the Prime Minister.

Role of CDS

- Its primary role will be to **work towards increasing operational coordination** among the Army, Navy or Air Force and deal with India's national security with a comprehensive approach.
- It is also meant to **streamline and prioritise defence spending** to meet the requirements of India's national security.

Current System

- Under the present structure, the **Chairman of the Chiefs of Staff Committee (CoSC)** coordinates tri-services issues. The CoSC comprises the Army, Navy and IAF chiefs and the senior-most among them acts as its chairman.
- Air Chief Marshal **Birender Singh Dhanoa** is the present CoSC, but he **does not function in the capacity of a CDS**, being proposed now.
- Other countries like the **US, France, the UK and China** all have a Chief of Defence Staff.

Committees Recommending CDS

- **Kargil Review Committee**, set up in 1999 under the chairmanship of K Subramanyan, was the **first committee to recommended** the appointment of a CDS
- **The Naresh Chandra Task Force**, formed in May 2011 to review the national security management system, recommended the **creation of permanent post of chairman, chiefs of staff committee (CoSC)**.
- **Lt Gen (retd) D B Shekatkar**, who is the Chairman of Committee on Combat Capabilities Enhancement of Armed Forces, in his report is also believed to have **recommended creation of such a post**.

Issues With The Current System

- In the current system, the senior most chief usually gets appointed to this post towards the end of his career. As a result, he **does not get sufficient time** to bring the necessary changes.
- Also, this system is considered to be inadequate since he **has dual role** as he is also the Chief of his own service.
- **Combined responsibility** is not only overwhelming, often **resulting in neglect and delay**, but it can also place **two roles in conflict**. For example, a CoSc from Air Force might have an inclination to favour Air force service in resource allocation.
- There is a turf war between the three wings with each seeing things with its own perspective and requirement. **Effective coordination** among the three is missing.
- In current system, Defense Secretary is responsible for the defense of the country. This invariably leads to **greater gap between the civilian and military bureaucracy**.

Previous Reforms Aimed At Integration Of Forces

- The first and only tri-service theatre **Andaman and Nicobar Command (ANC)** and the **Headquarters Integrated Defence Staff (HQ IDS)** were created in 2001.
- In 2018, Prime Minister Modi took additional steps toward further integration by establishing **agencies for Space and Cyber**, as also the **Special Operations Division under CoSC**.

Benefits Of The Proposed Structure

- It will promote **seamless coordination, better efficiency and greater effectiveness** of the national defence architecture.
- It will **eliminate the service loyalties or individual considerations** clouding the judgement which in turn will help cut back infructuous spending.
- **Duplication of assets** in infrastructure and human resources, whether in training or in operational commands, is **a huge drag** on the defence budget. This step will prevent duplication, streamline logistics and improve training.
- The hybridisation of conflicts is no longer a hypothetical concept. Also, the information warfare and Cyber warfare are breaking the traditional boundaries. Hence, CDS is required to address the challenges of 21st century warfare.

Limitations Of The Proposed System

- Can the proposed CDS bring synergy within the three services when he has no operational powers over the military?
- The current proposal provides the equal voting rights to CDS as the service chiefs. In case of disagreement, MoD will arbitrate. However, if a CDS is to be a “single point advisor”, where is the question of service chiefs not agreeing?

Way Forward

- Proper steps must be taken so as to ensure that the **integration of the armed forces takes place not only at the apex level but also at the field level.**
- Given that the decision to create the post of CDS is now a done deal, it is critical to ensure that its **constitution, powers, relation to other appointments** and organisations is well thought out.
- Since one of the most important functions of the CDS would be to build up the capability of the armed forces, the **existing capital procurement system** will need to be re-engineered.

Conclusion

- A single-point tendering of military advice to the political leadership, and the execution of its decisions, will go a long way in addressing the challenges of the changing strategic as well as security environment. In this context, it can be said that a historic decision has been announced on a historic day.
- **A high-powered panel** has been set up by the government under the National Security Advisor (NSA) to draw up the blue print for implementation of this reform.
- Much will depend on how well the blueprint of the CDS scheme is worked out by the panel.

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Artificial Intelligence

AI refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making. Initially conceived as a technology that could mimic human intelligence, AI has evolved in ways that far exceed its original conception.

Evolution of AI

- AI is not a new phenomenon, with much of its theoretical and technological underpinning developed over the past 70 years by computer scientists such as Alan Turing, Marvin Minsky and John McCarthy. AI has already existed to some degree in many industries and governments.
- AI technology has experienced waves of optimism followed by disappointment and periods of inertia, dubbed as “AI winters”. Each previous breakthrough has only ever partly lived up to the hype it generated, and none has managed to kick-start the technology into the mainstream.
- However, now thanks to virtually unlimited computing power and the decreasing costs of data storage and explosion in data that is digitised, the world is on the cusp of the exponential age of AI and has led to the belief that the “AI Spring” has not only arrived but is here to stay.

Categories of AI

I. Weak AI vs. Strong AI

- Weak AI describes "simulated" thinking. That is, a system which appears to behave intelligently, but doesn't have any kind of consciousness about what it's doing. For example, a chatbot might appear to hold a natural conversation, but it has no sense of who it is or why it's talking to someone.
- Strong AI describes "actual" thinking. That is, behaving intelligently, thinking as human does, with a conscious, subjective mind. For example, when two humans converse, they most likely know exactly who they are, what they're doing, and why. ^[1]_{SEP}

II. Narrow AI vs. General AI

- Narrow AI describes an AI that is limited to a single task or a set number of tasks. For example, the capabilities of IBM's Deep Blue, the chess playing computer that beat world champion Gary Kasparov in 1997, were limited to playing chess. It wouldn't have been able to win a game of tic-tac-toe - or even know how to play.
- General AI describes an AI which can be used to complete a wide range of tasks in a wide range of environments. As such, it's much closer to human intelligence.

- **Superintelligence:** The term "superintelligence" is often used to refer to general and strong AI at the point at which it surpasses human intelligence, if it ever does.
- While big strides have been made in Artificial Narrow Intelligence – algorithms that can process documents, drive vehicles or beat champion chess players, no one has yet claimed the first production or development of General AI. As per expert opinion, the world is a long way off the emergence of General AI.

Global Developments in AI

- Countries around the world are becoming increasingly aware of the potential economic and social benefits of developing and applying AI. For example, China and U.K. estimate that 26% and 10% of their GDPs respectively in 2030 will be sourced from AI-related activities and businesses.
- National governments have significantly increased public funding for AI through commitments such as increasing the R&D spend, setting up industrial and investment funds in AI startups, investing in network and infrastructure and AI-related public procurements. These countries are also leveraging different combinations of public-private-academia to develop and promote AI.

Applications

- Beyond just the headline numbers of economic impact, a disruptive technology such as AI needs to be seen from the perspective of the transformative impact it could have on the greater good – improving the quality of life and access of choice to a large section of the country. Given the strength of the technology, it has a range of applications.
- **Healthcare:** Application of AI in healthcare can help address issues of high barriers to access to healthcare facilities, particularly in rural areas that suffer from poor connectivity and limited supply of healthcare professionals.
- This can be achieved through implementation of AI driven diagnostics, personalised treatment, early identification of potential pandemics, and imaging diagnostics, among others. [SEP]
- **Education and Skilling:** AI can potentially solve quality and access issues observed in the education sector. It can help in augmenting and enhancing the learning experience through personalised learning, automating and expediting administrative tasks, and predicting the need for student intervention to reduce dropouts or recommend vocational training.
- **Agriculture:** AI holds the promise of driving a food revolution and meeting the increased demand for food. It can also address challenges such as inadequate demand prediction, lack of assured irrigation, overuse / misuse of pesticides and fertilisers, improvement in crop yield through real time advisory, advanced detection of pest attacks, and prediction of crop prices to inform sowing practices. [SEP]

- **Manufacturing:** Manufacturing industry is expected to be one of the biggest beneficiaries of AI based solutions, thus enabling 'Factory of the Future' through flexible and adaptable technical systems to automate processes and machinery to respond to unfamiliar or unexpected situations by making smart decisions.
- **Energy:** In renewable energy systems, AI can enable storage of energy through intelligent grids enabled by smart meters, and also improve the reliability and affordability of photovoltaic energy.
- **Smart Cities:** Integration of AI in newly developed smart cities and infrastructure could also help meet the demands of a rapidly urbanising population and providing them with enhanced quality of life. [SEP]
- Due to the large amount of data they can create, smart cities are especially amenable to application of AI, which can make sense of the data being generated, and transform it into predictive intelligence – thus transitioning from a smart city to an 'intelligent city'.

Ethics Privacy and AI

- AI is going to be the tipping point in technological evolution of mankind, with human dependence on machines and algorithms for decision making never been such deep.
- Decision making systems – individual, societal, regulatory or even judicial – are dependent upon human limitations of knowledge, precedent, rationale and bias (explicit or subconscious).
- Presently, most AI solutions suffer from what is commonly known as the “Black Box Phenomenon”, with very little or no understanding of what happens in between and only the input data and results being the known factors.
- Delegation of some aspects of that decision making to algorithms, which may well be able to ingest and process many more parameters as compared to a human, may likely result in systems with reduced bias, discrimination and improved privacy protection.
- However, even if a technological intervention helps to delegate that responsibility to an algorithm with improved outcomes, it is extremely important to set much higher standards for privacy and protection in case of AI tools.
- AI depends on generation, collection and processing of large amounts of data on individual, entity and community behaviour. Data collection without proper consent, privacy of personal data, inherent selection biases and resultant risk of profiling and discrimination, and non-transparent nature of AI solutions are some of the issues requiring deliberation and proper recourse.

Steps To Assure Ethics And Privacy

- It is important to establish data protection frameworks with legal backing based on the core principles of informed consent, technology agnosticism, data controller accountability, data minimisation, holistic application, deterrent penalties and structured enforcement.
- Apart from having a central privacy protection law, due to diverse and fast changing nature of the technology, sectoral regulatory frameworks may also act as additional protection to user privacy and security.

AI in India

- The truly transformative nature of the technology, yet the nascent stage of its adoption worldwide, provides India with an opportunity to define its own brand of AI leadership.
- The strategy should strive to leverage AI for economic growth, social development and inclusive growth, and finally as a “Garage” for emerging and developing economies.
- Despite indications of recent positive efforts in this aspect of technology, AI research in India is still in its infancy and battling multiples challenges-
 - Lack of enabling data ecosystems
 - Low intensity of AI research
 - Core research in fundamental technologies
 - Transforming core research into market applications
 - Inadequate availability of AI expertise, manpower and skilling opportunities
 - High resource cost and low awareness for adopting AI in business processes
 - Unclear privacy, security and ethical regulations
 - Unattractive Intellectual Property regime to incentivise research and adoption of AI

These challenges, if addressed in an expeditious manner through concerted collaborative efforts by relevant stakeholders, with government playing a leading role, could lead to fundamental building blocks that form the core to India’s march towards leadership in AI.

MAINS Q&A

1. **Current regime of unregulated, corrupt, politically complicit and crony-capitalist media in India is undermining rather than aiding democracy. Critically discuss.**

Context

- Recently, **NDTV founders were stopped** at Mumbai airport from flying abroad as they are facing alleged cases of corruption and money laundering.
- They were stopped from leaving the country on the basis of a "preventive" lookout circular (LOC) issued by the CBI.

Answer

In 2016, a leading Hindi news channel, had been asked to go off air for 24 hours as a penalty by the government for its coverage on Pathankot attacks in Jan' 2016. This is not an isolated incident. Various ill practices within the media has affected the internal security and has undermined the election processes.

Various Issues With The Current Media

- **Embedded Journalism:** Unholy nexus between the rulers (Military, Police) and media, leading to biased reporting (fake encounters as heroic-J&K, North-East),
- **Yellow Journalism:** The media represents little or no legitimate news and instead uses eye-catching sensational news to lure the audiences and increase TRP.
- **Paid News:** Political parties resort to paid news so as to get favorable reporting. A total of 647 cases of paid news have been registered while 909 social media posts were removed from various social media platforms in the 2019 Lok Sabha elections.
- **Insensitive And Biased Coverage:** This was also seen during the aftermath of Nepal Earthquake in 2015, which added to the plight of earthquake victims, which was evident from *#GoHomeIndianMedia*.
- **Corporate Ownership:** It affects the integrity and authenticity of broadcasting because of undue pressure. Their only motive is to earn massive profits as a result of which good news reporting takes a back seat.

However, Media is rightly called as the **fourth pillar of democracy** as it has a crucial role in shaping people's opinions and making them aware of various social, political and economic activities. Television and radio, due to their wide overreach and inclusive framework, have been instrumental in educating the rural illiterate masses. It provides a platform for exhaustive debates and constructive criticism of the government, thus promoting **participative democracy**. It is like a **'watchdog'** in a democracy.

Way forward:

- So far, self regulation has not yielded the desired results. However, excessive regulation might interfere with the freedom of expression and may give arbitrary power to the government to gag media houses.
- Hence, need of the hour is to **create truly independent, multi-stakeholder body**.
- For this regulatory body to be successful, it will have to create a **fine balance between public interest and what-public-is-interested-in**. As the former will give credibility to the media houses and later will generate revenue for them.

2. In the current nebulous global order, India is increasingly being viewed by major powers as a potential swing-state or balancer. Do you agree? Justify your position.

Context:

- Despite being a non-member, **India was invited to G7 Summit** by France.
- **During G20 summit**, held in Osaka, the major powers such as Russia, USA, Japan, China held **bilateral/trilateral meeting with India**.
- These events strengthen the claim that **Big Powers are gradually pivoting towards India**.

Answer

Assertive China, rising tensions between USA and Russia, trade war between USA and China, growing Russia-China proximity, decline of multilateralism are few examples which define the current nebulous global order. Against this background, India, due to increased standing and positive reputation, is viewed as a swing state in the global balance of power.

India As A Potential Swing-State: Few Instances

- India was a **key interlocutor** for trade adversaries between **both China and the United States**, on the margins of the 2018 G20 summit in Buenos Aires.
- **China, Russia, Japan and the United States** sought to pivot towards India on the margins of the recently-concluded G20 summit at Osaka. India participated in trilateral meetings such as RIC, JAI etc. on the sidelines of Osaka Summit.
- Although India **is not a member of G7**, it was invited to the recently held G7 summit in France.
- India is playing a major role in **Indo-Pacific region**.

Why India?

- **Economic Powerhouse** – India is among the fastest-growing economies in the world which aims to become a \$5-trillion economy by 2024. On the basis of purchasing power parity, it is the world’s third-largest economy.
- **Geographical Location** - Sitting at the edge of the Middle East and East Asia, it occupies the majority of the South Asian landmass and has a land or maritime boundary with every state in the region, as well as China, Myanmar, Indonesia, and Thailand.
- **Credibility** – Since 1947, India’s democracy has endured without suffering any set back. Also, India’s belief in multilateralism is widely known as India is a leading voice demanding the reform in global institutions such as IMF, UN, WTO etc.
- **Current Global Tensions** –Trade war, tension between Russia and USA and collapse of INF treaty, assertive China threatening Japan and USA, rising US-Iran hostilities etc. make India a suitable candidate for alliance.

Conclusion

India is arriving on the world stage as the first large, economically powerful, culturally vibrant, multi-ethnic, multi-religious democracy outside of the geographic West. As it rises further, India is playing a key role in the great political struggles of the next decades.

So far, it has been able to maintain relationship with all the major powers. However, this happy situation of being ‘pivotal’ to the interests of big powers can turn tricky for India if it has to eventually

choose its place. Since, India **aspires to be “a leading power”** rather than a balancing actor in geopolitics and geo-economics, it must tread carefully in choosing the right partners.

3. **The fact that the bilateral cooperation between India and Bhutan is expanding into new areas such as space, aviation and digital technology indicates a stronger trust in the relationship going forward. Comment.**

Context:

- Prime Minister Modi has paid a State Visit to Bhutan on 17-18 August 2019, at the **invitation of the Prime Minister of Bhutan, Dr. Lotay Tshering**.
- His visit to Bhutan, very early in his second term, is in line with Gol's continued emphasis on its **'Neighbourhood First Policy'**.

Answer

India and Bhutan share a special and time-tested partnership, anchored in mutual understanding and respect and reinforced by a shared cultural heritage and strong people to people links. The August 2019 visit of Indian PM to Bhutan has added a new chapter by going beyond the traditional sectors of cooperation. India now seeks to cooperate **extensively in new frontiers, from schools to space, digital payments to disaster management**.

New Frontiers in Cooperation:

- **Digital Economy** – India launched the **facility of use of Indian-issued RuPay cards in Bhutan**. In the next phase, the banks of Bhutan will be empowered to issue RuPay cards to Bhutanese citizens to use in India. It will ease digital payments for tourists. A feasibility study for use of India's Bharat Interface for Money (**BHIM**) **app** in Bhutan was also agreed.
- **Space** – Recently, India inaugurated the Ground Earth Station in Bhutan to improve Bhutan's broadcasting services and enhance disaster management capabilities. Together, both sides are planning to develop a small satellite for Bhutan that would provide services in meteorological data, tele-education and health care.
- **Education** – Recently inaugurated inter-connection between **India's National Knowledge Network and Bhutan's Research and Education Network** would **create an information highway**. This will encourage greater interaction among the universities and students of both sides. Increase in scholarships for Bhutanese students for studies at Nalanda University is a welcome step.
- **Aviation** – Both the countries have signed an MoU on cooperation Relating to Aircraft Accident and Incident Investigation.

Conclusion:

Over the last few decades, the relationship between these two countries has strengthened. However, it was mainly limited to energy, hydropower and cultural cooperation. Building on the existing good relations, the bilateral cooperation is expanding into new areas such as space, aviation and digital technology. It is a positive sign indicating a stronger trust in the relationship going forward.

However, India needs to pay more attention to Bhutan's economic and environmental concerns with regard to some of the Indian hydropower projects so as to sustain a long-standing friendship. Also, it must not forget the fact that **a small but strong minority in Bhutan regards China as its natural partner**.

Key Highlights of Visit

- During the visit, Indian PM congratulated Bhutan for the Kingdom's imminent graduation to the category of a **Middle-Income country**.
- 10 MoUs were signed during this visit. These are:
 - 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*
 - MoU on cooperation Relating to Aircraft Accident and Incident Investigation
 - MoU between National Knowledge Network of India (NKN), and Department of Information Technology & Telecom (Druk Research and Education Network on **Peering Agreement**
 - Power Purchase Agreement Between for Sale and Purchase of Mangdechhu Power
 - MoU on cooperation in Judicial Education and Mutual Exchanges (between Bhutan National Legal Institute and National Judicial Academy, Bhopal)
 - The Royal University of Bhutan signed separate MoUs with IIT Kanpur, IIT Bombay, IIT Delhi and NIT Silchar
- PM of both the countries formally inaugurated the recently completed **720 MW Mangdechhu Hydroelectric Plant**. With the coming on stream of this Project, the jointly created generation capacity in Bhutan has crossed **2000 MW**.
- Leaders of both the countries resolved to expedite the completion of other ongoing **projects such as Punatsangchhu-1, Punatsangchhu-2 and Kholongchhu**. They also reviewed the ongoing bilateral discussions on the **Sankosh Reservoir hydroelectric project**.
- Both leaders formally launched the **facility of use of Indian-issued RuPay cards in Bhutan** to ease digital payments for Indian tourists and resolved to expeditiously work on the **issuance of RuPay cards by Bhutanese banks**, which would benefit Bhutanese travellers to India and thus allow full inter-operability of RuPay cards in both countries.
- The two Prime Ministers inaugurated the Ground Earth Station of the South Asian Satellite in Thimphu, constructed with the support of ISRO. Both leaders also agreed to collaborate on the **joint development of a small satellite** for Bhutan.
- A Joint Working Group is to be formed to implement the project and other related activities, including developing a **geoportal system for Bhutan** for natural resources and disaster management, using remote sensing and geo-spatial data.
- The two leaders also inaugurated the inter-connection between **India's National Knowledge Network and Bhutan's Research and Education Network**. This link-up would **create an information highway**, encouraging greater interaction among the universities and students of both sides.
- Indian PM announced **the enhancement of quantum of subsidized LPG** to Bhutan from the present 700 MT to 1000 MT per month.
- He also announced the **increase in scholarships for Bhutanese students** for studies at Nalanda University from 2 to 5.

4. What is the Intermediate-Range Nuclear Forces (INF) Treaty? The collapse of INF treaty will give rise to a new arms race. Do you agree?

Context:

- On August 2, 2019 US President Donald trump formally terminated **the Intermediate-Range Nuclear Forces (INF) Treaty with Russia.**
- On 2 February 2019, US had given six-months' notice of a complete withdrawal. Later, Russia also suspended its involvement in this Cold War-era treaty following a similar decision by the US.

Answer

Ronald Reagan and Mikhail Gorbachev signed the INF Treaty in December 1987. The INF Treaty **banned all U.S. and Soviet land-based cruise and ballistic missiles** with ranges between 500 and 5,500 kilometers. The two countries destroyed a total of 2,692 short-, medium-, and intermediate-range missiles by June 1, 1991, the treaty implementation deadline, all under the **most intrusive verification measures** ever agreed, including on-site inspections. The treaty also led to the end of a dangerous standoff between US Pershing and cruise missiles and Soviet SS-20 missiles in Europe.

However, the US blames Russia of cheating and not adhering to the treaty. According to it, Russia developed and deployed a land-based cruise missile of intermediate-range, identified in 2017 as the 9M729.-US hawks have also argued that the INF treaty ties the country's hands **in its strategic rivalry with China** in the Pacific, with no response to Chinese medium-range missiles that could threaten US bases, allies and shipping. In wake of this, INF Treaty was formally terminated in Aug 2019.

Arm Race: A Possible Danger

The INF treaty was the **only nuclear arms control treaty** that **eliminated an entire class of existing weapons.** Hence, it was seen as having the ability to bring stability much beyond Washington and Moscow. With the termination of this treaty, now there are growing concerns that this will give rise to a new arms race.

- **Russia** - When treaty was in force, there were repeated reports of Russian breaches of its INF commitments. Now that treaty is gone, Russia might spend money on updating and amplifying its weapons systems by building more INF-range missiles.
- **China** – Since China was not a party to this treaty, it had deployed a large number of missiles thereby changing the military balance in East Asia and beyond.
- **Japan** – It will also be affected by such events and will be compelled to indulge in the arm race so as to protect its interests.
- **USA** – So far, the treaty had tied US' hands **in its strategic rivalry with China** in the Pacific. The growing synergy between Russia and China might force US to deploy the missiles forbidden by the treaty. The recent test fire of ground-launched cruise missile with a range of more than 500 km by USA is evident to this fact.
- **Indo-Pacific** – The termination of the treaty will have implications for the wider Indo-Pacific region.

Conclusion

- Binary Cold War-era arms control treaty was of little relevance in the current multi-polar world where an increasing number of nations and non-state actors have access to nuclear technology.

- However, it should be remembered that US has not **ratified** the CTBT and if this trend continues, it may not be long before leaders like Mr. Putin and Mr. Trump begin to **push to resume nuclear testing**.
- Hence, there is a **need for multilateral successor to the INF**. Until then, the world leaders must show restraint in developing and deploying the missiles having potential to trigger the arm race.

Extra Mile

US Tests Medium-Range Cruise Missile In The Wake Of INF Treaty Exit

- In August 2019, US tested a conventionally configured ground-launched cruise missile with a range of more than 500 km.
- The missile tested was a version of **nuclear-capable Tomahawk cruise missile**.
- This was **first such test** since the US pulled out of the INF Treaty.
- It was launched from US Navy-controlled **San Nicolas Island** off the coast of Los Angeles in California.

5. **Issues like corruption, political interference, cover-up within the agency have dented the image of Central Bureau of Investigation (CBI) as a premier investigating agency. In this context, there is an urgent need to reform CBI. Discuss.**

Context:

- Chief Justice of India Ranjan Gogoi has criticized CBI for its **failure to meet the standards of judicial scrutiny** in many high-profile and politically sensitive cases.
- He was delivering the D P Kohli Memorial Lecture on the **role of the police in strengthening justice delivery**. [Kohli was the founder-director of CBI]

Answer

The recent **turf war in the CBI and the ouster of its director** would be the one of few incident after the **Jain hawala fiasco** where corruption and a cover-up within the agency has been dragged and vigorously debated in the public domain. The image of a premier investigating agency had earlier suffered a serious setback when the Supreme Court of India, in May 2013, termed CBI as **caged parrot** with many masters while dealing with coal block allocation case.

Need For Reform

The CBI has been facing charges on various counts such as its alleged politicization, serious charges against its various chiefs, its very poor conviction rate, its delays in carrying out timely investigation, not to mention its lack of core competence and domain knowledge are indicative of a much more serious malaise.

- **Guided By Pre-independence Act:** The CBI is **still guided by DPSE Act 1946**, whose provisions hamper the accountability and autonomy of the institutions. The Guwahati HC in a judgement termed CBI as **unconstitutional** as it has no statutory backing.
- **Manpower shortage:** CBI is facing the staff shortage, which is required to deal with the daily dealings of the CBI office. Further, Supreme Court and High Courts are handing over a large number of

sensitive cases to the CBI for investigation without additional manpower. According to an official figure, 15 % of the posts in executive ranks and 28 % of those in the technical unit of the agency were vacant. Fifty per cent of the posts in the legal department of the CBI are also vacant.

- **Politically Inclined** – There have been instances where CBI has been politically biased as it is vulnerable to undue political pressure. Excoriating the agency's investigation of coal scam, the SC had in 2013, described it as a caged parrot who works according to the wishes of the govt in power.
- **Poor conviction rate and Delays in case solving**
- The **carrot of post-retirement benefit** makes CBI chief prone to toeing the lines of incumbent government.
- **Corruption and Nepotism** – Ex-CBI director Joginder singh in his book revealed about the prevalent corruption and nepotism within the agency.

Way Forward

- **Legal backing:** The structural deficiency need to be removed such as CBI continued to work under Delhi Special Police Establishment Act of 1946. As far back as 1978, the *L P Singh committee and Second ARC (2007)* had recommended enactment of a comprehensive Central legislation to remove the deficiency of not having a central investigative agency with a self-sufficient statutory charter of duties and functions. Thus, it is high time the CBI is vested with the required legal mandate and is given pan-India jurisdiction. Recently, the CJI Rajan Gogoi advocated that the CBI should be given statutory status through legislation equivalent to that provided to the Comptroller and Auditor General (CAG).
- A CBI act should be promulgated on par with the Customs Act or the Income Tax Act, so that CBI officers enjoy independent investigation powers outside the CrPC, without having to be at the mercy of the State governments.
- **Providing Financial Autonomy:** Administrative autonomy without financial autonomy makes this institution a **toothless tiger** and prone to corruption.
- **Specialized cadre:** This should also serve as the occasion to think of institutional reform. Perhaps it is time to act on the proposal to create a specialized cadre for the CBI. The CBI, just like its counterpart in the US, the FBI should now convert itself into a multidisciplinary corruption-fighting force with experts from diverse fields such as finance, banking, purchase, procurement, insurance and engineering.
- **Service Conditions**
 - Tenures of CBI officials must not be tinkered with, except under extraordinary circumstances.
 - There should be permanent recruitment to top posts as deputations are temporary and lead to lack of accountability and efficiency as understanding the new system takes time.
 - Provide a cooling of period of at least 5 years to address misuse of post-retirement benefits.
- A case is also being made to include "**Public order**" in the concurrent list in order to address an increasing incidence of inter-state crimes.

Conclusion:

CBI's motto is "**Industry, Impartiality, Integrity**" and the organization needs to practice these three qualities in true spirit, which would automatically make it a role model for other investigation agencies in the Nation to follow. By placing CBI **under a constitutional head** instead of the CVC's superintendence, we can take the first step.

6. What is the Protection of Children from Sexual Offences Act which was recently amended by the Parliament. Delineate and analyse the amendments.

Answer

- The Protection of Children from Sexual Offences Act came into force in 2012 as the first comprehensive law in the country dealing specifically with sexual abuse of children.
- The Act through its provisions increased the scope of reporting offences against children, which were not earlier covered under the Indian Penal Code.
- This included aggravated penetrative sexual assault to include punishment for abuse by a person in position of trust or authority including public servants, police, armed forces, management or staff of an educational or religious institution.
- It also defined the procedure for reporting of cases, including a provision for punishment for failure to report a case or false complaint. It provided procedures for recording of the statement of a child by the police and court, laying down that it should be done in a child-friendly manner, and by the setting up of special courts.

Current Status

- According to an NCRB report, the increase in the cases registered under the Act has gone up from 44% in 2013 to 178% in 2014 and there has been no decline in the number of cases thereafter.
- Further, the conviction rate in POCSO cases is 29.6% while pendency is as high as 89%. The prescribed time period of two months for trial in such cases is hardly complied with.
- Hence it was felt that stringent provisions had to be included to deter the perpetrators which necessitated the following amendments

Amendments

- The Act has enhanced punishment under various sections of the Act including punishment for aggravated penetrative sexual assault to be increased to include death penalty.
- Other sections under which the punishment has increased includes the minimum punishment for penetrative sexual assault, which has been increased from seven years to 10 years — and, if the child is below 16 years of age, the minimum punishment has been increased to 20 years.
- The Act has also tightened the provisions to counter child pornography. While the earlier Act had punishment for storing child pornography for commercial purposes, the amendment includes punishment for possessing pornographic material in any form involving a child, even if the accused have failed to delete or destroy or report the same with an intention to share it.
- The Act has also removed the words “communal or sectarian violence”, which had punishment for a person who sexually abused a child during the course of such violence. The words have been replaced with “violence during any natural calamity or in similar situations”.

Analysis

- The bill is welcome as it clearly defines ‘child pornography’ and ‘using a child for pornographic purpose’ which would go a long way in bringing a check on child pornography.
- The Criminal Law (Amendment) Act, 2018 introduced death penalty for rape of girls below the age of 12. This has created an issue as the effect of such an amendment was death penalty for rape of minor girls but not for assault against minor boys.

- The proposed Bill does away with such a discrepancy and makes the provision gender neutral, by bringing both these pieces of legislation on par.
 - However, NGOs working with children have criticised the provision of death penalty citing the NCRB report which states that over 94 % of the accused in cases registered under the Act are known to the victims, including close family members.
 - This may deter victims or put pressure on them to not file a complaint, given the possibility of death now. Also, it may threaten the life of the minor as the maximum punishment for murder is also the death sentence.
 - Further, while the Act states that the cases should be heard expeditiously, the pendency rate as per the NCRB is over 89 %. The delays affect the probability of conviction despite the stringent sections.
 - It largely diverts attention from the core issues of infrastructural apathy, procedural lapses and trial delays and conveniently evades the fact that it is the certainty of punishment rather than its severity which has deterrence in real sense.
- 7. A new anti TB drug has been recently approved by the US FDA. Explain the importance of the drug along with the challenges that lie ahead.**

Answer

The US Food and Drug Administration (FDA) has approved a new oral three-drug regimen for extensively-drug resistant tuberculosis (XDR-TB), estimated to have a high mortality rate. Tuberculosis is a bacterial infection that caused about 1.6 million deaths globally in 2017 and worldwide, TB has surpassed HIV-AIDS as the leading cause of death due to infectious diseases.

When TB infection becomes resistant to the first line of treatment, it is called MDR-TB. However, when the infection becomes resistant even to the second-line treatment, it is called XDR-TB. XDR can be contracted in two ways. It may develop in a patient who is already receiving treatment for TB and misuses the anti-TB drugs, or it can be contracted from a person who already has the disease

As per the World Health Organisation's Global Tuberculosis Report 2018, an estimated 4.5 lakh people across the world have MDR-TB and nearly 37,500 people have XDR-TB. India has 24% of MDR-TB cases in the world. But often, XDR TB may go undiagnosed since lower-middle-income countries lack the infrastructure to detect it.

Importance Of New Drug

- That Pretomanid is only the third drug in the last 40 years to get FDA approval highlights the scarcity of new drugs to treat TB bacteria that are rapidly developing resistance against most available drugs.
- Though the total number of people who will require the new drug may not be high, these are people who have very little alternative treatment options that are safe and efficacious.
- But, the number of those who would need a pretomanid-based regimen is increasing due to rising drug resistance. Thus, the new drug regimen is important for countries like India, which has the second-highest burden to XDR-TB patients in the world, after Russia.
- Unlike 18-24 months needed to treat the resistant TB using multiple drugs, the new regimen took just six months, was better tolerated and more potent in clearing the bacteria. The shorter duration is also more likely to increase adherence to therapy and improve treatment outcomes.

- The all-oral, three-drug regimen has a 90% cure rate. In contrast, the current treatment success rate for XDR-TB and MDR-TB is about 34% and 55%, respectively. Furthermore, the regimen was found to be safe and effective in curing TB in people living with HIV.

Challenges

- While the availability of a potent drug is welcome news, it remains to be seen if it would be made affordable, particularly in the developing countries where the burden of XDR-TB and MDR-TB is the highest.
- According to Doctors without Borders, although the price of pretomanid hasn't been made public, it is estimated that the generic versions of pretomanid could be produced and sold for a price between \$0.36 and \$1.14 per day, which can turn to be very costly for the poor.
- While patients will be happy with a shorter regimen, the three-drug system does not make procurement for the government any simpler. Besides, this could also complicate patient compliance to the medication regimen.

The new drug can prove to be a boon for people struggling with a disease which has low survival rate and could go a long way in giving them the gift of life, which the current health set up has not been able to give them with certainty.

8. **The Indian auto industry has been going through a slowdown. Highlight the importance of the auto industry in the economy elucidating the reasons for the slowdown? Suggest measures for revival.**

Answer

The overall slowdown in growth in the country has not spared the Indian automobile industry, which has led to over two lakh people losing their jobs along with the closure of nearly 300 dealerships across the country due to a lack of working capital. Historically, vehicle sales decline in the months preceding elections. However, the hope that demand following the elections would pick up has not materialised this time.

Significance Of The Automobile Industry

- It is a technology and knowledge intensive industry as it demands high performance and quality parts.
- The automobile sector contributes around **7.5% to the country's GDP and 49% to the manufacturing GDP** and is one of the largest employers in the country, employing about 37 million people, directly and indirectly.
- Moreover, **a sound transportation system**, to which the automobile industry is linked, plays a pivotal role in the country's **rapid economic and industrial development**.
- The industry occupies a prominent place due to its **deep forward and backward linkages** with many key segments of the economy. Many other manufacturing industries viz. steel, rubber, glass, machine tools, robots, electronics, software and many more depend upon this industry.
- Thus, as a major employment and export generator, GDP contributor, FDI earner, the automobile industry has a strong multiplier effect and is capable of being the driver of economic growth.

Reasons For The Slowdown

- The total cost of vehicle ownership has gone up due to an increase in fuel prices, higher interest rates and a hike in vehicle insurance costs.

- To add to this, the IL&FS crisis late last year led to a severe liquidity crunch, almost drying up credit for dealers and customers.
- Nearly half the vehicles sold in rural markets — a segment that has been witnessing a higher growth rate in comparison to urban markets — are financed by non-banking financial companies (NBFCs).
- Moreover, some customers are holding up purchase to buy the latest Bharat Stage (BS)-VI emission standard compliant vehicles. While others are waiting for more incentives from vehicle makers who will be looking to sell off the BS-IV compliant stocks before the April 1, 2020 deadline.
- Further, too much focus on electric vehicles (EVs) by the government may also be encouraging buyers to postpone the purchase of petrol and diesel vehicles.
- Meanwhile, growing competition from the pre-owned cars market is also pulling down sales of new vehicles. For example, in the passenger vehicles segment, while the new vehicles market grew 2% in FY19, the pre-owned market saw double-digit growth.

Way Ahead

- A GST reduction to 18% from the current rate of 28%, will help in an immediate price reduction and could kick-start demand in the short term.
- Given the slowdown in the overall economy and the multiplier effects of the sector, it may not be imprudent for the government to come up with a short term revival package ahead of the festival season.
- Further, it is important to handle the NBFC crisis to infuse liquidity into the system, along with bringing the much needed clarity on policy for electric vehicles.
- At the same time, it is necessary to introduce a vehicle scrappage policy, which will boost demand for new vehicles.

9. Recently the RBI has released the framework for a regulatory sandbox. What is a regulatory sandbox? What are the benefits and challenges associated with a regulatory sandbox?

Answer

Regulatory Sandbox (RS) usually refers to live testing of new products or services in a controlled/test regulatory environment. The objective of the regulatory sandbox is to foster responsible innovation in financial services, promote efficiency, and bring benefit to consumers. It is a tool which enables dynamic, evidence-based regulatory environments which learn from, and evolve with, emerging technologies. At the same time, it can provide a structured avenue for the regulator to engage with the ecosystem.

Benefits

- Regulatory Sandbox fosters ‘learning by doing’ on all fronts. Regulators obtain first-hand empirical evidence on the benefits and risks of emerging technologies and their implications, enabling them to take a considered view on the regulatory changes or new regulations.
- Incumbent financial service providers, including banks, also improve their understanding of how new financial technologies might work, which helps them to appropriately integrate such new technologies with their business plans.
- Innovators and FinTech companies can improve their understanding of regulations that govern their offerings and shape their products accordingly.

- Feedback from customers, as end users, educates both the regulator and the innovator as to what costs and benefits might accrue to customers from these innovations.
- Users can test the product's viability without the need for a larger and more expensive roll-out, if the product appears to have the potential to be successful.
- It can go a long way in not only improving the pace of innovation and technology absorption but also in financial inclusion and in improving financial reach. Areas that can potentially get a thrust include microfinance, innovative small savings, remittances, mobile banking and other digital payments.
- By providing a structured and institutionalized environment, the dependency of the regulator on industry/stakeholder consultations only is correspondingly reduced.
- It could lead to better outcomes for consumers through an increased range of products and services, reduced costs and improved access to financial services.

Risks and Limitations

- Innovators may lose some flexibility and time in going through the sandbox process. However, running the RS in a time-bound manner at each stage can mitigate this risk.
- Case-by-case authorizations and regulatory relaxations can involve time and discretionary judgements. This should be addressed by handling applications in a transparent manner and following well-defined principles in decision-making.
- Post-sandbox testing, a successful experimenter may still require regulatory approvals before the product/services/technology can be permitted for wider application.
- Attendant legal issues can also crop up, such as those relating to consumer losses in case of failed experimentation.
- Cryptocurrency or crypto assets services, trading, investing or settling in crypto assets and initial coin offerings have been kept out of the regulatory sandbox. This raises concerns about the impact on testing of distributed ledger technology, which is considered the future of financial services and banking.

Extra Mile**Eligibility Criteria**

- The applicant should either be a company incorporated and registered in India or banks licensed to operate in India. Further, financial institutions constituted under a statute in India would also be eligible.
- The entity should have a minimum net worth of Rs. 25 lakh as per its latest audited balance sheet.
- It should demonstrate that the products/services are technologically ready for deployment in the broader market.
- The entity must demonstrate arrangements to ensure compliance with the existing regulations/laws on consumer data protection and privacy.
- There should be adequate safeguards built in its IT systems to ensure that it is protected against unauthorized access, alteration, destruction, disclosure or dissemination of records and data.

10. Recently, the Law Commission has pitched for a common electoral roll for all elections right from panchayat level to Lok Sabha. Discuss the benefits associated with this as well as the roadblocks in implementing this idea.

Answer

The preparation of electoral roll by ECI and state commissions involves some amount of duplication of efforts, as the voter is the same for election to different bodies. Because of this, recently the Law Commission as well as the Parliament House panel have pitched for a common electoral roll for all elections right from panchayat level to Lok Sabha.

Benefits Associated With It

- The common electoral roll would save time, money and manpower of the nation besides removing inconsistencies between two sets of electoral roll and resultant confusion in the mind of the voter.
- It also limits the scope of electoral malpractices.
- This fits perfectly with the grand plan for simultaneous elections the government and its various arms are making a pitch for all elections right from panchayat level to Lok Sabha.

Roadblocks In Implementing This Idea

- **Question of delimitation:** The key issue is that as far as EC's purview is concerned the delimitation of constituencies is frozen until 2031. However, there is no such bar on states as far as determining the boundaries of wards for local bodies election is concerned. Most states in fact frequently change size of these wards often based on political or social concerns. To enable a common electoral roll, all states will have to amend respective laws to freeze constituency boundaries to synch to a uniform calendar.
- **Logistic issue:** There are also logistical issues which EC has flagged off that it would be difficult to conduct such a massive exercise for over 78 crore electors as there is no uniform system for preparation of rolls by state electoral commissions and it would not be possible for the ECI to collect the data of Panchayat, municipal body and ward numbers and feed it into a common database.
- **Clash Of Roles:** While EC prepares electoral roll for polls to Parliament and state legislatures, State Election Commission do the same for Panchayati Raj Institutions and municipal bodies. While some states do rely on EC's roll others do it de novo.
- **Fund requirement:** Over Rs 500 crore may be required for this project, which is more than Rs 300 crore that has been proposed to be allocated for the same in Budget 2018-19.

Conclusion

The idea of common electoral list looks impressive considering the mammoth exercise in preparing electoral roll due to vast size of the country. However, for that to be accomplished, there is a need for consensus between the government and the ECI on every issue of technical, logistic, and financial roadblocks.

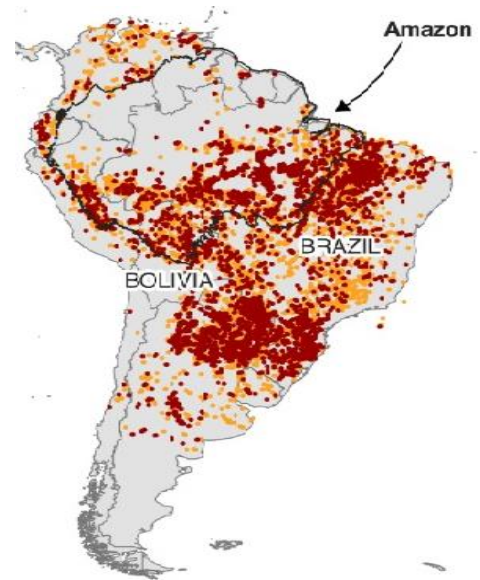
11. Thousands of fires are ravaging the Amazon rainforest in Brazil - the most intense blazes for almost a decade. Elaborate on the event highlights and discuss the reasons as well as impact of such disaster

Answer

The Amazon rainforest **is burning at a rate** scientists have never seen before. The Amazon is regarded as vital in the fight against global warming due to its ability to absorb carbon from the air. It is often referred to as the “**lungs of the Earth,**” as more than **20 per cent of the world’s oxygen** is produced there.

Key Highlights

- **Brazil is the worst affected country** as fire as number of fires are concerned. In Brazil, the worst-affected regions are in the north of the country.
- It is to note that the Brazil has the biggest share of the 670 million hectares of forest (60 per cent), which is home to more species than anywhere else on the planet.
- A number of other countries in the Amazon basin have also seen a high number of fires this year.
- **Venezuela** has experienced the second-highest number. Bolivia, Columbia, Peru have also been affected by this fire.



What Caused This Devastating Fire?

- Wildfires in the Amazon are not entirely uncommon. However, the way they are spreading is driving concern.
- **Deforestation** is considered the major contributing factor behind the alarming numbers.
- **Drought** can also be a factor in rainforest fires. However, the researchers at the INPE have said there is **nothing abnormal about the climate or rainfall amounts** in the Amazon this year.
- The dry season creates the favourable conditions for the use and spread of fire, but **starting a fire is the work of humans**, either deliberately or by accident.
- Hence, scientists are claiming that **human activities - farming, mining and drilling** – are mainly responsible.
- Environmentalists have also **put the blame on Brazillian President** Jair Bolsonaro for his pro-business leadership - emboldening farmers to cut away at more Amazon land for ranching.

Impact Of This Fire

- The fires have been **releasing a large amount of carbon dioxide**, the equivalent of 228 mega tonnes so far this year.
- They are also **emitting carbon monoxide** - a pollutant that is toxic at high levels. This pollutant is being carried beyond South America's coastlines.
- It has also destroyed the forests which will take years to regenerate besides destroying the habitat of several endangered species.

Response So Far

- Brazil has banned setting fires to clear land for 60 days. It also accepted an offer of four planes to fight the fires from the Chilean government. It has deployed 44,000 soldiers to seven states to combat the fires.

- However, Brazil **refused a G7 offer** of \$22m (£18m) following a dispute with French President Emmanuel Macron.
- **Seven countries** - Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru and Suriname - **have signed a pact**, setting up a disaster response network and satellite monitoring.
- The seven nations also agreed to put more efforts into education and increase the role of indigenous communities.

PRELIMS MCQS

1. With reference to H1N1 consider the following statements

1. H1N1 virus is a combination of viruses from pigs, birds and humans
2. H1N1 is contagious
3. There is no vaccine available for H1N1

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Context

- This year Gujarat has reported 4,819 cases and 149 deaths, followed by Maharashtra which has registered 2,135 cases and 202 cases.
- From 2010 till mid-August this year, Rajasthan has seen 21,107 cases reported and 1,638 deaths while Gujarat has reported 25,219 cases and 1,897 deaths.

Answer: A

Explanation:

- H1N1 flu is also known as swine flu. It's called swine flu because in the past, the people who caught it had direct contact with pigs.
- That changed several years ago, when a new virus emerged that spread among people who hadn't been near pigs, this particular strain of flu virus is known as H1N1. This virus is actually **a combination of viruses from pigs, birds and humans.**
- When people who have it cough or sneeze, they spray tiny drops of the virus into the air. If one comes in contact with these drops one can catch H1N1 swine flu.
- **A vaccine has been developed to protect humans against the H1N1 strain of swine flu.** This was introduced following a global pandemic of swine flu in 2009 and 2010.
- In 2017, the virus showed epidemiological characteristics different from previous years. Monitoring of the genetic character of the virus and surveillance for drug resistance in the context of influenza A (H1N1) and other influenza viruses remain a high priority.

2. With reference to North East Rural Livelihood Project, consider the following statements

1. It is a World bank aided project
2. It is under the Ministry of Rural Development

Which of the statements given above is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2

d) Neither 1 nor 2

Answer: A

Explanation:

- North East Rural Livelihood Project (NERLP) is being implemented in four North Eastern States of Mizoram, Nagaland, Sikkim and Tripura.
- Launched in 2012, the NERLP is a World Bank aided, multi-state project under the Ministry of Development of North Eastern Region (DoNER).
- The objective of NERLP is to improve livelihoods of the poor, especially that of women and the disadvantaged people in the project area.
- The project has focussed on five development strategies -- social empowerment, economic empowerment, partnership development, project management and livelihood and value chain developments.

Benefits

- The North East Rural Livelihood Project (NERLP) has empowered the poor and improved lives of people in about 300,000 rural households.
- Across the project districts, livelihood activities pursued by Self Help Group (SHG) members have increased considerably, thus increasing family incomes.
- One SHG leader has become a Cabinet minister in the state legislature in Tripura, and many SHG leaders are panchayat leaders.
- Women have become more knowledgeable and expressive, and they display better leadership qualities.

3. Changthangi goat is indigenous to which state

- a) Maharashtra
- b) Kerala
- c) Jammu and Kashmir
- d) Karnataka

Answer: C

Explanation

- Pashmina products have recently been given a code from the Bureau of Indian Standards (BIS) certifying their genuineness and quality.
- The certification will help curb the adulteration of Pashmina and also protect the interests of local artisans and the goat herding community who are the producers of Pashmina raw material. It will also assure the purity of Pashmina for customers.
- About 70% of the pashmina comes from China and another 20% from Mongolia. In India, pashmina is obtained from Ladakh region of Jammu and Kashmir, Lahaul and Spiti valley of Himachal Pradesh, Uttar Kashi, Chamoli and Pithoragarh districts of Uttarakhand.

- **The Changthangi or Pashmina goat, is a special breed of goat indigenous to the high altitude regions of Ladakh in Jammu and Kashmir.** They are raised for ultra-fine cashmere wool, known as Pashmina once woven.
- These goats are generally domesticated and reared by nomadic communities called the Changpa in the Changthang region of Greater Ladakh. The Changthangi goats have revitalized the economy of Changthang, Leh and Ladakh region.

4. With reference to PM Kisan Maan Dhan Yojana consider the following statements

- 1. All the farmers between the age group of 18-40 years are eligible**
- 2. LIC is the pension fund manager**
- 3. Farmers enrolled under PM Laghu Vyapari Maan-Dhan Yojana are not eligible**

Which of the statements given above is/are correct?

- a) 1 and 2**
- b) 2 and 3**
- c) 1 and 3**
- d) All of the above**

Answer: B

Explanation:

Registration for the PM Kisan Maan Dhan Yojana started recently. The scheme has been envisioned with an aim to improve the life of small and marginal farmers of the country.

Contribution

- The scheme is voluntary and contributory for farmers in the entry age group of 18 to 40 years. A monthly pension of Rs. 3000/- will be provided to them on attaining the age of 60 years.
- The farmers will have to make a monthly contribution of Rs.55 to Rs.200, depending on their age of entry, in the Pension Fund till they reach the age of 60 years. The Central Government will also make an equal contribution of the same amount in the pension fund.
- The spouse is also eligible to get a separate pension of Rs.3000/- upon making separate contributions to the Fund. **The Life Insurance Corporation of India (LIC) shall be the Pension Fund Manager** and responsible for Pension pay out.
- Unlike PM KISAN scheme that is now open for all farmers irrespective of land holdings, **pension scheme is for farmers owning less than two hectares land.**

Other Provisions

- In case of death of the farmer before 60 years, the spouse may continue in the scheme by paying the remaining contributions till the remaining age of the deceased farmer.
- If the spouse does not wish to continue, the total contribution made by the farmer along with interest will be paid to the spouse. If there is no spouse, then total contribution along with interest will be paid to the nominee.
- 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.

- The beneficiaries may opt voluntarily to exit the Scheme after a minimum period of 5 years of regular contributions. On exit, the entire contribution shall be returned by LIC with an interest equivalent to prevailing saving bank rates.

Ineligible farmers

- Small and Marginal Farmers 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).
- Farmers who have opted for Pradhan Mantri Laghu Vyapari Maan-dhan Yojana (PM-LVM).

5. Consider the following statements regarding Defence Institute of High Altitude Research (DIHAR):

1. It is a constituent laboratory of DRDO.
2. It aims to promote high altitude and agro-animal research in cold-arid regions.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 only
- d) Neither 1 nor 2

Context:

- Union Defence Minister has inaugurated the **26th Mela of Ladakhi-Kisan-Jawan-Vigyan Mela** at Leh.
- The mela was **organised by the Leh-based Defence Institute of High Altitude Research (DIHAR)** of DRDO.

Answer: C

Explanation:

- DIHAR is a constituent laboratory of DRDO, **established in 1960**, to meet the fresh food requirement of the soldiers deployed in the harsh terrain of Ladakh.
- **Vision** - Seeding and nurturing agro-animal technologies to strengthen food, health and energy security of Armed Forces personnel deployed in high altitude cold desert.
- **Mission** - To excel in high altitude and agro-animal research in cold-arid regions
- **Location of Research Stations** - Ranbirpura (Ladakh), Partapur (Siachen Sector), Base Laboratory (Chandigarh)
- It also hosts **world's highest terrestrial R&D Centre at Changla, Ladakh.**

6. Jung-E-Azadi memorial is located at

- a) Punjab, India

- b) Lahore, Pakistan
- c) Hyderabad, India
- d) None of the above

Context

Punjab Chief Minister Amarinder Singh dedicated the **third phase of the 'Jung-E-Azadi' memorial** to the people who **were killed in the Jallianwala Bagh massacre** and the **unsung heroes who were incarcerated in the Andaman Cellular jail** during the freedom struggle.

Answer: A

7. Which of the following states has inaugurated a Bunker Museum by converting a British-era underground bunker found under the Raj Bhavan?
- a) Maharashtra
 - b) Bihar
 - c) Andhra Pradesh
 - d) Gujrat

Answer: A

Explanation

- President Ram Nath Kovind has inaugurated the underground Bunker Museum at Raj Bhavan in Mumbai.
- A British-era underground bunker was discovered under the Raj Bhavan in August 2016, after being closed for more than six decades.
- It has 13 rooms such as Shell Store, Gun Shell, Cartridge Store and Central Artillery Store

8. World Police and Fire Games 2019 was held in
- a) Rotterdam, Netherlands
 - b) Winnipeg, Canada
 - c) Chengdu, China
 - d) None of the above

Context

- **CISF sports personnel** have **won 10 medals**, including **five gold**, at the recently-concluded 'World Police and Fire Games'.
- The 2019 edition of this game was held at Chengdu, China's southwestern Sichuan province.

Answer: C

Explanation

- **World Police and Fire Games** is an Olympic-style competition with participation of around 10,000 athletes from over 70 countries competing in more than 60 sports
- **Participants** – Athletes *representing law enforcement, fire-fighters and officers from corrections, probation, border protection, immigration and customs.*
- It had their origins in San Jose, California in 1985. Since that time the Games have been held every 2 years in a different city and country around the world.
- 2021 edition will be held at Rotterdam, Netherlands.
- 2023 edition is scheduled at Winnipeg, Canada

9. Consider the following statements regarding UN Special Purpose Trust Fund (SPTF):

1. **It is a specific fund housed within the UN Secretariat.**
2. **A 1 % levy applied to contributions for UN development-related activities earmarked to a single agency, single programme or project constitute an important source of funding for SPTF.**

Which of the above statements is/are correct?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2 Only
- d) Neither 1 nor 2

Context:

India has contributed \$1 million to the UN Special Purpose Trust Fund for the Resident Coordinator System.

Answer: C

Explanation

- **About SPTF**
 - It is a specific fund **housed within the UN Secretariat.**
 - It has been established to receive, consolidate, manage and account for all contributions and financial transactions of the new **Resident Coordinator (RC) system**, in a transparent and effective way.
 - **Funding sources include three streams:** (i) voluntary contributions from Member States; (ii) the doubling of cost-sharing amounts from UN entities who are members of the United Nations development system; (iii) a 1 percent levy applied to contributions for UN development-related activities earmarked to a single agency, single programme or project.
- **Open Data Portal**
 - Earlier, the UN Sustainable Development Group launched **an open data portal** to support UN Resident Coordinators in coordinating assets at the country level.

- The portal aims to **enhance effective coordination of the UN's work** in over 160 countries in support of the SDGs and is part of wider UN reform efforts on development, management, peace and security.
- **About RC System:**
- It encompasses all organizations of the United Nations system dealing with operational activities for development, regardless of their formal presence in the country.
- It aims to bring together the different UN agencies to **improve the efficiency and effectiveness of operational activities at the country level.**

10. “Innovating for Clean Air” is a joint initiative between India and

- a) USA
- b) Netherland
- c) Norway
- d) UK

Answer: D

Explanation

Innovating for Clean Air (IfCA) is a two-year **India-UK joint initiative.**

Key Highlights:

- It has been launched in Bengaluru
- Aim – To provide a **unique air quality measurement system** by integrating satellite and sensor data and **support India’s transition to Electric Vehicles.**
- The initiative will identify innovations having potential to improve air quality and contribute to a more detailed localised map of the air quality of Bengaluru.
- It will identify relevant challenges around EV-charging infrastructure, grid management and integrating renewable energy to ensure a sufficient, reliable and clean source of power.
- It will also facilitate opportunities for Indian and UK innovators to collaborate in developing long-lasting relationships to address these challenges.

11. Consider the following statements regarding “Know India Programme” (KIP):

1. It mainly targets Indian-origin youth between the age brackets of 18-30 years.
2. Currently, four KIPs a year are being organised.

Which of the above statements is/are Incorrect?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

Context:

- A group of 40 Indian Origin youth visited India under the **54th Edition of 'Know India Programme' (KIP)**.
- This edition was scheduled from 1st August to 25th August.

Answer: B**Explanation**

- KIP is a flagship initiative for Diaspora engagement which familiarizes **Indian-origin youth (18-30 years)** with their Indian roots and contemporary India.
- Ministry Involved – MEA
- In 2016, the scheme was revamped to increase duration from 21 to 25 days. Also, **six KIPs are being organised in a year** since 2016.
- Preference given to PIOs from Giritiya countries. A maximum of **40 Indian Diaspora youth are selected**.

12. The 2019 Indo Pacific Chiefs of Defence (CHOD) Conference took place in

- a) Manila, Philippines**
- b) New Delhi, India**
- c) Bangkok, Thailand**
- d) None of the above**

Context:

- Chairman Chiefs of Staff Committee, Air Chief Marshal Birender Singh Dhanoa participated the **2019 Indo Pacific Chiefs of Defence (CHOD) Conference in Bangkok, Thailand**.
- Theme - "Collaboration in a free and Open Indo – Pacific"

Answer: C**13. Shaheen-VIII is**

- a) A nuclear-capable missile test fired by Pakistan**
- b) A nuclear-capable missile test fired by Iran**
- c) New air defence system developed by Iran**
- d) Joint air force exercise between Pakistan and China**

Context:

- The air forces of China and Pakistan carried out joint annual exercise 'Shaheen-VIII' aimed at enhancing their combat capability.
- It was conducted in Chinese city of Holton, close to the Indian border near Ladakh.

Answer: D

14. Consider the following statements:

1. Ghaznavi is a new air defence system of Iran.
2. Bavar-373 is a nuclear-capable surface-to-surface ballistic missile of Pakistan.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: D

Explanation

A. Ghaznavi

- Recently, Pakistan successfully test-fired **nuclear-capable surface-to-surface ballistic missile Ghaznavi**.
- It was a night-training launch from Sonmiani test range near Karachi.
- The missile is capable of delivering different types of warheads including nuclear and conventional up to a range of 290 km.

B. Bavar-373

- It is an indigenous long-range air defense missile system.
- According to Iran, has a range of 300 km (186 miles) and can strike targets at an altitude of 65 km.
- Iran claims that the Bavar system is “**better than Russian S-300 and close to S-400.**”
- It can reportedly *detect up to 100 targets, tracking 60 of them, and engage six concurrently.*
- Iran began to design the Bavar-373 system after Russia suspended delivery in 2010 of at least five S-300s under a 2007 contract.

15. Which of the following countries has launched the world's first floating nuclear reactor?

- a) France
- b) Russia
- c) Japan
- d) China

Context:

- **Russia** has launched the **world's first floating nuclear reactor** named “**Akademik Lomonosov**”.
- The reactor has been launched from the **Arctic port of Murmansk** for its 5,000 kilometre voyage to **Pevek in northeastern Siberia**.

- Once in Pevek, it will replace local nuclear plant and closed coal plant.

Answer: B

Explanation

About The Plant

- **Constructed by** - Russian state **nuclear power firm Rosatom**.
- **Capacity** - 70 MW (2 reactors of 35 MW each) of electricity and 300 MW of heat
- **Uses** - To power oil rigs in untapped Arctic region's remote areas (Russia is pushing to drill for oil and gas in this region). It will also power the **Chaun-Bilibin mining complex in Chukotka region**, which also **includes gold mine**.
- **Controversy** - Environmental groups have long warned of the dangers of the project, dubbing it a **potential "Chernobyl on ice" and a "nuclear Titanic**.

16. Recently, a commando unit "CORAS" has been inducted. Which of the following is Correct regarding CORAS?

- a) It is a separate Commando Unit of Railway Protection Force.
- b) This unit will be deployed be in Naxal-hit Chattisgarh.
- c) This unit will provide support to COBRA unit in its fight against Naxalism.
- d) Both A and B

Context

Railway Ministry has inducted the **Commando for Railway Security (CORAS)**.

Answer – D

Explanation

- Comprising RPF and Railway Protection Special Force (RPSF) personnel, the CORAS is headed by the RPF DG and is armed with special uniforms with bullet-proof jackets, helmets and sophisticated weapons.
- The unit will act **as a responder for any situation pertaining** to damage, disturbance, disruption of train operations, attack/hostage/hijack, disaster situations in railway areas.
- CORAS' **first deployment will be in naxal-hit Chattisgarh**. They will also be deployed in areas where railway has major ongoing projects which need security like northeastern States and Jammu and Kashmir.
- A new state-of-the-art facility will be built in **Haryana's Jagadhari city to train CORAS commandos**.

17. With reference to Housing Sector in India, consider the following statements:

1. Housing Finance Companies are regulated by National Housing Bank.
2. Housing Finance Companies cannot accept demand deposits.
3. National Housing Bank is a statutory organization.

4. National Housing Bank is wholly owned by the Government of India

Which of the statements given above is/are correct?

- a) 1 and 3
- b) 2, 3 and 4
- c) 1 and 4
- d) All of the above

Context

- The Finance Act, 2019 has amended the National Housing Bank Act, 1987. The amendment confers powers of regulation of Housing Finance Companies (HFCs) to Reserve Bank of India.
- NHB will continue to carry out supervision of HFCs and HFCs will continue to submit various returns to NHB. The grievance redressal mechanism with regard to HFCs will also continue to be with the NHB.
- HFCs will henceforth be treated as one of the categories of Non-Banking Financial Companies (NBFCs) for regulatory purposes.
- Also, banks can now classify the credit provided to NBFCs (for example, HFCs) for on-lending as priority sector lending.

Answer: B

Explanation**National Housing Bank**

- NHB is a statutory organization set up in 1988 under the National Housing Bank Act, 1987.
- It is an apex financial institution for housing and is wholly owned by the the Government of India.
- *Objectives*
 - Promote a sound, healthy, viable and cost effective housing finance system to cater to all segments of the population
 - Integrate the housing finance system with the overall financial system.
 - Make housing credit more affordable.

HFCs

- A Housing Finance Company is a form of non-banking financial company registered under the Companies Act, 1956.
- *Requirements For Registration*
 - It should primarily transact or has as one of its principal objects of transacting, the business of providing finance for housing, whether directly or indirectly.
 - It should have a minimum net owned fund of Rs. 10 crore.

Banks vs HFCs

HFCs lend and make investments and hence their activities are similar to that of banks. However, there are a few differences as given below:

- HFCs cannot accept demand deposits.

- HFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself.
- Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of HFCs, unlike in case of banks.

18. With reference to National Population Register and Census, consider the following statements:

1. NPR includes people from other Nationalities as well.
2. For NPR, a 'usual resident' is defined as a person who has resided in a local area for the past six months.
3. Census is conducted under the provisions of the Census Act 1948.

Which of the statements given above is/are correct?

- a) 2 and 3
- b) Only 2
- c) 1 and 3
- d) 1, 2 and 3

Context

The government has announced that it will be preparing the NPR by September 2020.

Answer: D

Explanation:

National Population Register

- The NPR is a register of usual residents of the country. The objective is to create a comprehensive identity database of every usual resident in the country.
- For purpose of NPR, a usual resident is defined as 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 six months or more.
- It is mandatory for every usual resident of India to register in the NPR. All usual residents will be eligible to be included irrespective of their Nationality.
- It is prepared at the local (village/sub-town), sub-district, district, state and national level. The database would contain demographic as well as biometric particulars.
- The authenticated list is sent to the Unique Identity Authority of India (UIDAI) for de-duplication and issue of UID Numbers.
- The maintenance of the NPR database and subsequent updating is done by the Office of Registrar General and Census Commissioner, India
- It helps in better targeting of the benefits and services under the Government schemes/programmes, improves planning and helps strengthen security of the country.

NPR and Census

- Although the data for NPR is collected along with the data collection process of Census, they are not the same. The data collected under Census has a wider ambit.

- The Census is a statutory exercise conducted under the provisions of the Census Act 1948 and Rules made under it. The NPR is covered under the provisions of the Citizenship Act 1955 and the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003.

19. Which of the following lakes has been officially recognized as the world's highest lake?

- a) Tilicho lake
- b) Kajin Sara lake
- c) Lake Titicaca
- d) Suraj Tal Lake

Context:

The Kajin Sara lake in Manang district of Nepal has been discovered about a few months ago by a team of mountaineers.

Answer: A

Explanation

- This lake is **likely to set a new record of being the world's highest lake** replacing Tilicho. It is located at **Singarkharka area of Chame rural municipality**.
- As per the measurement of the lake taken by the team, **it is located at an altitude of 5,200 metres, which is yet to be officially verified**. It is estimated to be 1,500-metre-long and 600-metre-wide.
- At present, **Tilicho lake is officially recognized as the world's highest lake**. It situated at an altitude of 4,919 metres, is 4 km long, 1.2 km wide and around 200 metres deep.
- **Suraj Tal Lake**: In Himachal Pradesh, Altitude – 4883 m. This lake is just below the summit of famed Baralacha pass. The river Bhaga originates from this lake.

20. Consider the following statements regarding indigenous languages in the world:

1. Year 2019 has been designated as United Nations' International Year of Indigenous Languages.
2. The Pacific island nation of Fiji has the highest number of 'living' indigenous languages in the world.
3. India stands at fourth in this list.

Which of the above statements is/are Correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Context

2019 is UN's Year of Indigenous Languages

Answer: C

Explanation

Directory of Languages

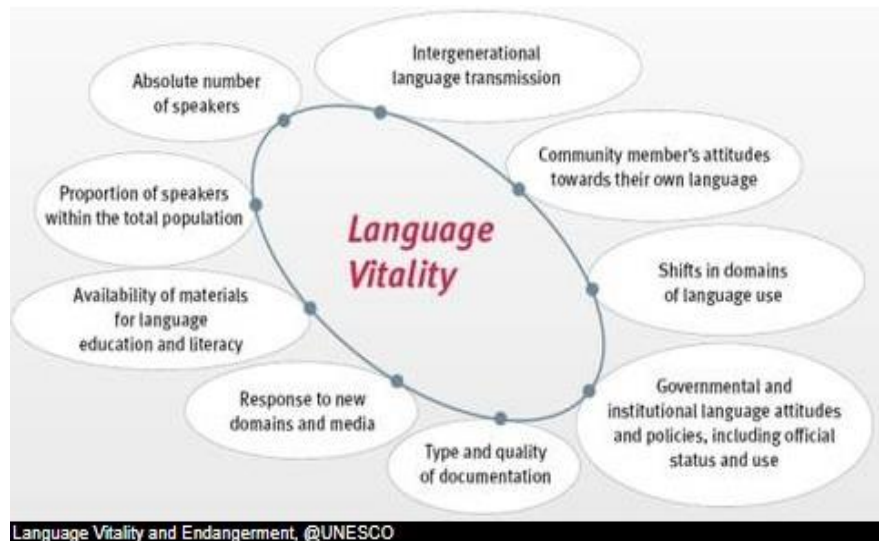
- **Ethnologue is a directory of languages** which lists 7,111 living languages worldwide (languages that are still being used and spoken by people).
- Since 1951, the Ethnologue has been an active research project involving hundreds of linguists and other researchers around the world. It is widely regarded to be the most comprehensive source of information of its kind.

Key Facts Regarding Languages

- In 2016, the UN's Permanent Forum on Indigenous Issues pointed out that **"40% of the estimated 6,700 languages** spoken around the world were in **danger of disappearing"**.
- Several languages are now **"endangered"** and in the case of languages like **Tiniguan** (Colombian origin), there is **just a single native speaker left**.
- The **Pacific island nation of Papua New Guinea has the highest number** of 'living' indigenous languages in the world (840), while **India stands fourth with 453**.
- Chinese, Spanish, English, Hindi and Arabic – these five languages account for what is spoken by over 40% of people worldwide.
- According to UNESCO's **'Atlas of the World's Languages in Danger'**, 228 languages have become extinct since 1950.
- About 10% of the languages are classified 'vulnerable', while another 10% are 'critically endangered'.
- In India, **five languages have become extinct since 1950**, while 42 are critically endangered.

Criteria For Classification Of Endangered Language

- UNESCO's concept paper entitled "Language Vitality and Endangerment" had proposed nine criteria shown below in the diagram.
- No single factor is sufficient to assess the state of a community's language. However, taken together, these nine factors can determine the viability of a language, its function in society and the type of measures required for its maintenance or revitalization.



21. Consider the following statements regarding Coalition of the Willing on Pollinators:

1. It was founded at the Conference of the Parties to the Convention on Biological Diversity in 2016.
2. Initiated by the Government of the Netherlands, the Coalition has been joined by India recently.

3. The coalition aims to cooperate actively in the promotion of pollinators.

Which of the above statements is/are correct?

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) 1, 2 and 3

Context:

- Nigeria became the **fourth African country** to join the **Global Coalition of the Willing on Pollinators**.
- Ethiopia was the first African nation to be part of this global coalition in 2017. Later Burundi and Morocco joined it.

Answer: B

Explanation

About the Coalition of the Willing on Pollinators:

- The Coalition of the Willing on Pollinators was **founded at the 13th session** of the Conference of the Parties to the Convention on Biological Diversity (CBD 13 held in Mexico) **in 2016**.
- As of now, the coalition has 28 signatories including 17 **European countries**, five from **Latin America** and the **Caribbean and four from Africa**.
- India has not joined the coalition yet.

Background

- The **Thematic Assessment on Pollinators, Pollination and Food Production**, launched in February 2016 at Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES-4).
- The report found that populations of pollinators around the world are in decline.
- Against this backdrop, the Global Coalition came into fruition **on the initiative of the Government of the Netherlands**.

Need for Such Step:

- The promotion of pollinators relates to SDG 15 (life on land) as well as to SDG 2 (zero hunger).
- 75% of food crops in the world and nearly 90 per cent of wild flowering plants depend, at least to some extent, on animal pollination.
- According to the **IUCN Red List assessments**, 16.5 per cent of vertebrate pollinators are threatened with global extinction.

22. Consider the following pairs:

Name of the Award

Awardee

- 1. **A.P.J. Abdul Kalam Award 2019 -**
- 2. **Ramon Magsaysay Award 2019 -**

- K. Radhakrishnan (ISRO Chief)**
- Raymundo Pujante Cayabyab (musician)**

Which of the above pairs is/are correctly matched?

- a) 1 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

Answer: C

Explanation

A.P.J. Abdul Kalam Award 2019

- Chairman of Indian Space Research Organisation (ISRO) **K. Sivan** has been awarded Tamil Nadu government's Dr. A.P.J. Abdul Kalam Award.
- Under his leadership, the organisation launched its Chandrayaan-2 mission.
- A.P.J. Abdul Kalam Award has been instituted in 2015 by the Tamil Nadu Government.
- This award is conferred upon those who work for promoting scientific growth, humanities and students' welfare. The awardees should hail from Tamil Nadu.
- The award carries 8 gm gold medal, Rs.5 lakh in cash and a citation. It is given on Independence Day every year.

Ramon Magsaysay Award 2019

- Established in **April 1957**, the Ramon Magsaysay Award is an annual award established to perpetuate former Philippine President Ramon Magsaysay's example of integrity in governance, courageous service to the people, and pragmatic idealism within a democratic society.
- The award is internationally-recognized as the Nobel Prize counterpart of Asia and is the highest award given to Asian individuals and organizations which celebrates greatness of spirit and transformative leadership in Asia.
- The award carries a Medallion bearing likeness of the late President Ramon Magsaysay, cash prize and a certificate.
- **2019 recipients are:**
 - India's Ravish Kumar (Journalist)
 - Thailand's Angkhana Neelapajit (human rights activist),
 - Philippines' Raymundo Pujante Cayabyab (musician),
 - Myanmar's Ko Swe Win (journalist),
 - South Korea's Kim Jong-Ki, an activist working on violence and mental health issues in youth.

Bharat Ratna 2019

- Former President **Pranab Mukherjee**, Assamese singer-composer **Bhupen Hazarika** and social activist **Nanaji Deshmukh** – 2019 Recipients
- Bharat Ratna is the highest civilian Award of the country, instituted in the year 1954.
- The award was originally limited to achievements in arts, literature, science, and public services, but the government expanded the criteria to include "any field of human endeavour" in December 2011.

- The recommendations for the Bharat Ratna are made by the **Prime Minister to the President**, with a **maximum of three nominees** being awarded per year.
- Recipients receive a **Sanad (certificate)** signed by the President and a **peepal-leaf-shaped medallion**.
- There is **no monetary grant associated** with the award.
- Bharat Ratna recipients **rank seventh** in the Indian order of precedence.
- The first recipients of the Bharat Ratna were politician C. Rajagopalachari, philosopher Sarvepalli Radhakrishnan, and scientist C. V. Raman, who were honoured in 1954.

23. Consider the following statements regarding National Institute of Health and Family Welfare (NIHFW):

1. It is an autonomous organisation under the Ministry of Health and Family Welfare.
2. A committee headed by the Minister of Health and Family Welfare appoints the Director of this organization.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Context:

Harshad Pandurang Thakur has been appointed as the Director of National Institute of Health and Family Welfare.

Answer: A

Explanation

- NIFHW was established on 9 March 1977 by the merger of two national level institutions, viz. the **National Institute of Health Administration and Education (NIHAE)** and the **National Institute of Family Planning (NIFP)**.
- The NIHFW is an **autonomous organization**, under the Ministry of Health and Family Welfare.
- It acts as an apex technical institute as well as a think-tank for the promotion of health and family welfare programmes in the country.
- The **Appointments Committee of the Cabinet**, headed by Prime Minister, appoints the Director of this organization.

24. Consider the following statements regarding the Indian National Science Academy (INSA):

1. It was established in 1935 with the object of promoting science in India.
2. Chandrima Shaha has got the distinction of becoming the first woman president of this organization.

Which of the above statements is/are Correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 only
- d) Neither 1 nor 2

Context

- **Dr Chandrima Shaha**, a biologist and professor at the National Institute of Immunology, is all set to **become the first woman to head the INSA**.
- She is the President-elect and will head INSA from 2020 to 2022. The current President is Ajay K Sood.

Answer: C

Explanation

- INSA was established in **January 1935** with the object of promoting science in India and harnessing scientific knowledge for the cause of humanity and national welfare.
- Earlier, it was known as the National Institute of Sciences of India (NISI). The name was changed to the Indian National Science Academy (INSA) in February 1970.
- HQ – New Delhi

25. Virasat-e-Khalsa museum is located in

- a) Patna City, Bihar
- b) Anandpur Sahib, Punjab
- c) Ontario, Canada
- d) None of the Above

Answer: B

Explanation

- The Virasat-e-Khalsa museum is all set to **enter in the Asia Book of Records for becoming the most visited museum** in the Indian sub-continent **on a single day**.
- It is located in **Punjab's Anandpur Sahib town**.
- With its name in the Asia Book of Records, it would be the **third entry for the museum in record books**. Earlier, Virasat-e-Khalsa made it **to Limca Book of Records** in the February 2019 edition and **India Book of Records**.

26. Which of the following have been allotted a GI tag?

1. Palani Panchamirtham
2. Tawlhlohpuan
3. Mizo Puanchei
4. Tirur betel vine

- a) 1 and 2
- b) 3 and 4
- c) 2, 3 and 4
- d) All of the above

Context

- The Geographical Indication (GI) under the Department for Promotion of Industry and Internal Trade has recently registered 4 new GIs.
- PalaniPanchamirtham from Palani Town in Dindigul District of Tamil Nadu State, Tawlhlohpuan and Mizo Puanchei from the state of Mizoram and Tirur Betel leaf from Kerala are the latest additions to the list of registered GIs.

Answer: D

Explanation:**Palani Panchamirtham**

- Palani Panchamirtham, is one of the main offerings in the Abisegam of Lord Dhandayuthapani Swamy, the presiding deity of ArulmiguDhandayuthapaniswamy Temple, situated in palani Hills, Palani Town in Dindigul District of Tamil Nadu.
- It is a combination of five natural substances, namely, banana, jaggery sugar, cow ghee, honey and cardamom in a definite proportion.
- It is prepared in a natural method without addition of any preservatives or artificial ingredients. This is the first time a temple 'prasadam' from Tamil Nadu has been bestowed with the GI tag.

Tawlhlohpuan

- Tawlhlohpuan, a medium to heavy, compactly woven, good quality fabric from Mizoram is known for warp yarns, warping, weaving & intricate designs that are made by hand.
- Tawlhloh, in Mizo language, means 'to stand firm or not to move backward'. Tawlhlohpuan, which holds high significance in the Mizo society, is produced throughout the state of Mizoram, Aizawl and Thenzawl town being the main centre of production.

Mizo Puanchei

- Mizo Puanchei, a colourful Mizo shawl/textile, from Mizoram, is considered as the most colourful among the Mizo textiles. It is an essential possession for every Mizo lady and an important marriage outfit in the state.
- It is also the most commonly used costume in Mizo festive dances and official ceremonies. The weavers insert the designs and motifs by using supplementary yarns while weaving to create this textile.

Tirur betel vine

Tirur betel vine from Kerala, is valued both for its mild stimulant action. Even though it is commonly used for making pan masala for chewing, it has many medicinal, industrial and cultural usages and is considered as a remedy for digestive disorders.

GI Tag

- GI is an indication used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. The tag conveys an assurance of quality and distinctiveness which is essentially attributable to its origin in that defined geographical locality.
- GI products can benefit the rural economy in remote areas, by supplementing the incomes of artisans, farmers, weavers and craftsmen. India's rural artisans possess unique skills and knowledge of traditional practices and methods, passed down from generation to generation, which need to be protected and promoted.

27. What is FEDOR?

- a) Satellite
- b) Spacecraft
- c) Humanoid robot
- d) Telescope

Answer: C

Explanation

- Russia has launched an unmanned rocket carrying a life-size humanoid robot that will spend 10 days learning to assist astronauts on the International Space Station.
- Named Fedor, short for Final Experimental Demonstration Object Research, the robot is the first ever sent up by Russia.
- Fedor copies human movements, a key skill that allows it to remotely help astronauts or even people on Earth to carry out tasks while the humans are strapped into an exoskeleton.
- Space is the most important industry for using robots, a dangerous environment for humans but an ideal option for an assistant, and in some cases a complete replacement for a person, is an anthropomorphic robot.
- Fedor could help in tests on Russia's new manned transport ship under development, the Federatsiya, or a spacewalk to work on the outside of the ISS.

Earlier Attempts

- While Fedor is Russia's first robot in space, other countries have previously sent theirs. In 2011, NASA sent up **Robonaut 2**, a humanoid developed with General Motors that had a similar aim of working in high-risk environments.
- In 2013, Japan sent up a small robot called **Kirobo**, developed with Toyota. It was able to hold conversations in Japanese.

28. The principle of Electromagnetic Induction is used in which of the following

1. Transformers
2. Electric Generators
3. Induction Cooking

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Answer: D

Explanation

- On August 29 in 1831, British scientist Michael Faraday discovered electromagnetic induction, a seminal breakthrough which led to important inventions such as electric motors, transformers, inductors, generators and induction cooking.
- The formal name for the physics equation that defines the behaviour of an induced electromagnetic field from the magnetic flux (change in a magnetic field) is Faraday's law of electromagnetic induction.
- Electromagnetic induction is the production of voltage or electromotive force due to a change in the magnetic field.
- Electromagnetic induction can be generated in two ways, namely when the electric conductor is kept in a moving magnetic field and when the electric conductor is constantly moving within a static magnetic field.
- The phenomenon of electromagnetic induction was first discovered by Michael Faraday when he moved a bar magnet through an electric coil and noticed a change in voltage of the circuit.

Factors Influencing Electromagnetic Induction

- He later deduced the factors that could influence the electromagnetic induction as the number of coils, the strength of the magnet, the changing magnetic fields and the speed of relative motion between coil & magnet.
- The number of turns in the coils/wire is directly proportional to induced voltage. In other words, greater voltage is generated when the number of turns is higher.
- The speed of the relative motion between the coil and magnet was also found to affect the induced voltage or electromagnetic induction as rise in velocity cuts the lines of flux at a faster rate. This results in more induced electromagnetic force or voltage.

29. Which of the following organization has instituted “Vikram Sarabhai Journalism Award in Space Science, Technology and Research”?

- a) NITI Ayoga
- b) Department of Science and Technology
- c) Press Council of India
- d) ISRO

Answer: D

Explanation

- As part of **centenary year celebrations of Dr. Vikram Sarabhai**, father of Indian space programme, ISRO has announced its “**Vikram Sarabhai Journalism Award in Space Science, Technology and Research**”.
- This award has been instituted to recognize and reward journalists who have actively contributed towards the field of space science, applications, and research.
- **Two categories of awards** will be given:
 - The first is has a cash price of Rs 5,00,000, a medal and citation. Two journalists or freelancers of the print media will be awarded.

- The second category of the award has three cash prizes of Rs 3,00,000, 2,00,000 and 1,00,000 respectively, and a citation.

30. Consider the following Countries:

1. Singapore
2. Lao PDR
3. Cambodia
4. Vietnam

Which of the above countries is/are not member(s) of Mekong-Ganga Cooperation (MGC)?

- a) 1 Only
- b) 1 and 2 Only
- c) 1 and 3 Only
- d) All of the above are members

Context:

- The **10th Mekong-Ganga Cooperation Ministerial Meeting** (10th MGC MM) was held in **Bangkok, Thailand**.
- Indian side was represented by Minister of External Affairs of India.
- The meeting adopted the new **MGC Plan of Action 2019-2022**

Answer: A

Explanation

MGC Plan of Action 2019-2022

- It envisages **project-based cooperation in the seven areas** of MGC cooperation, namely *tourism and culture, education, public health and traditional medicine, agriculture and allied sectors, transport and communication, MSMEs*.
- It also **included three new areas of cooperation**, i.e. water resources management, science and technology, skill development and capacity building.

Other Highlights of the Meeting:

- India proposed to develop a website of MGC, which would contribute to branding of the regional grouping.
- The Ministers welcomed **India's joining the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS)** as a Development Partner and noted that ACMECS Inaugural SOM with India was held in Bangkok on 29 July 2019.
- It was agreed to hold the **11th MGC Ministerial Meeting** on the margins of ASEAN Foreign Ministers' Meeting in **2020 in Viet Nam**. MGC will witness its 20th anniversary in 2020.

About MGC:

- The Mekong-Ganga Cooperation (MGC) is an initiative by six countries – **India and five ASEAN countries, namely, Cambodia, Lao PDR, Myanmar, Thailand and Vietnam**.
- It was launched in 2000 at Vientiane, Lao PDR for cooperation in tourism, culture, education, as well as transport and communications.

31. Consider the following statements regarding the World Anti-Doping Agency (WADA):

1. It is an organization which works under International Olympic Committee.
2. Its key activities include scientific research, education, development of anti-doping capacities, and monitoring of the World Anti-Doping Code (Code).

Which of the above statements is/are Correct?

- a) 1 Only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Context:

- The World Anti-Doping Agency (WADA) has **suspended the accreditation of the National Dope Testing Laboratory (NDTL) in New Delhi**, for a period of up to six months.
- This suspension has been imposed due to non-conformities with the International Standard for Laboratories (ISL).
- The suspension took effect on 20 August 2019. As a result of suspension, NDTL will not be able to carry out any anti-doping activities.

Answer: B

Explanation

About WADA

- WADA is an international independent agency which was **established in 1999** by a collective initiative led by the International Olympic Committee.
- The **First World Conference** on Doping in Sport held, in Lausanne, Switzerland, produced the **Lausanne Declaration on Doping in Sport**. This declaration paved the way for establishment of WADA.
- **HQ** - Montreal, Canada
- Its **key activities** include **scientific research, education, development of anti-doping capacities, and monitoring of the World Anti-Doping Code (Code)** – the document harmonizing anti-doping policies in all sports and all countries.

About NADA

- It was set up as registered society in 2005 with a mandate for **Dope free sports in India**.
- The primary objectives are to implement anti-doping rules as per WADA code, regulate dope control programme, to promote education and research and creating awareness about doping and its ill effects.
- It works **under the Ministry of Youth Affairs and Sports**.

BCCI Agrees To Come Under NADA Ambit

- Recently, BCCI has agreed to come under the ambit of the **National Anti-Doping Agency (NADA)** after years of resisting the move.

- Till now, **Sweden-based International Dope Testing Management (IDTM)** was collecting cricketers' samples on behalf of BCCI and submitting them to the NDTL.
- **Reason for resistance till now:**
 - In the past BCCI had argued that it is an autonomous organisation and not a national sports federation, and is therefore not under NADA's jurisdiction.
 - BCCI had issue with the **contentious whereabouts clause** that deals with out-of-competition testing. The clause **has been regarded as an invasion of privacy** and a potential threat to the security of the high-profile cricketers.
 - The clause requires every athlete to fill a declaration form **mentioning three specific dates in a year** when they are not competing but are available to NADA's dope-control officer for sample collection.

32. With reference to Repo rate, consider the following statements:

1. **A decrease in Repo rate can lead to an increase in the money supply in the economy**
2. **An increase in Repo rate can lead to an increase in inflation in the economy**

Which of the statements given above is/are correct?

- a) **Only 1**
- b) **Only 2**
- c) **Both 1 and 2**
- d) **Neither 1 nor 2**

Context

The Reserve Bank of India's (RBI's) monetary policy committee (MPC) has reduced the repo rate by 35 basis points (bps) to 5.40 per cent to help revive the economy. It was the fourth straight rate cut by the central bank in 2019.

Answer: A

Explanation:

- Repo rate refers to the rate at which commercial banks borrow money from the Reserve Bank of India (RBI) in case of shortage of funds.
- When the RBI needs to pump funds into the system, it lowers the repo rate. Consequently, businesses and industries find it cheaper to borrow money for different investment purposes. It also increases the overall supply of money in the economy. This ultimately boosts the growth rate of the economy.
- During high levels of inflation, RBI makes strong attempts to bring down the flow of money in the economy. One way to do this is to increase the repo rate. This makes borrowing a costly affair for businesses and industries, which in turn slows down investment and money supply in the economy. As a result, it negatively impacts the growth of the economy. It also helps bring down inflation.

33. Consider the following statements about Gross Domestic Product in India

1. **Nominal GDP is the sum of Inflation and Real GDP**
2. **GDP figures are devoid of taxes and subsidies**
3. **In India, GDP is calculated by the Central Statistics Office**

Which of the statements given above is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. All of the above

Context

- The Central Statistics Office (CSO) has released the economic growth data for the first quarter (April to June) of the current financial year (2019-20, or FY20).
- At 5%, the real GDP growth rate has slowed to a six-year low. The previous low was recorded at 4.3% in the fourth quarter (January to March) of the financial year 2012-13.
- Growth rate of Gross Value Added (GVA), which is GDP minus net product taxes, fell to 4.9 per cent in the first quarter of this financial year compared to 7.7 per cent in the corresponding period last year.

Answer: C

Explanation:

- Real GDP growth rate is a derived figure and is arrived at by subtracting the inflation rate from the nominal GDP growth rate.
- GDP is calculated by mapping the expenditure made by different categories of spenders. As the GDP maps final expenditure, it includes both taxes and subsidies that the government receives and gives.
- Central Statistics Office (CSO) under the Ministry of Statistics and Programme Implementation is responsible for the calculation of GDP in India.

Impact On Various Sectors

- Data shows that the growth has slowed down in five out of eight sectors, reflecting the widespread weakness in the overall economy.
- The manufacturing sector grew at a two-year low of 0.6% in the first quarter of 2019-20, down from 12.1% in the same quarter of the previous year.
- The real estate sector has slowed down to 5.7% in the first quarter, compared with 9.6% in the same quarter of 2018-19.
- The agriculture sector saw a slowdown in growth to 2% from 5.1% over the same period.
- However, the electricity and power generation sector highlighted robust growth of 8.6% in the said quarter compared to 6.7% in the same quarter of the previous year.

34. The Char Dham Highway Project connects which of the following temples?

1. Badrinath
2. Kedarnath
3. Nanda Devi
4. Hanuman Garhi

Choose the correct option using the codes below:

- a) 1 and 2
- b) 1 and 3

- c) 2, 3 and 4
- d) 1,2,3 and 4

Context

The Supreme Court has cleared the Chardham highway project, by modifying an NGT order. It has also ordered to constitute a fresh committee to look into environmental concerns related to the project.

Answer: A

Explanation:

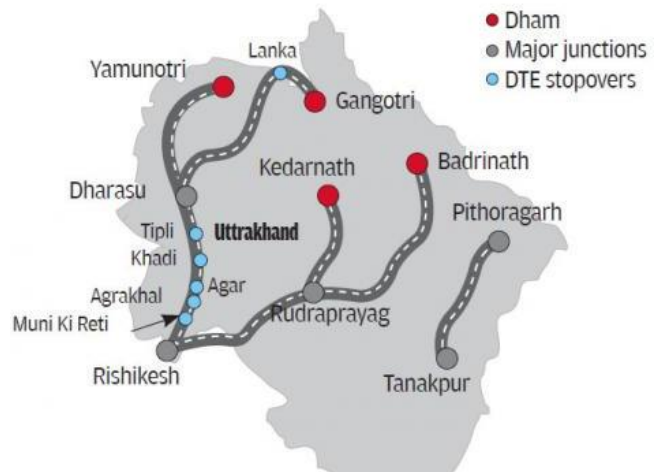
Committee’s Mandate

- The committee will consider whether revision of the full Chardham project should take place with a view to minimize the adverse impact on the environment and social life.
- It will assess the environmental degradation - loss of forest lands, trees, green cover, water resources etc. - on the wildlife and will direct mitigation measures.
- The committee will also suggest the areas in which afforestation should be taken and the kind of saplings to be planted.

Char Dham Highway Project

- The Chardham Mahamarg Vikas Pariyojna, or the Chardham highway project, is an initiative to improve connectivity to the Char Dham pilgrimage centres (Gangotri, Yamunotri, Kedarnath and Badrinath) in the Himalayas.
- The Prime Minister had launched the construction of the Char Dham Mahamarg in December, 2016, as a tribute to those who died in the 2013 Kedarnath disaster.
- The project will develop around 900 km of national highways in Uttarakhand at an approximate cost of Rs 12,000 crore.

Proposed Char Dham highway



Advantages

- The project will make travel to Char Dham safer and more convenient. Connectivity & tourism will get a strong boost through the project.
- Proper slope stabilisation will ensure protection against landslides.
- The project is also important from a strategic point of view as it is close to the China border. In the eventuality of any aggression, improved roads will facilitate movement of heavy weapons, equipments and artillery guns.

Concerns

- It is an extremely fragile region. The area forms the Main Central Thrust of the Lesser Himalayan region. This is where the Indian tectonic plate goes under the Eurasian Tectonic Plate. The phenomenon makes the region susceptible to earthquakes and landslides.

- The Geological Survey of India corroborates this in its report prepared after the Kedarnath disaster. It states that road construction in mountains reactivates landslides as it disturbs the toe of the natural slope of the hill.

Char Dham

I. Badrinath

- Badrinath or Badrinarayan Temple is a Hindu temple dedicated to Lord Vishnu which is situated in the town of Badrinath in Uttarakhand.
- The temple is located in Garhwal hill tracks in Chamoli district along the banks of Alaknanda River.
- The temple is also one of the 108 Divya Desams dedicated to Vishnu, who is worshipped as Badrinath—holy shrines for Vaishnavites.

II. Kedarnath

- Kedarnath Temple is a Hindu temple (shrine) dedicated to Lord Shiva. It is one of the twelve Jyotirlingas, the holiest Hindu shrines of Shiva.
- It is located on the Garhwal Himalayan range near the Mandakini river, in Uttarakhand.
- Kedarnath is seen as a homogenous form of Lord Shiva, the 'Lord of Kedar Khand', the historical name of the region.

III. Gangotri

- Gangotri is a town and a Nagar Panchayat (municipality) in Uttarkashi district in the state of Uttarakhand.
- It is a Hindu pilgrim town on the banks of the river Bhagirathi and origin of River Ganges. It is on the Greater Himalayan Range, at a height of 3,100 metres.
- According to popular Hindu legend, it was here that Goddess Ganga descended when Lord Shiva released the mighty river from the locks of his hair.
- The river is called Bhagirathi at the source and acquires the name Ganga (the Ganges) from Devprayag onwards where it meets the Alaknanda. The origin of the holy river is at Gaumukh, set in the Gangotri Glacier, and is 19 kms from Gangotri.

IV. Yamunotri

- Yamunotri Temple is situated in the western region of Garhwal Himalayas at an altitude of 3,291 metres in Uttarkashi district, Uttarakhand. River Yamuna originates at Yamunotri.
- The temple is dedicated to Goddess Yamuna and has a black marble idol of the goddess.

35. Which of the following statement is incorrect about the Zonal Council.

- a) The zonal councils provide a forum where irritants between the Centre and the States, and among the States themselves can be resolved through free and frank discussions and consultations**
- b) The States have been divided into five zones and each zone has its council comprising the Chief Minister, two Ministers and the Chief Secretary of each State.**
- c) It is headed by the Prime Minister.**
- d) Each zone nominates one Chief Minister as its vice-chairman on rotation basis.**

Context

Union Home Minister Amit Shah chaired the 24th meeting of Western Zonal Council in Goa. The Western Zonal Council is a forum for the Centre and States to exchange ideas on issues such as health, security and social welfare

Answer: C**Explanation**

It is headed by Union Home Minister.

Iron Ion Battery

- Indian Institute of Technology (IIT) Madras researchers have for the first time fabricated a rechargeable iron ion battery.
- With the world turning its attention to electric vehicles, the focus is on developing batteries that are cheaper.
- With no lithium reserves in India and shortage of lithium reserves in the world, the stress is on developing rechargeable batteries of comparable performance using materials other than lithium.

Set up

- The battery uses mild steel as the anode and vanadium pentoxide as the cathode.
- In pure iron, the easy removal of iron ions from the anode and their reinsertion, which is an essential mechanism in battery operation, is not possible. However, small amount of carbon present in mild steel facilitates this process.
- Vanadium pentoxide is chosen as it has a layered structure with very large spacing between the layers.
- An ether-based electrolyte containing dissolved iron perchlorate is being used. The iron perchlorate behaves like an ion-conducting medium between the anode and cathode.
- While lithium ions are the charge carriers in lithium ion battery, the Fe^{2+} ions perform that function in the case of iron ion battery.

Why Iron?

- Iron has favourable physico-chemical properties like lithium. The redox potential of iron ion is higher than lithium ion and the radius of the Fe^{2+} ion is nearly the same as that of the lithium ion.
- Iron is more stable during the charging process and therefore prevents short-circuiting of the batteries which makes it safer to handle.
- When compared with the popular lithium metal-based batteries the iron ion battery is cost-effective and the amount of energy that can be stored in the battery is also high.

Performance

- When fabricated under controlled conditions, the amount of energy that can be drawn from the iron ion battery is 220 Wh per kg, which is 55-60% of lithium ion battery's performance. The energy density of lithium ion battery is around 350 Wh per kg.
- The battery can also be cycled at high current densities so that energy can be drawn at a faster rate from the battery.
- The team is now focused on further improving the performance of the iron ion battery. Since the electrolyte cannot be changed, the researchers are trying out different cathode materials.
- Different metal oxides are being used to increase the amount of iron ions that can bind to the cathode. When more iron ions bind to the cathode, more energy can be stored in the battery leading to improved performance

Magnetospheric Multiscale Mission

- For the first time in human history, visible evidence of an "interplanetary shock" has been discovered. The phenomenon was captured by the Magnetospheric Multiscale mission (MMS).
- The Magnetospheric Multiscale mission — MMS — has spent the past four years using high-resolution instruments to see what no other spacecraft can

Interplanetary Shocks

- Interplanetary shocks are a type of collisionless shock — ones where particles transfer energy through electromagnetic fields instead of directly bouncing into one another. The shocks are made of particles and electromagnetic waves and are launched by the Sun.
- The collisionless shocks are a phenomenon found throughout the universe, including in supernovae, black holes and distant stars.
- Interplanetary shocks start at the Sun, which continually releases streams of charged particles called the solar wind.
- The solar wind typically comes in two types — slow and fast. When a fast stream of solar wind overtakes a slower stream, it creates a shock wave, just like a boat moving through a river creates a wave. The wave then spreads out across the solar system.

MMS

- The MMS mission, a group of four spacecrafts orbiting the Earth in a tight formation, was launched in 2015. It is able to measure the shock due to its unprecedentedly fast and high-resolution instruments.
- One of the instruments aboard MMS is the Fast Plasma Investigation. This suite of instruments can measure ions and electrons around the spacecraft at up to 6 times per second.
- Since the speeding shock waves can pass the spacecraft in just half a second, this high-speed sampling is essential to catching the shock.
- The study also collects information on magnetic fields around the Earth, how and where they overlap and the energy released when two such magnetic field lines intersect, in a process known as magnetic reconnection.
- It observes reconnection from Earth's own protective magnetic space environment, the magnetosphere. By studying reconnection in this local, natural laboratory, MMS can help in understanding reconnection elsewhere in the universe as well, like in the atmosphere of the sun, other stars, in the vicinity of black holes and neutron stars.

SARAL

- The Ministry of New & Renewable Energy has launched the State Rooftop Solar Attractiveness Index–SARAL.
- SARAL has been designed collaboratively by MNRE, Shakti Sustainable Energy Foundation (SSEF), Associated Chambers of Commerce and Industry of India (ASSOCHAM) and Ernst & Young (EY).
- The Index that evaluates Indian states based on their attractiveness for rooftop development has placed Karnataka at first place.
- While Telangana, Gujarat and Andhra Pradesh have got 2nd, 3rd and 4th rank respectively.
- It captures five key aspects viz. robustness of policy framework, implementation environment, investment climate, consumer experience and business ecosystem.

Benefits

- It encourages each state to assess the initiatives taken so far, and what it can do to improve its solar rooftop ecosystem.
- It incentivises rooftop solar by creating healthy competition among the States and encourage States to adopt best practices being followed by top ranking States.
- In addition, the exercise is also likely to create a more conducive environment for solar rooftop installations, encourage investment and lead to accelerated growth of the sector.

Solar Rooftops

- MNRE has set a target of 175 GW of renewable energy capacity by 2022. 100 GW solar power is to be operational by March 2022, of which 40 GW is expected to come from grid connected solar rooftops.
- Rooftop solar PV has already achieved grid parity for commercial and industrial consumers and is fast becoming attractive for residential consumers as well.
- However, to achieve the rooftop solar targets, it is important to develop an ecosystem that ensures information symmetry, access to financing and clear market signals. This is where SARAL is expected to help.
- MNRE had, in December 2015, approved a programme 'grid connected rooftop and small solar power plants programme', which aimed to install 4,200 MW rooftop solar plants in the country by year 2019-20.
- But, in the first phase only 2,158 megawatt (MW) of rooftop solar (RTS) systems could be installed till December 2018.
- In February 2019, MNRE approved the second phase of the programme. In the second phase, the electricity distribution companies (discoms) will play a key role in expansion of RTS.
- This is to ease the consumer's challenge of approaching multiple agencies for getting a RTS plant installed. The discoms and its local offices would be the nodal points for implementation of the RTS programme.

Economic Stimulus

- In a bid to stabilise the slowing economy, the Union Finance Minister has announced a slew of measures.
- The steps come in the wake of a slide in equity markets and a slowdown in demand which has impacted industries ranging from automobiles to items of daily use such as biscuits and groceries.
- Given the tight fiscal deficit targets, the government has refrained from providing an outright fiscal stimulus. However, it has assured that more policy measures will be taken in the next couple of weeks.

Measures Announced**Investors**

- In order to encourage investment in the capital market, the enhanced surcharge on FPIs has been removed and the pre-Budget position is restored.
- Surcharge on domestic investors in equity markets is also withdrawn.
- Government is working to bring offshore rupee market to domestic market.
- Aadhaar-based KYC will be allowed for opening demat accounts and investment in mutual funds

Auto Sector

- BS-IV cars purchased till March 2020 to remain operational for the entire period of registration.
- Government departments to replace old vehicles with new ones, in order to boost demand.
- Depreciation has been increased to 30 per cent for all vehicles purchased till March 2020.
- ICE (internal combustion engine) vehicles will coexist with EVs (electric vehicles) and there will be no phasing out of ICE vehicles.
- Scrappage policy to be announced soon.

Industry

- Corporate Social Responsibility (CSR) violation would be treated as a civil offence, not a criminal offence.
- All pending GST refunds till now shall be paid in 30 days. Future GST refunds to be paid in 60 days and the GST system will be simplified further.
- The angel tax provision for startups and investors has been withdrawn.
- The expenditure department will review delayed payments from government and Central Public Sector Enterprises. This will release nearly Rs 60,000 crore worth of payments into the economy, easing the working capital crunch in many companies.

Banking

- An upfront capital infusion of Rs 70,000 crore into public sector banks, in order to boost lending and improve liquidity situation. This will enable them to lend up to Rs 5 lakh crore more to the economy.
- Further, the government is working with the banks to ensure that lending rates are lowered in line with the reduction in policy rates by the Reserve Bank of India.
- Additional liquidity to support Housing Finance Companies by National Housing Board increased to Rs 30,000 crore from the earlier Rs 10,000 crore.

Income Tax

- The Finance Minister has assured of steps to end tax harassment by reining in the discretionary powers of tax authorities significantly.
- Old tax notices to be decided by October 1 and from October 1 onwards, all notices and summons by the Income Tax Department would be generated by a centralised computer and would carry a unique code.
- The new notices will have to be disposed within three months.

Impact

- The measures announced are not in the form of doles or direct spending but in terms of structural reforms and will help in reconnecting the broken pipe between the banks to HFCs, NBFCs and other asset classes.
- The upfront release of growth capital for banks will help lenders to plan their asset growth better instead of scrambling for funds and ensure that the pipeline of loans is healthy.
- Fund flows in equity and debt markets will get a boost and will lead to an increase in the velocity of money and help in increasing the quantum of transactions in the economy.
- It also helps to mitigate genuine difficulties of startups and their investors which will help in laying the ground for a conducive startup ecosystem.

Bangladesh Signs Uranium Supply Deal With Russia

- Bangladesh has signed a deal with Russia for the supply of uranium for its **2,400 MW Rooppur Nuclear Power Plant (RNPP)**.
- Work on the two units of RNPP (each producing 1200 MW) is scheduled to be completed in 2022 and 2024 respectively.
- Under the deal, Russia will be obliged to supply the nuclear fuel needed for the plant during its entire life cycle.

Three New Precision-Guided Missiles Unveiled by Iran

- The air-to-air missiles revealed by Tehran are called the “**Yasin**”, the “**Balaban**” as well as a new series of the “**Qaem**” missile.
- These were developed jointly by the Iranian Defense Ministry and Sa Iran (Iran Electronics Industries).
- Last year, US withdrew from a 2015 nuclear deal between Iran and world powers. Since then it is engaged in a campaign of "maximum pressure" on the Islamic republic.

World Breastfeeding Week

- World Breastfeeding Week is celebrated every year from 1 to 7 August to encourage breastfeeding and improve the health of babies around the world. Annually, WABA coordinates and organises the World Breastfeeding Week (WBW).
- It commemorates the Innocenti Declaration signed in August 1990 by government policymakers, WHO, UNICEF and other organizations to protect, promote and support breastfeeding.
- This year, WHO is working with UNICEF and partners to promote the importance of family-friendly policies to enable breastfeeding and help parents nurture and bond with their children in early life, when it matters most.
- This includes enacting paid maternity leave for a minimum of 18 weeks, and paid paternity leave to encourage shared responsibility of caring for their children on an equal basis.
- Mothers also need access to a parent friendly workplace to protect and support their ability to continue breastfeeding upon return to work by having access to breastfeeding breaks; a safe, private, and hygienic space for expressing and storing breastmilk; and affordable childcare.
- WHO recommends exclusive breastfeeding starting within one hour after birth until a baby is 6 months old. Nutritious complementary foods should then be added while continuing to breastfeed for up to 2 years or beyond.

Benefits

- Breastfeeding promotes better health for mothers and children alike.
- Increasing breastfeeding to near-universal levels could save more than 800 000 lives every year, the majority being children under 6 months.
- Breastfeeding decreases the risk of mothers developing breast cancer, ovarian cancer, type 2 diabetes, and heart disease.

WABA

- World Alliance for Breastfeeding Action (WABA) is a global network of individuals and organisations dedicated to the protection, promotion and support of breastfeeding worldwide.

- WABA is in consultative status with UNICEF and an NGO in Special Consultative Status with the Economic and Social Council of the United Nations (ECOSOC).

New Space India Limited

- New Space India Limited (NSIL), the newly created second commercial arm of the Indian Space Research Organisation, recently got its first contract.
- A private US space services provider, Spaceflight has booked ISRO's Small Satellite Launch Vehicle (SSLV), which is yet to be tested, for launching a spacecraft.

SSLV

- SSLV was originally scheduled to have its first development flight in July but the flight has been pushed to the end of the year.
- It is suited for launching multiple microsattellites at a time and supports multiple orbital drop-offs.
- The SSLV can carry satellites weighing upto 500 kg to low earth orbit while the PSLV can launch satellites weighing in the range of 1,000 kg.
- It is the smallest vehicle at 110-tonne mass at ISRO and takes only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle.
- Further, only six people will be required to do the job, instead of 60 people. This leads to the entire job being done in a very short time.
- The cost of the vehicle is only around Rs 30 crore which is one tenth of a PSLV.
- About 15 to 20 SSLVs would be required every year to meet the national demand alone.

NSIL

- NSIL was incorporated in March 2019 under the administrative control of Department of Space (DOS).
- The aim of NSIL is to use research and development carried out by ISRO over the years for commercial purposes through Indian industry partners.
- It will mass produce and manufacture the SSLV and the more powerful PSLV with the private sector in India through technology transfers.
- It will be involved in marketing spin-off technologies and products/services, both in India and abroad, and in any other subject which the government deems fit.
- It will deal with capacity building of local industry for space manufacturing.

Antrix

- Antrix, is the commercial arm of ISRO incorporated in 1992 and is under the administrative control of Department of Space (DOS).
- It promotes and commercially markets the products and services emanating from the Indian Space Programme.
- The current business activities of Antrix include:
 - Provisioning of communication satellite transponders to various users
 - Providing launch services for customer satellites
 - Marketing of data from Indian and foreign remote sensing satellites
 - Building and marketing of satellites as well as satellite sub-systems

- Establishing ground infrastructure for space applications
- Mission support services for satellites

ISRO's Technical Liaison Unit

The Union Cabinet chaired by Prime Minister has approved the setting up of ISRO Technical Liaison Unit (ITLU) at Moscow, Russia.

Background

- Department of Space has instituted technical Liaison Units, namely ISRO Technical Liaison Units (ITLU) at Washington and Paris with the prime objective to liaise with various Government and space agencies in USA and Europe, respectively.
- Space cooperation has been one of the major links between India and Russia almost from the beginning of the space era and currently both sides are actively pursuing interactions in diversified areas of space programme.
- Apart from intensifying cooperation with Russia, India has expanded its space cooperation with countries near to Russia. This calls for extensive uninterrupted coordination & interface support for increased level international technical collaboration.

ITLU

- The ISRO Technical Liaison Unit (ITLU) at Moscow will enable effective technical coordination for timely interventions on diversified matters with Russia and neighbouring countries for realization of the programmatic targets of ISRO.
- The Liaison Officer, deputed at ITLU from ISRO provides technical information about the developments in research and technology and inputs arising from their meetings with researchers, government agencies and industries in the respective countries.
- They also support the ongoing bilateral programmes of cooperation in space technology and act on behalf of ISRO on the matters referred.

Benefits

- ISRO will be able to collaborate with Space agencies/industries in Russia and neighbouring countries for mutually synergetic outcomes.
- ISRO's Gaganyaan programme requires development of some of the key technologies and establishment of specialized facilities, which are essential to support life in space. Keeping this in view, it is prudent to avail technical cooperation from International space agencies, who have already demonstrated their technical capabilities in specific areas.

Space Situational Awareness Control Centre

- Indian Space Research Organisation (Isro) has laid the foundation stone for the Space Situational Awareness Control Centre in Bengaluru.
- Space Situational Awareness & Management (SSAM) has become an internationally significant area due to the rise of manmade space debris and the increased collision threat with operational spacecraft.
- ISRO has also set up a Directorate of Space Situational Awareness and Management aimed at protecting high-value space assets from space debris' close approach and collisions.

- The control centre would host a range of activities related to the protection of Indian space assets from inactive satellites, pieces of orbiting objects, near earth asteroids and adverse space weather conditions.
- It would also assimilate the tracking data of inactive satellites from indigenous observation facilities and generate useful information from bare observations through analysis.
- For sustainable use of space, the control centre would enable research activities pertaining to active debris removal, space debris modelling and mitigation.

Currency Manipulator

- The US Treasury Department has formally declared that China is a currency manipulator.
- It claims that the Central Bank of China, allowed the yuan to suddenly depreciate (or lose value) relative to the dollar by 1.9 per cent — one of the biggest single-day falls. As a result, the yuan breached the 7-to-a-dollar-mark for the first time since 2008.
- US claims that it would approach the International Monetary Fund to eliminate the unfair competitive advantage created by China's latest actions.
- However, in its External Sector Report released last month, the International Monetary Fund noted that China's external assessment is moving from "moderately stronger to broadly in line".
- Further, most expert economists across the world claim that the label has been applied in an "arbitrary and retaliatory manner" and that the currency manipulator charge is difficult to support on the basis of objective criteria.

Background

- China was by far the largest currency manipulator between 2003-12. It held down the value of its currency in the past to speed its economic development. However, it reversed that practice in 2015-16.
- Currency devaluation along with other policies helped China build a manufacturing sector that serves as a factory to the world.

Currency's Exchange Rate

- The exchange rate of the currency is the fundamental price in the economy. It is the value of one nation's currency versus the currency of another nation. Say, if it takes 70 Rupees to buy one dollar, the exchange rate is 70.
- In the globalised world economy, where different parts of each good (and service) are produced in different countries, exchange rates become important. It often determines the affordability of buying or selling internationally. While a stronger rupee is better for a consumer, it is bad for an exporter.
- In an ideal world, the exchange rate for any currency would be determined by the interplay of its demand and supply. However, the real world is far from ideal.
- If more Indians want to buy US goods, there would be a higher demand for the dollar relative to the rupee. This, in turn, would mean the dollar would be "stronger" than the rupee — and gain in strength as the demand increases.

Currency Manipulation

- Currency manipulation happens when governments try to artificially tweak the exchange rate to gain an "unfair" advantage in trade. In other words, if China's central bank buys dollars in the forex market, it can artificially weaken the yuan.

- Some amount of such “intervention” by central banks is allowed to reduce wild fluctuations in the exchange rate. But excessive and undisclosed interventions are not considered fair.

Impact

- Though the decision to label China is largely symbolic, China is not expected to take it lightly, as it has been very resistant to being labelled a currency manipulator.
- It will lead to an escalation in the ongoing trade war, harming businesses, consumers and others that depend on steady relations between the world’s two largest economies.
- Other countries which compete with China might also weaken their currencies in order to maintain their competitiveness, potentially disrupting trade and investment flows and eventually triggering off a currency war.

UNIDO - NISE Agreement

- An agreement has been signed between the National Institute of Solar Energy (NISE) and the United Nations Industrial Development Organization (UNIDO) to initiate a skill development programme for different levels of beneficiaries in the solar thermal energy sector.
- NISE and UNIDO will engage national and international experts to bring the best practices by developing specialized training material.
- The agreement is part of the ongoing MNRE-GEF-UNIDO project implemented jointly by UNIDO to support capacity building and skill development of technical manpower in the Concentrated Solar Thermal Energy Technologies (CST) which are being used to replace conventional fossil fuels and save costs and emissions in the industrial process heat applications.

UNIDO

- UNIDO was established as a UN programme in 1966 with headquarters in Vienna, Austria, and became a specialized agency of the United Nations in 1985. It is also a member of the United Nations Development Group.
- UNIDO’s mission is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States.
- It promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.

Strategic Priorities

- Creating shared prosperity
- Advancing economic competitiveness
- Safeguarding the environment
- Strengthening knowledge and institutions

Tripura Insurgent Group Signs Peace Pact

- The Central government has signed a pact with **an insurgent group of Tripura**. The tripartite Memorandum of Settlement (MoS) was signed by the governments of India and Tripura, and the **National Liberation Front of Twipra** led by Sabir Kumar Debbarma (**NLFT-SD**).
- Under this pact, the NLFT-SD has agreed to abjure the path of violence, join the mainstream and abide by the Constitution of India.

- The group will also surrender its cadres with their weapons. The surrendered cadres will be given benefits under the **Surrender-cum-Rehabilitation Scheme, 2018** of the Ministry of Home Affairs.
- NLFT has been banned under the Unlawful Activities (Prevention) Act since 1997. Peace talks with NLFT were initiated in 2015.

Patriotic Song Watan

- Information and Broadcasting (I&B) Ministry has released a **patriotic song Watan** in New Delhi.
- The special song has been **produced by Doordarshan** and it pays tribute to New India.
- The song has been sung by famous Bollywood singer Javed Ali. It has been penned by lyricist Alok Shrivastav and music composed by Dushyant.
- It has been made free of copyright by Doordarshan and Ministry of I&B.
- Almost three decades ago, Doordarshan had promoted a **song called Mile Sur Mera Tumhara** with an accompanying video **propagating national integration and unity in diversity**.

Quick Reaction Surface-to-Air Missiles

- DRDO has test-fired a sophisticated **all-weather and all-terrain** Quick Reaction Surface-to-Air Missile (QRSAM) from a test range at Chandipur in Odisha.
- QRSAM uses solid-fuel propellant and has a **range of 25-30 km** and is equipped with electronic counter measures against jamming by aircraft radars.

Hong Kong Protest

Context

- Hong Kong is facing a major political crisis amid repeated street protests and mass demonstrations.
- What started as a movement against a controversial law has expanded into something much bigger.

Background

- Hong Kong has its own currency, political system and cultural identity but it belongs to China.
- The city was a **colony and territory of the United Kingdom** for more than 150 years, until the British **handed it back over to China in 1997**.
- At the time of handover, *in order to maintain Hong Kong's prosperity, and its legal system and culture*, the Chinese Communist leadership had agreed to a unique arrangement – **"One Country, Two Systems"**.
- Under the policy, Hong Kong maintains a de-facto constitution, known as the **Hong Kong Basic Law**.
- It guarantees freedoms that **are unavailable to Chinese mainlanders**, such as the **right to protest, the right to a free press and freedom of speech**.
- The Basic Law states that Hong Kong "*shall safeguard the rights and freedoms of the residents*" for *50 years after the handover*.
- But in recent years, Beijing has repeatedly reinterpreted the Basic Law and now it says it has **"complete jurisdiction" over Hong Kong**.

Trigger Point of Recent Protests

- It was Hong Kong Government's move to pass the "**Fugitive Offenders and Mutual Legal Assistance in Criminal Matters Legislation Bill**" (or the Extradition Bill).
- The bill, if passed, would have allowed Hong Kong citizens and foreigners accused of crimes to be extradited for a trial to the mainland China.
- This was seen as a deliberate attempt by the government to undermine the independence of Hong Kong's legal system.

Demand of Protestors

- The protest movement is leaderless, not everyone has the same goals in mind.
- But in general, **five main demands** have emerged: **withdraw the bill, for leader Carrie Lam to step down, an inquiry into police brutality, for those who have been arrested to be released, and greater democratic freedoms.**

Travel Restrictions on Saudi Women Lifted

- Saudi government has allowed **women over 21 to travel abroad** freely and **obtain passports without permission from their male guardian.**
- In addition to this, mothers who have primary custody of their children can now also apply for passports and provide travel permission for their child
- Women in the kingdom have **long required permission from their male guardians to marry, renew their passports or exit the country.**

FATF Asia-Pacific Group Blacklists Pakistan

Context:

- Global Financial Action Task Force's (FATF) regional sub-group APG (Asia-Pacific Group) has blacklisted Pakistan.
- It was blacklisted for non-compliance of anti-money laundering and combating terror financing efforts.
- The decision was taken in a review meeting in Canberra, Australia.

Tough Road Ahead

- The current blacklisting of Pakistan would make its case much more difficult during FAFT review to be held in October.
- Pakistan has to show compliance on the FATF action plan **in the next plenary session, which will do the final review in October.**

Background

- Pakistan was **grey listed by FATF in June 2018.** Countries with domestic laws that are weak to tackle money laundering and terrorism financing are included in the grey list.
- Pakistan had to comply with 40 point action plan formulated by the International Cooperation Review Group (ICRG) of the Asia Pacific Group.
- However, the August 2019 session of FATF APG found that Pakistan was **non-compliant on 32 of 40 compliance parameters.**

What Next?

- On September 5, the APG will meet again, to take forward the main 15-month process of Pakistan's FATF evaluation, which will present its recommendations for the FATF plenary session in Paris from October 18 to 23.
- The Paris plenary will decide whether to remove Pakistan from the greylist, continue the listing, or downgrade it to a blacklist of non-cooperative countries.
- It is being speculated that the **downgrade might not occur**, given that **any three countries in the FATF can veto it**, and *Pakistan is likely to secure the backing of China, Turkey and Malaysia.*

Financial Action Task Force (FATF):

- FATF is an inter-governmental body set up in 1989, with an aim 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.
- It was established during the G7 Summit in Paris.
- It has 35 member (Including India) jurisdictions and 2 regional organisations - the European Commission and the Gulf Co-operation Council. In addition, it has two observers and nine associate members, which are primarily regional organisations.
- There are also a number of observer organisations, which either have a related area of work that deals with enforcement like Europol, financial institutions like the International Monetary Fund (IMF) and UN bodies or groups linked with counter terrorism or money laundering.
- The FATF functions as an independent body guiding policy, with its president selected by the plenary for a one year period.
- China has been elected as vice-president of the global money laundering watchdog, the Financial Action Task Force (FATF). China was elected in the plenary session held at Paris in February 2018.

Iceland Holds Funeral for Lost Glacier

- Iceland had organized funeral for OKJOKULL glacier. Okjokull was **officially declared dead in 2014** at age of 700.
- This was country's 1st glacier lost to climate change.

China Designated as a "Currency Manipulator"

- The U.S. Treasury Department has designated **China as currency manipulator**.
- The formal designation — the **first since President Bill Clinton's administration in 1994** — came after China allowed its currency to breach a psychological level. Recently, the yuan fell to 7 against the dollar for the first time since 2008.

Impact Of This Step:

- Many analysts believe that the designation is **more a symbolic move than a substantive one**.
- This is due to the fact that the **US will have to engage with the IMF** to eliminate the unfair competitive advantage created by China's latest actions. However, the IMF had **just determined that China's currency was fairly valued**.

- However, it will increase **the pressure in the ongoing trade war** between these two countries.
- If Chinese are going to take further action on this front, then the **trade war will become a currency war** with wider ramifications on the world economy.

What is Currency Manipulation?

- It is a practice in which a country tries to manipulate the system, weakening its currencies to lift exports.
- It is being alleged that China held down the value of its currency in the past to speed its economic development.

How much control does China have over its currency?

- China manages its currency more actively, though the market still plays a role.
- Officials set a daily benchmark exchange rate for the renminbi, but allow traders to push the value up or down within a set range.
- Officials then use that trading activity to help determine the next day's exchange rate

'Nagar Kirtan' Arrives from Pak to India

- For the first time after Independence, the 'Nagar Kirtan' arrived India from Pakistan to mark the **550th birth anniversary celebrations of the Sikhism founder, Guru Nanak Dev.**
- The Nagar Kirtan, **carrying Guru Granth Sahib**, was taken out from **Nankana Sahib district of Pakistan's Punjab province.**
- It was a religious procession which culminated at **Sultanpur Lodhi in Kapurthala district** of Punjab in India after passing through various cities and towns.
- It was organized by Shiromani Gurdwara Prabandhak Committee (SGPC), an apex religious body of the Sikhs with support from both Indian and Pakistani authorities.

Guru Nanak Dev

- Founder and 1st Guru of Sikhism
- Born in 1469, Talwandi (now known as Nankana Sahib) in Pakistan

India Suspends Thar Link Express

- India has cancelled operations of **Thar Link Express** that connects **Jodhpur in India to Karachi in Pakistan.**
- This step was taken after **Pakistan downgraded diplomatic ties** with India after the government revoked Jammu and Kashmir's special status and divided the state into two Union territories.
- The **weekly train** departs from **Jodhpur's Bhagat Ki Kothi railway station** on **Saturdays** and reach **Munabao, the last station on the Indian** side of the border, early morning.
- At the zero point on the international border with Pakistan, passengers change trains. And a train from Pakistan then takes them to Karachi.

State Visit of Indian President to Benin, The Gambia and Guinea

Context

- Indian President Ram Nath Kovind, paid a State Visit to **Benin, The Gambia and Guinea** from 28 July to 3 August, 2019.

- This visit was the first ever visit of the head of the state of India to all the three countries.

A. Benin

- Indian President arrived in Cotonou, Benin on 28 July.
- He met Mr. Patrice TALON, President of the Republic of Benin and discussed matters related to bilateral cooperation, India-Africa partnership and global issues.
- India announced a **soft Line of Credit of USD 100 million** to Benin for its national priority projects.
- President KOVIND also announced a **special ITEC course** in English proficiency and a **special Professional Course** for Foreign Diplomats from Benin.
- India also announced the **inclusion of Benin in India's e-visa regime**.
- Both parties signed the following MoUs/ Agreements:
 - Cultural Exchange Programme between India and Benin for 2019-23,
 - MoU on Telemedicine and Tele-education (e-VidhyaBharati/e-ArogyaBharati Network Project),
 - Agreement on Mutual Exemption from Visa requirement for holders of Diplomatic, Official/Service Passports, and
 - MoU on cooperation in the field of Export Credit and Investment Insurance wherein **India will help set up an Export Credit Agency in Benin**
- The two leaders also agreed that **the second session of the India-Benin Joint Commission**, at Ministerial level, will be held in New Delhi on a date to be agreed upon by the two parties.
- In a special honour extended to India by Benin, President addressed the National Assembly in Porto Novo.



India – Benin: Few points

- India's transformative growth and Benin's natural strengths complement each other.
- In the last ten years, **bilateral trade between these two countries has risen** from US\$ 350 million to US\$ 803 million in 2018-19. With this, India has become **Benin's largest trading partner**.
- India's Duty Free Tariff Preference Scheme has helped Benin's exports grow by over 68% last year to reach US\$ 376 million.
- Few Development Projects –
 - Project to supply safe drinking water to 103 villages in Benin;
 - Signing of **Country Agreement for Benin to avail India's tele-education programme - e-Vidyabharati**, and tele-medicine initiative - e-Arogyabharati.
 - Under these programmes, India is extending free tele-education courses to 15,000 students and tele-medicine courses to 1000 doctors and paramedics in Africa.
 - Indian pharma Industry and hospitals are providing affordable healthcare solutions to people in Benin.

B. The Gambia

- Indian President held delegation talks with President of The Gambia, Adama Barrow in capital Banjul on 31 July.
- As a special gesture, the National Assembly, which was in recess at that time, held a special session for the address of President on the same day. **The National Assembly Building Complex in Banjul** is one of the **prominent projects in West Africa built under Line of Credit extended by India.**
- A Memorandum of Understanding on Cooperation in the field of Traditional Systems of Medicine and Homeopathy was signed.
- India is keen to implement a grant based solar project in select villages in The Gambia.
- India decided to extend **assistance of half-a-million US dollars** in support of skill development and cottage industry project.

C. Guinea

- At the invitation of Alpha Conde, President of the Republic of Guinea, President of India paid a State Visit to Conakry, Guinea from August 1-3, 2019.
- The visit was undertaken to strengthen friendship and bilateral cooperation between the two countries.
- Both leaders agreed to the **holding of the first session of the India-Guinea Joint Commission**, at Ministerial level, at an early date.
- India had already extended a **concessional line of credit of US \$ 35 million** to Guinea for construction of two regional hospitals. During this visit, a **new Line of Credit of US\$ 170 million** for Water Supply Project of Metropolitan city of Conakry was announced.
- A concessional line of credit of US \$ 35 million was already extended by India to Guinea for construction of two regional hospitals. During this visit, Guinean side **solicited Gol's concessional line of credit for construction of two more hospitals.** The Indian side agreed to examine the proposal.
- President Alpha Conde conveyed support for **India's candidacy as non-permanent member of the UN Security Council for the term 2021 – 2022.**
- During the visit, the following three MoUs were signed:
 - MoU on Cooperation in the Field of Traditional System of Medicine and Homeopathy.
 - MoU for Participation in the e-VBAB Network Project [Technology Upgradation of Pan Africa e-Network Project].
 - MoU on Cooperation in the Field of Renewable Energy.

In March 2018, India announced implementation of two solar projects in Guinea. These projects are to be funded by Gol's Line of Credit. These projects are:

- Solar Project for Supply of Electricity and Drinking Water for 7 Public Universities
- Solar Project for Electrification and Refrigeration in 200 Health Infrastructures in Guinea

Visit of Vice President to Lithuania, Latvia and Estonia

- Vice President of India, Shri M. Venkaiah Naidu visited Lithuania, Latvia and Estonia from 17th-21st August 2019.

- This visit was the first ever high level visit to the three Baltic countries.
- India and Baltic countries have historical connect and common linguistic roots. Lithuanian is the **oldest Indo-European language** and it has **strong links with Sanskrit**.
- The cutting edge technology and innovation ecosystems of the Baltic countries complement India's huge market and appetite for these technologies.

Visit of Prime Minister to France, United Arab Emirates and Bahrain

Indian Prime Minister visited France, UAE and Bahrain from 22nd – 26th August 2019.

A. France

- Indian PM paid an Official Visit to France on 22-23 August 2019. The Indian PM also visited **Biarritz, France** at the invitation of President Macron for the **2019 G-7 Summit as 'Biarritz Partner'** from 25-26 August 2019.
- India and France are **Strategic Partners since 1998** and share a comprehensive, dynamic and multi-faceted relationship.
- The two sides enjoy strong cooperation in the fields of defence, maritime security, space, cyber, counter-terrorism, and civil nuclear energy along with robust trade and investment relations.
- The **bilateral visit to France** and the **invitation to G7 Summit** are in keeping with the tradition of strong and close partnership and high level political contacts between India and France.

Key Highlights:

- List of MoUs/Agreement signed:
 - Administrative Arrangement for Cooperation in Skill Development and Vocational Training
 - Memorandum of Agreement between National Institute of Solar Energy(NISE), Ministry of New and Renewable Energy, GoI and The French Alternative Energies and Atomic Energy Commission (CEA)
 - Cooperation Agreement between Centre for Development of Advanced Computing (C-DAC) and ATOS – To develop **cooperation in the fields of quantum computing, Artificial Intelligence and exascale supercomputing**
 - Implementing Arrangement between ISRO & CNES France for Joint Maritime Domain Awareness
- Both leaders welcomed the decision to **train medical support personnel for Indian astronauts**, who will be part of India's manned space mission by 2022.
- They appreciated the launch of a **Space Climate Observatory** that further enhances Indo-French cooperation on combating climate change, besides **TRISHNA joint mission** and **accommodating Argos in Oceansat 3**.
- In digital space, the two leaders have **adopted a cybersecurity and digital technology road map**.
- France and India agreed to **significantly enhance people-to-people contacts** and cultural exchanges. It was agreed to set up a regular dialogue on consular matters, which will facilitate exchange and mobility.
- Education is an important area of cooperation. The **student exchange target** of 10,000 set in 2018 will be fulfilled this year itself and therefore both sides decided to enhance the target to 20,000 students by 2025.

- It was decided that India will be the **Country of Honour** for the **2020 edition of Livre Paris, the Paris international book fair**.
- The **National Gallery of Modern Art** in Delhi will hold the **first exhibition in India of French artist Gérard Garouste** in January 2020; and the Musée national d'art moderne (Centre Georges Pompidou) will hold a dedicated exhibition of the works of Indian artist Sayed Haider Raza in 2021.
- India will **organise Namasté France**, in 2021-2022.
- The two countries will **adopt a Plan of Action by the end of 2019** aimed at enhancing co-produced projects, distribution, and training in the fields of cinema, video games and virtual reality.

Indo-French Roadmap on Cybersecurity and Digital Technology

- **Vision** – Promote digital technologies that empowers citizens, reduces inequalities, and promotes sustainable development.
- **International security and diplomatic effort** – It recognized the shared responsibility of various stakeholders to improve trust, security and stability in cyberspace. For this it favoured the strengthening of the multi-stakeholder approach.
- **Governance, sovereignty, and technological regulation** – The document talked about guaranteeing the **sovereignty of States over the Digital Infrastructure** located within the territory of the States as well as the protection of online human rights and freedom of expression.
- **Cooperation in the field of cybersecurity** - France and India recognise the importance of the pursuit and the deepening of the cyber dialogue whose third edition was held in Paris on June 20th, 2019.
- They also recognize the need to address issue arising from the proliferation of malicious tools and practices in cyberspace, **notably by actively participating in relevant discussions under the Wassenaar Arrangement**.
- They highlighted the importance of a close cooperation between all countries to address cross-cutting threats to cybersecurity, particularly in Economic Information Infrastructure impacting national security.
- **Cooperation in the area of fight against cybercrime** – Both the countries plan to strengthen their cooperation in this area, with a particular view to facilitating sharing of information, evidence collection and the identification of offenders.
- They also plan to discuss the prevention of cybercrime with Service Providers, Social Media Companies to seek information sharing arrangements.
- **Cooperation on digital governance** – The two countries recognize the need to develop the **necessary framework to ensure that technologies remain protective of public goods, data sovereignty and fundamental freedoms**.
- **Regulation of artificial intelligence** – These two countries affirmed their commitment to working in this direction in the various multilateral fora (G7, G20, UN) and participating in the **International Panel on Artificial Intelligence (IPAI)**.
- **Fight against terrorist, violent extremist and hateful content online** – In this regard, the document pointed towards the responsibility and accountability of Social Media platforms in the moderation of such activities. They also extended their support for the principles set out in the **Christchurch Call**.

- **Prevention of manipulation of information** – The framework calls for an international exchange on this threat, particularly on the development of a framework to regulate social media platform.
- **Protection of personal information** – They wish to develop an innovative Digital ecosystem that is secure and respectful of users' data protection.
- In the context of the implementation of the EU General Data Protection Regulation (GDPR) and India's objective to put in place adequate regulation in this area, both countries recognise that the convergence of data protection frameworks of Europe and India would facilitate the flow of information and data.
- **Reduction of digital divide** – by promoting digital inclusion, to bridge digital divide and promote digital literacy, notably by exchanging information on their national policies and good practices in this regard.
- **Indo-French digital partnership** - The Ministry of the Economy and Finance of France and the Ministry of Electronics and IT (MeitY) of India will be nodal points to coordinate.
- **Research, training and education** – Both sides agreed to promote research in **Supercomputing, quantum computing as well as in exascale calculation.** In this context, the launch of an **Indo-French pilot project** dedicated to using high performance computing **for water flow simulation in the Mahanadi river basin** was appreciated.
- **Artificial intelligence initiative** - France and India wish to develop an Indo-French research and innovation programme dedicated to artificial intelligence.
- A consortium, bringing together academic institutions, ministries and reference companies, will mobilise all the potential in artificial intelligence of France and India.
- As part of this consortium, **both parties will work towards mobilising € 2 million** annually to fund basic and applied research projects, scholarships and awareness-raising measures.
- This **consortium will meet annually** as part of the Knowledge Summit, with **its first meeting to be held in Lyon in October 2019.**

B. United Arab Emirates

- The Indian PM visited to United Arab Emirates (UAE) on 23-24 August 2019.
- During the visit, PM Modi received the **Order of Zayed**, the highest civil decoration of the UAE.
- This medal was conferred to Indian PM **earlier in April 2019** in recognition of the *distinguished leadership of PM Modi for giving a big boost to bilateral relations between the two countries.*
- The award in the **name of Sheikh Zayed bin Sultan Al Nahyan**, the founding father of the UAE. It acquires special significance as it was awarded in the **year of the birth centenary of Sheikh Zayed.**
- Indian PM **launched the RuPay card.** This was the **first time** that the RuPay card was launched in **the Middle East.**
- Both leaders also released a postage stamp on Mahatma Gandhi. A series of events have been held in UAE to commemorate the 150th anniversary of Mahatma Gandhi.

C. Bahrain

- Indian Prime Minister paid a State Visit to the Kingdom of Bahrain from 24-25 August 2019. This was the **first ever Prime Ministerial visit** from India to Bahrain.

Key Highlights:

- Hamad bin Isa Al Khalifa, King of the Kingdom of Bahrain, bestowed **Bahrain Order – First Class** on Indian PM in *recognition of his efforts to strengthen bilateral relations with the Kingdom of Bahrain.*
- The following MoUs were signed during the visit:
 - Cultural Exchange Programme between India and Bahrain
 - Statement of Intent on the collaboration between ISRO and NSSA in the area of Space Technology
 - Statement of Intent on the collaboration of Bahrain with ISA
 - MoU between BENEFIT and NPCI for Launch of 'RuPay Card' in Bahrain
- The two sides welcomed the 'Security Dialogue' meetings at regular intervals, at the level of Deputy National Security Advisors.
- India expressed interest in the newly discovered tight **oil and shale gas reserves in Khaleej al Bahrain basin** and the OVL's signing of an expression of interest with BAPCO.
- Both leaders **welcomed greater investment** into each other's country and the **earmarking of funds of \$500 million by Invest Bahrain.**
- Indian PM visited the **Shrinath Ji Temple** to launch its renovation. The renovation of the temple was launched by the Prime Minister in **its 200th year.**
- The Temple was established in the **19th century under the Royal patronage** and it holds the distinction of being the first and the oldest temple in the Gulf region.

India – Bahrain: In Short

Relationship rooted in ancient trade and cultural links and people to people contacts and underpinned by regular exchange of high level visits.

India-Bahrain **bilateral trade** has been on the rise for the last few years, reaching about **US\$ 1.3 billion in 2018-19.**

Further about **3,50,000 Indian nationals**, the largest expatriate community in Bahrain has been contributing to the development of

Visit of External Affairs Minister to China

- EAM travelled to China from 11-13 August 2019. This was his first visit to China after assuming office.
- During the visit, he co-chaired the **second meeting of the India-China High Level Mechanism on Cultural and People-to-People Exchanges (HLM).**
- The decision to establish the HLM was taken during the Wuhan Informal Summit in April 2018. The inaugural HLM meeting was held on December 21, 2018 in New Delhi.
- List of MoUs signed:
 - Plan of Action to Implement the Protocol on Cooperation in Bilateral Relations, 2020
 - MoU on Sports Cooperation
 - Programme of Cultural Exchange
 - MoU on cooperation in Traditional Medicine
 - MoU Between Hubei Provincial Museum and the National Museum, New Delhi

EAM also addressed **the 4th meeting of the India-C**

Biometric Seafarer Identity Document

India has become the first country in the world to issue Biometric Seafarer Identity Document (BSID), capturing the facial bio-metric data of seafarers.

Background

- The shipping sector is seeing major developments in the areas of coastal shipping, inland waterways and other maritime activities.
- This is led to generation of employment in the sector, which is evident in the growing number of Indian seafarers in the international shipping industry.
- The total number of Indian seafarers who were employed on Indian or foreign flag vessels increased from 154349 in 2017 to 208799 this year, showing an unprecedented increase of 35%.

Details of BSID

- BSID introduces modern security features like an embedded biometric chip, as well as optical security features such as micro prints/micro texts and Unique Guilloche pattern.
- The issuance of SID involves the collection of biometric and demographic details of the seafarers, their verification and then issuance of the card to them.
- The new card is in confirmation of the Convention No. 185 of the International Labour Organisation on BSID which India had ratified in October 2015.
- A record of each SID issued will be maintained in a national database and its related information will be internationally accessible.
- Every Indian seafarer who possesses a valid Continuous Discharge Certificate issued by the Govt. of India will be eligible for issue of a BSID.

Benefits

- The technology is a marked improvement over the two finger or iris based bio-metric data, with modern security features.
- It will make the identification of the SID holder more reliable and efficient, while protecting their dignity and privacy.
- It will give a fool proof identification to the seafarers which will facilitate their movement, provide ease of getting jobs and help in identifying them from any location in the world.

Gravitational Lensing

- Using NASA's James Webb Space Telescope as a sort of time machine, researchers plan to investigate how new stars are born. For this, they will take the help of a natural phenomenon called "gravitational lensing".
- The phenomenon 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.
- Normal lenses such as the ones in a magnifying glass or a pair of spectacles work by bending light rays that pass through them in a process known as refraction, in order to focus the light somewhere (such as in the eye).
- Gravitational lensing works in an analogous way and is an effect of Einstein's theory of general relativity – simply put, **mass bends light**.

- Gravitational lensing is useful to cosmologists because it is directly sensitive to the amount and distribution of dark matter.
- Lensing can therefore help astronomers work out exactly how much dark matter is there in the Universe as a whole and also how it is distributed.
- Lensing has also been used to help verify the existence of dark matter itself.

James Webb Space Telescope

- The James Webb Space Telescope (JWST or "Webb") is a space telescope that is planned to be the successor to the Hubble Space Telescope and will launch in 2021.
- It will provide greatly improved resolution and sensitivity over the Hubble, and will enable a broad range of investigations across the fields of astronomy and cosmology, including observing some of the most distant events and objects in the universe, such as the formation of the first galaxies.
- Other goals include understanding the formation of stars and planets, and direct imaging of exoplanets and novae.

Dindigul Lock and Kandangi Saree

- Dindigul lock and the Kandangi saree were recently given the GI tag by the Geographical Indications Registry in Chennai.
- Both these products were losing their sheen in the market, and the GI tag would help them get some recognition.
- The famous Dindigul locks are known throughout the world for their superior quality and durability, so much so that even the city is called Lock City. The abundance of iron in this region is the reason for the growth of the lock-making industry.
- Though machine-made locks are easily available, government institutions like prisons, godowns, hospitals and even temples use the older pattern locks.
- But over the last few years, this industry has been slowly dying due to competition from Aligarh and Rajapalayam. Marketing these locks has also been a growing challenge.
- The Kandangi saree, manufactured in Karaikudi taluk in Sivaganga district, is facing challenges similar to Dindigul lock's.
- The market is flooded with sarees that are woven in other parts of the State and look like the Kandangi saree.
- The original Kandangi saree is manually made using a winding machine, loom, shuttle and bobbin. It is a team effort of the families who live in the town of Karaikudi and it forms part of their livelihood.
- These sarees are characterised by the large contrast borders, and some of them are known to have borders covering as much as two-thirds of the saree.

Hyperloop MoU

- The Maharashtra government has entered into a tie-up with Virgin Hyperloop One for exploring the possibility of connecting Mumbai and Pune with hyperloop transportation system.
- The company has signed a memorandum of understanding (MoU) with the Pune Metropolitan Region Development Authority (PMRDA) for identifying potential routes and for analysing the high-level economic impact and technical viability of hyperloop transportation solutions in India.

- The preliminary study is intended to analyse the applicability and benefits of hyperloop technology, identify high priority routes within the State based on demand analysis and socio-economic benefits.
- With speeds two to three times faster than high-speed rail, and being fully autonomous, hyperloop technology can deliver a 300-km commute in around 20 minutes.
- By reducing travel time a hyperloop route will help intensify the connectivity between the metropolitan regions of Pune and Mumbai, transforming the two cities into India's first and largest megapolis

Hyperloop

- Hyperloop is a new form of ground transport currently in development by a number of companies, It could see passengers travelling at very high speeds in a floating pod which races along inside giant low-pressure tubes, either above or below ground.
- There are two big differences between Hyperloop and traditional rail. The pods carrying passengers travel through tubes or tunnels from which most of the air has been removed to reduce friction, which allows the pod to move at high speeds.
- Rather than using wheels like a train or car, the pods are designed to float on air skis, using the same basic idea as an air hockey table, or use magnetic levitation to reduce friction.

Benefits

- Hyperloop will be faster than train or car travel, and less polluting than air travel.
- It has also been claimed that it's also quicker and cheaper to build than traditional high-speed rail.
- It could therefore be used to take the pressure off gridlocked roads, making travel between cities easier, and potentially unlocking major economic benefits as a result.

Challenges

- Constructing a tube hundreds of kilometers long would be an engineering marvel in itself. However, introducing a tube hundreds of kilometers long that operates at a near perfect vacuum which can support the force of capsule weighing thousands of kilograms as it travels hundreds of kilometers an hour is a challenge of different level altogether.
- Small scale experiments reveal the fundamentals of the idea are sound. Although, in the real world, there are too many factors that cannot be accounted for with a small scale design. In the real world, there are tens of thousands of kilograms of atmospheric pressure which threatens to crush any vacuum chamber.
- There is also the problem with thermal expansion which threatens to buckle any large structure without proper thermal expansion capabilities.
- A small compromise in the structure of the tube would result in a catastrophic implosion. If the tube became punctured, external air would tear into the tube, shredding it apart as it violently rushes in to fill the void.
- Further, the capsule must be strong enough to support the atmospheric pressure inside the cabin, yet must remain light enough as to not destroy or compromise the tube as it travels down the track.

Coprolite

- Scientists have found the oldest parasite DNA ever recorded. A team of scientists from Argentina's National Council of Scientific and Technical Research studied a prehistoric puma's coprolite taken from a rock-shelter in Argentina.

- Coprolites are fossilised faeces belonging to animals that lived millions of years ago. Using ancient mitochondrial DNA analysis, they were able to confirm that the coprolite came out of a puma.
- Scientists can analyse and study their shape and size and depending on the location they were found in, they can figure out the animal from which they came as well as uncover what those animals ate
- For instance, if there are bone fragments in the faeces, it tells scientists that the animal might have been a carnivore. Tooth marks can reveal how the animal ate.
- Parasite DNA has been found in coprolites before, but this is the oldest since the evidence found earlier dated back to a few thousand years ago only.

Tardigrade

- The Israeli spacecraft Beresheet attempted to land on the Moon, but crashed on the surface. It was carrying a number of items — including thousands of specimens of a living organism called tardigrade.
- The tardigrade, also known as water bear, is among the toughest and most resilient creatures on Earth.
- The tardigrade can only be seen under a microscope. Half a millimetre long, it is essentially a water-dweller but also inhabits land.
- It can endure extreme hot and cold temperature levels. If all other life were to be wiped out by a cataclysmic event — a large asteroid impact, a supernova or a gamma-ray bursts — the tardigrade would be the likeliest to survive.
- A tardigrade typically eats fluids, using its claws and mouth to tear open plant and animal cells, so that it can suck nutrients out of them. It is also known to feast on bacteria and, in some cases, to kill and eat other tardigrades.
- Although they are known for their resilience, they are destructible too. If a human being swallows a tardigrade with her food, her stomach acid will cause the flesh of the tardigrade to disintegrate.

Tardigrade on Moon

- Although the tardigrades on the spacecraft were dehydrated, the organism is known to “come back to life” on rehydration. In fact, they themselves expel water from their bodies and set off a mechanism to protect their cells, and can still revive if placed in water later.
- Although there is ice, there is no evidence of liquid water on the Moon. Without liquid water, it is possible that the tardigrades will remain in their current state, unless future astronauts find them and revive them in water.
- On the Moon, should they find liquid water and revive, the tardigrades might not last very long in the absence of food and air.

India’s No-First-Use Nuclear Doctrine

- Union Defence Minister Rajnath Singh, while speaking at an event, said that India may see a major shift in its **policy of using nuclear weapons**.
- So far, India has strictly adhered to No First Use Policy. However, his statement has given an indication that **the future use may depend on the circumstance**.

India’s Nuclear Doctrine

- India had made its Nuclear Doctrine in 1999. The basic principle of India's nuclear doctrine is "**No First Use**".
- According to this policy, nuclear weapons will only be used in retaliation against a nuclear attack on Indian Territory or on Indian forces anywhere.
- India needs to build and maintain a **Credible Minimum Deterrent**. This includes:
 - Sufficient and survivable nuclear forces to inflict unacceptable damage to the enemy.
 - Nuclear Forces must be operationally prepared at all times.
 - Effective Intelligence and Early Warning Capabilities.
 - Communication of Deterrence Capability to the enemy.
- The right to take nuclear action against the enemy **will only be taken by the elected representatives of the people**, i.e. the political leadership of the country, although the cooperation of the Nuclear Command Authority will be necessary.

Nuclear Command Structure:

- The Nuclear Command Authority (NCA) comprises of an Executive Council and a Political Council.
- The Chairman of the Political Council is the Prime Minister. It is the sole body which can authorise the use of nuclear weapons.
- The Executive Council is headed by the National Security Advisor (NSA).
- The Executive Council provides the inputs for decision taken by the Nuclear Command Authority (NCA) and executes the instructions given to it by the Political Council.

- The bureaucracy of India is not authorised to take decision of the nuclear attack on the enemy.
- Nuclear weapons will **not be used against non-nuclear state**.
- India will continue to support the global initiative to create a **nuclear free world** and will push forward the idea of **discrimination free nuclear disarmament**.

Relevance of a Nuclear Doctrine:

- It states **how a nuclear weapon state** would **employ its nuclear weapons** both during peace and war.
- It helps **states to establish deterrence** vis-à-vis its adversary during peace and once deterrence fails, **guides the state's response during war**.

Why NFU (no-first-use) Policy came under scanner?

- It puts India in a disadvantageous position by restricting India's options.
- Pakistan's **low nuclear thresholds** and its policy of using its nuclear umbrella to foment sub-conventional conflict in India is the principle reason behind the debate around India's 'no first use' policy.
- NFU policy has also come under the attack due to **India's other nuclear adversary: China**. There is an **asymmetry of conventional military power** between the two countries, some analysts believe that, by revoking NFU pledge, India can leverage its nuclear capability.

Revoking the NFU would have its own costs

- It would tarnish India's image as a responsible nuclear power.
- This nuclear diplomacy helped India to get accepted in the global nuclear order. It is now a **member of most of the technology denial regimes** such as the Missile Technology Control regime and the Wassenaar Arrangement.

- Nuclear preemption is a costly policy as it requires **massive investment not only in weapons and delivery systems** but also **intelligence, surveillance and reconnaissance (ISR) infrastructure**.

New Panel to Review Defence Procurement Procedure

The Defence Ministry has approved setting up of a Committee to review the Defence Procurement Procedure (DPP).

Key Highlight:

- The committee has been formed under the Chairmanship of Director General (Acquisition).
- The aim of this committee is to speed up procurement and incorporate suitable changes in order to strengthen the Centre's 'Make in India' initiative.
- It will review the **Defence Procurement Procedure (DPP) 2016** and **Defence Procurement Manual (DPM) 2009**.

India's Defence Acquisition Framework:

- India's current acquisition framework consists, broadly, of a **two-tiered structure**, comprising the **Defence Acquisition Council (DAC) and its subordinate bodies** — the Defence Procurement Board, the Defence Research and Development Board and the Defence Production Board.
- This structure was created in 2001 in pursuance of the recommendations of the Group of Ministers (GoM), which was set up to review the "national security system in its entirety".
- The acquisition procedures, which are captured in a **document known as Defence Procurement Procedures (DPP)**.

Problems with Defence Acquisition Framework

- **Inability to ensure time-bound** procurement which creates import-centric pressures, corruption and controversies.
- **Dispersed centres of responsibility and lack of professionalism** in acquisition.
- There are too many independent actors responsible for various acquisition functions that include drafting of technical features, issuance of tender document etc.
- These actors are **neither trained** nor are they given adequate time to build institutional capacity.
- Another major problem of India's defence acquisition framework has been **its lip service to indigenisation/self-reliance**.
- The apathy towards domestic industry has been institutionalised by keeping the **acquisition and production functions under two distinct power centres** in the MoD.
- DG (Acquisition) is responsible for acquisition and Secretary (Defence Production) is responsible for indigenous arms production.
- Since the basic objectives of these two high offices are not necessarily driven by indigenous-centric procurement, the focus on indigenisation has become subservient to acquisition.

Reorganisation of Army HQ

Context:

- The Defence Ministry has approved reform of Army headquarters.

- This includes relocation of 206 officers from the Army headquarters, **setting up of a separate vigilance cell** and forming an **umbrella organisation to focus on human rights** issues.

Key Highlights:

- The separate vigilance cell will be **set up under the Army Chief** with tri-services representation. Presently, the vigilance cell operates through multiple agencies and no single point interface is available.
- The vigilance cell will have **three Colonel-level officers**, one each from Army, Indian Air Force and Navy.
- An **umbrella organisation directly under the Vice Chief of the Army** will be looking into human rights issues. This special human rights section **headed by ADG (Major General rank officer)**.
- To enhance transparency and ensure the best of investigative expertise is available to the newly created human right section, an SSP or an SP-rank police officer will be on deputation.
- The unit will be **"the nodal point to examine"** any reports of human rights violations.
- The reform roadmap was finalized last year based on 12 independent studies.

Child Care Leave to Single Male Service Personnel

- Ministry of Defence has approved **extension of benefits of Child Care Leave (CCL) to single male service personnel** and certain relaxations of CCL provisions in case of woman officers of defence forces.
- These steps are in line with a recent DoPT order extending similar benefits of CCL to civilian employees.
- Presently, CCL is being granted to woman officers in defence forces.
- Now, single male service personnel and woman officers of defence forces will also be able to avail CCL in respect of child with 40 percent disability without any restriction of age limit of the child.
- Further, the minimum period of CCL that can be availed in each spell has been reduced to 05 days from the earlier limit of 15 days.

12th India Security Summit

- Theme - **"Towards New National Cyber Security Strategy"**
- Organised at – New Delhi
- Organized by - Associated Chambers of Commerce and Industry of India (ASSOCHAM)
- Several issues such as *protection of critical national infrastructure, emerging cyber threats: incidents, challenges and response* were discussed at the summit.

All CAPF Personnel To Retire At 60 Years

- The Union Home Ministry order has announced that all Central Armed Police Forces (CAPFs) personnel will now retire at a uniform age of 60 years, instead of 57 years for certain rank of officials.
- Earlier, Delhi High Court had called the current policy of different age of superannuation in these forces as **"discriminatory and unconstitutional"** as it created **two classes in the uniformed forces**.

- According to the existing policy, all personnel in the **Central Industrial Security Force and the Assam Rifles retire at the age of 60.**
- However, in **CRPF, BSF, ITBP and SSB**, the personnel from the ranks of constable to commandant retire at the age of 57, while those above them superannuate at the age of 60.

Meeting Held Between Indian, Sri Lankan Coast Guards

- A high level meeting was held at Coast Guard Headquarters in New Delhi.
- It took place under the provisions of the **MoU signed between the two sides for the establishment of a collaborative relationship to combat transnational illegal activities at sea and develop regional co-operation.**
- Recent Success – This MoU played an important role in the **apprehension of two fishing boats** by Sri Lanka involved in drug trafficking based on the information exchange undertaken by Indian Coast Guard.

NISHTHA

- The **National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA)** was recently launched by the Department of School Education and Literacy, Ministry of HRD.
- It is an initiative to build capacities of teachers and school principals and improve learning outcomes at the elementary level under the Centrally Sponsored Scheme Samagra Shiksha during 2019-20.
- More than 42 lakh teachers and principals of primary and elementary-age government schools across the country will undergo a five-day training programme over the next few months.
- The aim of this training is to motivate and equip teachers to encourage and foster critical thinking in students, handle diverse situations and act as first level counsellors.

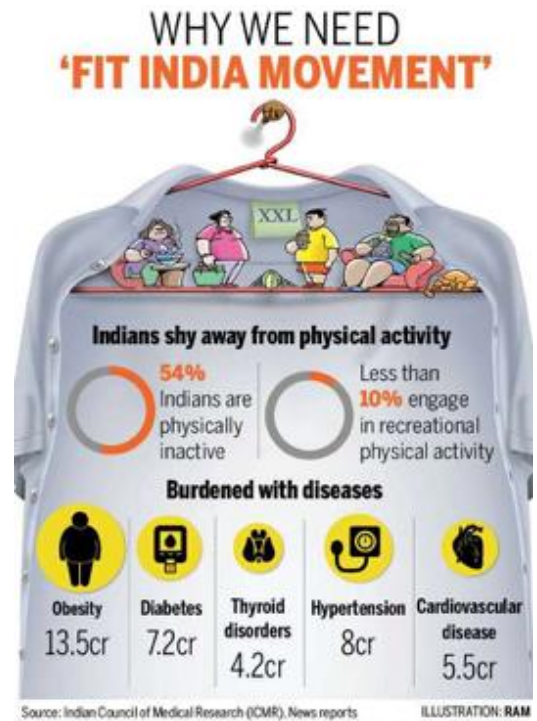
Expected Outcomes

- Integration of ICT in teaching learning and assessment and improvement in learning outcomes of the students.
- Teachers becoming responsive to the social, emotional and psychological needs of students as first level counselors.
- Teachers trained to use Art as pedagogy leading to increased creativity and innovation among students.
- Teachers to adopt Activity Based Learning and move away from rote learning to competency based learning.
- Developing stress free School Based Assessment focused on development of learning competencies.
- Transformation of the Heads of Schools into providing academic and administrative leadership for the schools for fostering new initiatives.
- Creation of a healthy and safe school environment.

Fit India Movement

- The Prime Minister recently launched the 'Fit India' Movement' on the birth anniversary of Major Dhyani Chand, which is also celebrated as the National Sports Day.

- A few decades back, a normal person would be quite fit in general. But with technology and change in the nature of work, physical activity has reduced significantly in people's lives and an indifference has been growing towards fitness.
- There is a surge in diabetes and hypertension cases and other lifestyle diseases, which is a worrying trend. To address the same, countries like China, Australia and Germany have already started campaigns to make their countries fitter.
- With declining fitness levels, the initiative is the need of the hour and intends to take the country towards a healthier future.
- A committee, headed by the Sports Minister and comprising government officials, members of Indian Olympic Association (IOA), national sports federations, private bodies and fitness promoters, has been formed to take the movement forward.



Child Well-Being Index

- World Vision India and research institute IFMR LEAD have released a report on child well-being in India. The report is an attempt to look at how India fairs on child well-being using a **composite child well-being index**.
- The report is important considering that **40 per cent** of the country's population is made of children that falls in the age group of 1 and 18.

Index

- The report highlights the **multi-dimensional approach** towards measuring child well-being by going beyond mere income poverty.
- One of the primary objective of the index is to garner attention to the under-researched theme of child well-being in India and inspire further academic and policy conversations on related issues.
- A total of **24 indicators** that provide insights on health, nutrition, education, sanitation and child protection, have been used to create the score.
- The 24 indicators are divided into three categories - **Healthy individual development, positive relationships and protective contexts**.
- Some of the key indicators that need to be studied in the future include mobile usage, digital access, financial literacy, mental health and quality of relationships between parents/peers and children.

Findings

- Among states, **Kerala (0.76), Tamil Nadu (0.67) and Himachal Pradesh (0.67)** are the top three states in the index.
- Kerala bagged the top spot with the state providing a **strong start to its children** as more children were completing school and were able to have access to quality education.
- Kerala also performed better in addressing malnutrition and ensuring child survival and access to a healthy environment in terms of clean drinking water and sanitation facilities.

- **Meghalaya (0.53), Jharkhand (0.50) and Madhya Pradesh (0.44)** featured at the bottom of the index.
- In Jharkhand, more children were stunted and underweight, access to institutional delivery was low and a higher number of children were dying before they turned five.
- **Nutrition and basic education** are other aspects in which Jharkhand performed lowest among all Indian states.
- Low performance in the areas of child survival, nutrition, crimes against children and juvenile crimes, brought the scores down for Madhya Pradesh.
- Further, the number of **children living in poor families** is also quite huge in M.P. which plays its part in the low scores.
- Among the Union Territories, **Puducherry leads the way**, with a score of 0.77 and **Dadra and Nagar Haveli is at the bottom**, with a score of 0.52.

Way Ahead

- Children have the potential to transform the country, but if neglected, they will further worsen the burden of poverty and inequality. Hence, it is imperative that all stakeholders prioritise and invest in the well-being of children.
- The report calls for States to look at their respective scores and to prepare for **priority areas of intervention with specific plans of action**.
- It is important to trigger policy level changes, seek better budgetary allocations and initiate discussions with all stakeholders to enhance the quality of life of all children in the country.
- This should be supported with a **peoples' movement** as governments' work need the support of community and civil society to build the momentum.

World Vision

- **World Vision India** is an interdependent office of World Vision International, a child-focused Christian relief and development agency operating in India.
- **World Vision International** is an Evangelical Christian **humanitarian aid, development, and advocacy organization** and is active in nearly 100 countries.
- It was found in 1950 by Robert Pierce as a service organization to meet the emergency needs of missionaries and in 1975 development work was added to World Vision's objectives.

IFMR LEAD

- It is a **non-profit research organization** based in India conducting high-quality scalable action research and outreach in development economics and finance.
- It is dedicated to leverage evidence-based research and **further sustainable development** in India and other low-to-middle income countries.
- The **focus areas** of the organisation are financial inclusion, public finance, SMEs & Entrepreneurship, livelihoods, health, governance and climate change.

Pradhan Mantri Ujjwala Yojana

- A survey was recently conducted in 127 villages across four States — Bihar, M.P., Rajasthan, and Uttar Pradesh to ascertain the impact of PM Ujjwala Yojana.

- 92% of the respondents in the survey said food cooked on a chulha tastes better than food cooked on gas, and more than 86% believed that food cooked on a chulha is healthier.
- Around 22% said that cooking food on a chulha is better for the health of the cook than cooking food on gas.
- Even among those who believed that cooking on a chulha harms health, the harms most often invoked were not respiratory, but to the eyes of the person cooking.
- Up to 25 per cent of black carbon emissions come from burning solid fuels for household energy needs.

Clean Cooking

- Clean cooking helps address energy poverty and ensure sustainable energy security for billions.
- Reducing smoke emissions from cooking decreases the burden of disease associated with household air pollution and improves well-being, especially for women and children, thus contributing to meeting the goals under SDG 3 on good health and well-being.
- Clean cooking solutions address the most basic needs of the poor, while also delivering climate benefits, thus contributing to meeting the goals under SDG 13 on climate action.
- India plans to ensure 80 million households to get LPG connections by 2020 under the Pradhan Mantri Ujjwala Yojana Programme, the government's flagship scheme on providing clean energy for cooking
- However, according to International Energy Outlook, by 2030, close to 39 per cent of the Indian population will still be dependent on solid fuels. and that India will miss the target under SDG 7.1 of ensuring universal access to affordable, reliable, and modern energy services.

Way Ahead

- A large anti-tobacco style campaign communicating that solid fuels harm respiratory health and that food cooked on gas can be as tasty and healthy as food cooked on a chulha should be conducted.
- Reducing LPG prices in rural areas, where residents are poorer and solid fuels are easier to access, would also help. If priority households could become eligible for even higher subsidies in a revamped LPG pricing regime, and Antyodaya households could become eligible for LPG cylinders free of cost, exclusive LPG use would likely be higher.
- Men rarely cook or make dung cakes in rural households. Current Ujjwala messaging, which focuses on the benefits of clean fuels for women, reinforces this inequality. Advertisements showing that gas is so good that even men can cook with it will challenge both misinformation on LPG and gender inequalities in household tasks.

Henley Passport Index

- The Henley Passport Index, which measures the strength of passports of all nations has been released. 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. The index includes 199 passports and 227 travel destinations, including micro-states and territories.

- The score is the sum of the number of countries accessible by that passport holder without requiring pre-departure government approval for visa-types including a visitor's permit, visa on arrival or an electronic travel authority (ETA).
- For every territory/country that a passport holder of a particular country/territory is able to access through these visa-types (without pre-departure government approval), a value of 1 is attributed to it.
- Passport rankings point towards the strength of diplomatic relations between countries. In the past decade travel freedom has expanded vastly as a result of the rising number of bilateral visa-waiver programmes signed between different countries and unilateral decisions implemented by governments of some countries.
- Countries moving towards nationalist isolationism and away from policies that encourage visa openness are likely to drop in the rankings and incur geopolitical consequences for themselves and their neighbours.

Rankings

- India ranked 86 with a score of 58 in 2019, while in 2010 it was ranked 77. Just eight nations were added to its visa-free access list from 2010 to 2019 — lowest among BRICS nations.
- For 2019, Japan and Singapore held the top spot, with visa-free or visa-on-arrival access to 189 destinations, dislodging Germany, which held the number one position in 2018.
- Along with Germany in the second spot were Finland and South Korea (187 destinations), followed by Denmark, Italy and Luxembourg at third place (186 destinations).
- Afghanistan's passport was the weakest, with access to only 25 destinations. Iraq, Syria, Pakistan and Somalia were the other nations at the bottom of the barrel.

National Digital Health Blueprint

The Ministry of Health and Family Welfare has released the National Digital Health Blueprint, which is in line with the vision to reach each individual of this country with services at their doorstep under Digital India Programme.

Details

- The vision of NDHB is to create a National Digital Health Eco-system that supports Universal Health Coverage in an efficient, accessible, inclusive, affordable, timely and safe manner.
- It intends to do so through the provision of a wide-range of data, information and infrastructure services, duly leveraging open, interoperable, standards-based digital systems, and ensuring the security, confidentiality and privacy of health-related personal information.
- Among the key principles of the datafication of India's medical ecosystem is a unique health ID for citizens, with Aadhaar as a key identifier.
- The Blueprint lays out the building blocks for the implementation of the National Health Stack (NHS), which aims to deploy Artificial Intelligence (AI) in leveraging health records.
- Medical data exists in silos and without standardisation. Moreover, Ayushman Bharat will generate enormous amount of health data mostly in the digital space.
- The Blueprint proposes the linking of multiple databases to generate greater and granular data that can be leveraged by the public as well as private sector – including insurance companies, hospitals, apps and researchers.

- Getting authentic healthcare data is a big challenge and the existing data suffers from three basic challenges – Integrity, Integration and Intelligence of data.
- Hence to address the issue of data discrepancy, the Blueprint as well as the National Health Stack emphasise “a single source of truth” as a major objective and propose the creation of national and regional registries pertaining to doctors, hospitals, pharmacies and healthcare professionals.
- It also intends to promote health data analytics and medical research.

Concerns

- This National Blueprint illustrates is another example of a major digitisation program involving the data of millions of citizens without a data protection law in place.
- Data security is a prerequisite for any data movement however, currently, data privacy in health is a grey area.
- Data researchers have expressed concerns that the health data is set up on a foundation of India Stack – a bouquet of privately-owned proprietary software applications.
- IndiaStack is a set of APIs that allows governments, businesses, startups and developers to utilise the Aadhaar infrastructure for businesses like eKYC and UPI digital payments. The Blueprint appears to give more legitimacy to stacks, which have been under criticism.

World Youth Conference for Kindness

- The first-ever World Youth Conference for Kindness was recently organised by the UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) in India. The conference hosted 60 international delegates from over 27 countries, each of whom work in the field of positive social change.
- The theme of the conference was ‘Vasudhaiva Kutumbakam: Gandhi for the Contemporary World: Celebrating the 150th birth anniversary of Mahatma Gandhi.’
- The conference was in commemoration of the 150th birth anniversary celebrations of Mahatma Gandhi and aimed at providing youth with creative, effective methods of engaging and realising the United Nations Sustainable Development Goals (SDGs). It sought inspiration from Gandhi’s championing of non-violence.
- The motivation for this conference was the general observation that people have increasingly started to think that being kind is a sign of weakness whereas aggressiveness is respected.
- Contrary to this belief, humans are neurologically wired at birth to be kind but the process of socialisation tears that away.
- The MGEIP hopes to create a movement of inspired and empowered youth through kindness to transform themselves and build long-lasting peace in their communities.

Anti-lynching Laws

- With the menace of mob lynchings growing across the country, the Rajasthan Legislative Assembly has passed a Bill providing for life imprisonment and a fine from ₹1 lakh to ₹5 lakh to those convicted in cases of mob lynching leading to victim’s death.
- Although the Indian Penal Code and the Criminal Procedure Code have provisions to deal with the cases of mob lynching incidents, they have been inadequate in deterring such acts. Hence, the government brought the bill to provide for stricter punishment to curb such incidents.

Supreme Court's Observations

- In July last year, the Supreme Court had condemned the sweeping incidents of lynching as an affront to the rule of law and to the exalted values of the Constitution, and asked Parliament to come up with a special law to deter such crimes.
- It had observed that the horrendous acts of mobocracy cannot be permitted to inundate the law of the land and the recurrent pattern of violence cannot be allowed to become the new normal.

Provisions Of The Bill

- **Definition:** The Bill defines the mob as a group of two or more individuals. It also defines lynching as "an act or series of acts of violence or those of aiding, abetting or attempting an act of violence, whether spontaneous or preplanned, by a mob on the grounds of religion, race, caste, sex, place of birth, language, dietary practices, sexual orientation, political affiliation or ethnicity".
- It enlists various other offences related to the lynching such as dissemination of offensive materials, propagation of hostile environment and obstructing legal processes, which would be punishable with jail terms varying from three to five years.
- It makes the offence, cognisable, non-bailable and non-compoundable.
- **Prevention:** The Bill empowers the State police chief to appoint a state coordinator of the rank of Inspector General of Police to prevent the incidents of lynching in the State with the district Superintendents of Police acting as the district's coordinator, to be assisted by a Deputy Superintendents of Police, for taking measures to prevent incidents of mob violence and lynching.
- **Compensation:** The Bill stipulates the provision of compensation to victims by the State government as per the Rajasthan Victim Compensation Scheme.
- **Rehabilitation:** It also binds the State government to take necessary measures to rehabilitate the victims of mob lynching, suffering displacements from their native place

Punishment

- For the offence of an assault by mob, leading to the victim suffering grievous hurts, the Bill provides for jail terms up to 10 years and a fine of ₹25,000 to ₹3 lakh.
- In cases of the victims suffering simple injuries, the Bill proposes imprisonment up to seven years and a fine up to ₹1 lakh.
- For hatching a conspiracy of lynching or aiding, abetting or attempting such an offence, the Bill seeks to punish the offenders in the same manner as if he actually committed the offence of lynching.

Other States

In December the Manipur assembly passed a bill recommending life imprisonment for those involved in mob violence, if it resulted in the death of a person.

West Bengal

- The West Bengal Assembly has also passed an anti-lynching bill.
- The bill proposes a maximum punishment of life imprisonment and fines ranging from Rs 1 lakh to Rs 5 lakh for offences.
- Those found guilty of assisting or interfering with the accused will be punished with imprisonment of up to three years and fined a maximum Rs 1 lakh.
- It also proposes a maximum one-year jail term and a fine up to Rs 50,000 for "publishing, communicating or disseminating offensive material by any method – physical or electronic".

- Those who create “a hostile environment for a person or a group of persons” face maximum prison term of three years and fine up to Rs 1 lakh.
- The legislation prescribes the appointment of a nodal officer for periodic assessment of local intelligence inputs on potential flashpoints, and mandates that lynching incidents be investigated by an officer not below the rank of an inspector.
- It also calls for witness protection and compensation for victims, adding that any allegation of threat, coercion or inducement of witnesses must be brought to the notice of a court within 24 hours.
- While new anti-lynching laws hold hope, the law can only be a tool and not a magic bullet. And a tool works only as well as it is wielded.
- Insofar as such laws show a state’s commitment to curb lynching, they are a step in the right direction. But to deliver change, better enforcement and political will is equally necessary.

Angikaar Campaign

- The Ministry of Housing and Urban Affairs has launched the Angikaar Campaign.
- It has been launched for social behaviour change, focusing on issues such as water & energy conservation, waste management, health, tree plantation, sanitation and hygiene for beneficiaries of completed houses under PMAY (U), through community mobilisation and IEC activities.
- For this purpose, the campaign will converge with schemes and Missions of other Ministries dealing with these subjects.
- The convergence would especially focus on Ujjwala for gas connection and Ayushman Bharat for health insurance to the beneficiaries of PMAY (U).
- According to the ministry, around 88 lakh houses have so far been approved against the demand of 1.12 crore. The 'Angikaar' aims at reaching out all the beneficiaries of the PMAY(U) in a phased manner.

Women Transforming India (WTI) Awards

- NITI Aayog has launched the Fourth Edition of Women Transforming India (WTI) Awards, in collaboration with the United Nations.
- The WTI Awards, since its inception in 2016, has been recognising and celebrating stories of exemplary women from across India.
- The theme for WTI Awards 2019 is “Women and Entrepreneurship”, in continuation with last edition’s theme that recognizes women entrepreneurs who are breaking the glass ceiling and challenging stereotypes, through businesses and enterprises and are providing innovative developmental solutions to building a dynamic New India.
- The Women Entrepreneurship Platform (WEP) is a Government of India initiative by NITI Aayog to promote and support aspiring as well as established women entrepreneurs in India, assist and handhold them in their journey from starting to scaling up and expanding their ventures.
- It has more than 5,000 women entrepreneurs registered on the platform, more than 30 partners and, has committed funding of more than US\$10mn for these startups.

Rotavirus

- The Health Ministry has decided to provide rotavirus vaccine to every child across all 36 States and Union Territories (UTs) by September 2019.
- Diarrhoea is one of the biggest cause of death among children and Rotavirus is one of the most common causes of severe diarrhoea in children less than two years of age.
- It is estimated that it causes 8,72,000 hospitalisations, 32,70,000 outpatient visits and estimated 78,000 deaths annually in India.

Preventing Rotavirus

- Other forms of diarrhoea can be prevented by maintaining basic hygiene — frequent hand washing, safe water and food consumption, exclusive breastfeeding and vitamin A supplementation.
- However, Rotavirus diarrhoea, can only be prevented through vaccination. Rotavirus vaccine along with proper sanitation, hand washing practices, ORS and zinc supplementation can go a long way in reducing the mortality and morbidity due to diarrhoea in children

Rotavirus Vaccine

- Rotavirus vaccine was introduced in 2016 in a phased manner, beginning with 4 States initially and later expanded to 7 more States. The vaccine is now available in 28 States/Union Territories. It is expected to be available in all 36 States/Union Territories by September 2019.
- Three doses of the Rotavirus vaccine are provided along with other vaccines, free of cost, under Universal Immunisation Programme at one-and-half-months, two-and-half-months, and three-and-half-months of age.

National Essential Diagnostics List

- The Indian Council of Medical Research (ICMR) has finalized the country's first National Essential Diagnostics List (NEDL) that recommends that at least 159 tests should be made available for patients in even rudimentary government health facilities.
- India is the first country to compile such a list. The list is meant for facilities from village till the district level.

Background

- The list is on the lines of the essential drugs list, the National List of Essential Medicines (NLEM) which was first released in 1996 and last updated in 2015.
- WHO had released the 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 the landscape of India's health care priorities

Need for NEDL

- While affordability of diagnostics is a prime concern in low, middle-income countries like India, low cost, inaccurate diagnostics have made their way into the Indian market which has no place in the quality health care system.
- NEDL would enable improved health care services delivery through evidence-based care, improved patient outcomes and reduction in out-of-pocket expenditure; effective utilisation of public health facilities; effective assessment of disease burden, and address antimicrobial resistance crisis too.

Challenges

- While the move is laudable, India has healthcare battles to win on many fronts, failing which NEDL could fall flat.
- The number of clinicians to conduct tests falls short of requirement, and there is a lack of awareness on diagnostics. The access to diagnostics in remote areas and even in tier-2 and tier-3 cities is a challenge.
- NEDL caters to one side of the story, and accessibility to equipment cannot ensure better health unless there is an existing capacity of professionals who can perform these tests in a suitable infrastructure.
- The National List of Essential Medicines (NLEM) is implemented by the Central Drugs Standard Control Organisation (CDSCO), which sets the prices of medicines under the Drug Price Control Order, 2013.
- The ICMR cannot fix the price of the tests as it is not the implementing body. Hence unless the NEDL can fix the prices of these diagnostic tests, patients will still end up paying different prices for the same tests depending on the service provider.

Way Ahead

- Since health is a state subject, it is up to the states to ensure that the NEDL is implemented in a way that it benefits the maximum number of patients, both in the public and private sector.
- If implemented in a phased manner, NEDL could potentially improve access to safe and effective diagnostic tests for patients.
- However, this needs a streamlined approach in synchrony with other changes being proposed, such as revision of Indian Public Health Standards (IPHS) and free diagnostic service initiative of the government. (IPHS are a set of standards envisaged to improve the quality of healthcare delivery in the country under the National Rural Health Mission)

Surrogacy (Regulation) Bill 2019

The Surrogacy (Regulation) Bill 2019, which proposes to ban commercial surrogacy, was passed by Lok Sabha recently.

Need For The Bill

- The Bill explains that lack of legislation on surrogacy has led to its rampant commercialisation, unethical practices, exploitation of surrogate mothers, abandonment of children born out of surrogacy and import of human embryos and gametes.
- In line with the recommendations of the Law Commission of India, it proposes to address these issues and protect the rights of surrogate mother and child.

Provisions Of The Bill

The Bill defines surrogacy as a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after the birth to the intending couple.

A. Regulation

- The Bill prohibits commercial surrogacy, but allows altruistic surrogacy. Even altruistic surrogacy is allowed for an intending couple who suffer from proven infertility.
- Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

- Altruistic surrogacy involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.

B. Eligibility Criteria For Intending Couple

- The intending couple should have a 'certificate of essentiality' and a 'certificate of eligibility' issued by the appropriate authority.
- A certificate of essentiality will be issued to the intending couple only after it is proven that one or both the partners are infertile.
- A certificate of eligibility is issued to the intending couple and is proof that the couple has been married for at least five years, and are Indian citizens. The wife must be in the age group of 23-50, and the husband in the age group of 26-55.
- The intending couple should not have any surviving biological child, through adoption or through surrogacy. An exception is made if the intending couple has a surviving child who is mentally or physically challenged, or is suffering from a fatal illness with no permanent cure.

C. Eligibility Of A Surrogate Mother

- A married woman between the ages of 25 and 35 who has a child of her own can be a surrogate or can help in surrogacy by donating her egg.
- The surrogate mother needs to be a close relative of the intending couple and can become a surrogate only once in her lifetime. Additionally, a woman cannot become a surrogate mother by providing her own gametes (unfertilised eggs).
- **Clinics:** Only surrogacy clinics registered under the Surrogacy (Regulation) Act, 2019 will be able to perform procedures related to surrogacy.

D. National and State Surrogacy Boards

The central and the state governments shall constitute the National Surrogacy Board (NSB) and the State Surrogacy Boards (SSB), respectively.

Functions of NSB

- Advising the central government on policy matters relating to surrogacy
- Laying down the code of conduct of surrogacy clinics;
- Supervising the functioning of SSBs.

E. Parentage and Abortion

- A child born out of a surrogacy procedure will be deemed to be the biological child of the intending couple. An abortion of the surrogate child requires the written consent of the surrogate mother and the authorisation of the appropriate authority.
- Further, the surrogate mother will have an option to withdraw from surrogacy before the embryo is implanted in her womb.

F. Penalties

If an individual is found advertising or undertaking commercial surrogacy, exploiting the surrogate mother, selling, importing, purchasing or trading human embryos or gametes for surrogacy, conducting sex selection for surrogacy, or has abandoned, exploited or disowned a surrogate child, he/she can be liable for imprisonment of up to 10 years and a fine of up to Rs 10 lakh.

Criticisms

- Although novel in its intentions limiting surrogate to a close relative and making it altruistic would lead to coercion and further exploitation of women due to family pressure, given the social, legal, emotional and ethical dynamics involved.
- Further, it would also cause acute dearth and unavailability of women available for surrogacy.
- Limiting eligibility for couples who have been unable to conceive for 5 years would impair chances of parenthood for many as people get married late these days with their biological clock ticking. It also goes on to violate their reproductive rights.
- Restricting it to legally married couple amounts to imposing prohibition on widows, divorced women, live-in partners, which is not fair given the stigma attached to infertile women.
- The provision for denial of compensation to a surrogate mother has also been criticised. While doctors, hospitals and lawyers involved in the process would get paid the person undergoing hardships for nine months and beyond would be left in the lurch.

Canine Distemper Virus

- A recent study notes that 86% of the tested dogs around Ranthambhore National Park in Rajasthan carried Canine Distemper Virus antibodies in their bloodstream.
- This means that the dogs are either currently infected or have been infected sometime in their life and have overcome the disease.
- These dogs wander into the forest along with the humans, and there have been cases where leopard have hunted these dogs.
- Studies from Russia and Africa have shown that small, isolated wildlife populations are more susceptible and when the virus transmits from one species to another the disease manifestation is worse.
- Last year, over 20 lions from the Gir forest succumbed to the viral infection and now a guideline has been prepared by the National Tiger Conservation Authority to prevent the spillover of the disease to wild animals.

Control Measures

- Understanding the role of domestic animals as contributors to a local CDV reservoir is imperative precursor in considering control measures
- The disease needs to be recognised and more targeted studies need to be initiated to collect baseline data on CDV from wherever they are reported from in wild carnivores.
- The government should take the initiative to vaccinate the dogs around wildlife sanctuaries in the country. It is an investment that requires time and effort but increasing herd immunity will reduce chances of disease spillover to wildlife

Canine Distemper Virus

- Canine distemper (sometimes termed hardpad disease) is a viral disease that affects a wide variety of animal families, including domestic and wild species of dogs, coyotes, foxes, pandas, wolves and a variety of other species.
- Many species of large cat as well as domestic cats, were long believed to be resistant to canine distemper, until some researchers reported the prevalence of CDV infection in large cats.
- The disease is highly contagious via inhalation and morbidity and mortality may vary greatly among animal species.

28th BASIC Ministerial Meeting On Climate Change

- The **BASIC countries** — a grouping of Brazil, South Africa, India and China — held their **28th Ministerial meeting** on Climate Change in **Brazil**.
- It was held in the run-up to United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP-25) meet scheduled to be held in December 2019.

Key Highlights:

- The joint statement, issued at the conclusion of the summit, reaffirmed the commitment of member countries to the successful implementation of the UNFCCC, its Kyoto Protocol and its Paris Agreement.
- It also expressed the belief of member countries in principles of **Equity and Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)**.
- **China** will host the **next meeting of the BASIC Ministers**.

About BASIC Countries:

- It is a geopolitical alliance formed by an agreement signed by the four countries (Brazil, South Africa, India and China) on November 28, 2009.
- This grouping collectively accounts for one-third of world's geographical area and nearly 40% of world's population.

Significance of this grouping:

- It was formed to **act together** at the upcoming Copenhagen Summit, scheduled in December of 2009.
- Since then, these nations have a broadly common position on reducing greenhouse gas emissions and raising the massive funds that are needed to fight climate change.
- The BASIC group wields considerable heft purely because of the size of the economies and populations of the member countries.

G-7 Summit 2019

- 45th G7 summit, also known as Group of Seven, was held in Biarritz, France on 24–26 August 2019.
- Hosted by French President Emmanuel Macron, the annual meet was attended by the seven state members.

Key Highlights:

- This year, France had also **invited non-member countries** who are playing an important part in world politics.
- The invited guest nations included **India, Australia, Spain, South Africa, Senegal and Rwanda**. These countries were invited as "**Biarritz partner country**".
- Main theme of the G7 summit this year was "**combating inequality**" and its main focus was on the **climate and biodiversity**.
- Following five objectives were identified by the France for this Summit:
 - **fighting inequality of opportunity**, promoting in particular gender equality, access to education and high quality health services;
 - **reducing environmental inequality** by protecting our planet through climate finance and a fair ecological transition, preserving biodiversity and the oceans;

- **strengthening the social dimension** of globalization through more fair and equitable trade, tax and development policies;
- **taking action for peace** against security threats and terrorism which weaken the foundations of our societies; and
- **tapping into the opportunities created by digital technology and artificial intelligence (AI).**

I. Fighting Inequalities

- The Biarritz Chair's Summary on Fighting Inequalities underscores the need to mobilize international organizations in the fight against inequalities.
- The summit welcomed the idea of an **inclusive growth financing forum**, which will be formally launched during the **Paris Peace Forum in November 2019**.

II. Climate, Biodiversity and Oceans

- The participating leaders endorsed the **Metz Charter on Biodiversity, adopted by G7 environment ministers in May 2019**.
- G7 countries reaffirmed their commitment to implement the Paris Agreement on climate change; followed up on the **G7 Ocean Plastics Charter** agreed at the 2018 G7 Summit; and discussed further **initiatives to reduce plastic pollution**.
- Four multi-stakeholder coalitions addressing climate, biodiversity and oceans, were formed. These are:
 - the '**Maritime Coalition for Climate and Environment**,' which aims to limit the international maritime sector's impact;
 - the '**Biarritz Pledge for Fast Action on Efficient Cooling**,' aimed at advancing efforts to improve the cooling sector's energy efficiency and lifecycle management, while countries phase down hydrofluorocarbon (HFC) refrigerants, in accordance with the Kigali Amendment to the Montreal Protocol;
 - the '**Sustainable Fashion Coalition**,' aimed at reducing the environmental footprint of textiles, which are responsible for up to 35% of primary microplastic pollution in the oceans; and
 - the '**One Planet Business Coalition for Biodiversity**,' which seeks to define ambitious targets for the agri-food sector on preserving and restoring biodiversity.

III. Gender Equality

- G7 Leaders adopted the **Declaration on Gender Equality and Women's Empowerment**; launched the **Biarritz Partnership on Gender Equality**.
- They were briefed on **Recommendations of the Gender Equality Advisory Council regarding good practices** of new and innovative laws for gender equality.

IV. Development in Africa

- G7 leaders endorsed a **new framework between the G7 and Africa** to enhance cooperation.
- This was reflected in the **Biarritz Declaration for a G7 and Africa Partnership**.
- The G7 also endorsed the **Sahel Partnership Action Plan** to improve development and security cooperation.

V. Digital Transformation

- Participating leaders also supported a Strategy for an **Open, Free and Secure Digital Transformation**, focusing on ways to defend democratic societies and institutions.

- They also discussed **international cooperation on AI**.
- Discussions on the **data economy** focused on how countries can craft sensible laws on data transfer, collection, and retention in a way that does not harm their development.

India in G7 summit

- India has been invited to attend the G7 summit **after a gap of almost 10 years**.
- The last time **India was invited to the summit was in 2005**, when the then British Prime Minister Tony Blair had invited the then Indian PM Manmohan Singh to attend the G7 summit in Gleneagles, Scotland.

Analysis:

- India's presence at the G7 as an observer state is an acknowledgement of another dimension of this new reality. It is being seen as the legacy of a **decade of strong strategic ties between Paris and New Delhi**.
- Traditionally India found **EU very difficult to negotiate with**. However, a better relationship between the two is emerging and this platform can further help.
- India's **ability to safeguard its core sovereign concerns** even as it deepens its partnership with the West is growing. Issues such as trade, Kashmir, and India's relations with Russia and Iran were all discussed with G7 members.
- The summit also signaled **India's growing willingness to lead on issues such as climate change and digitization**. These issues are the points of contention for the transatlantic actors.

About G7:

- G7 originally came into **being in 1975** when the heads of the **world's six leading industrial nations**- the US, UK, France, Germany (West), Japan and Italy decided to hold a meeting in the wake of the oil shock of 1973 and the following financial crisis.
- The **six countries were joined by Canada** in 1976.
- In 1998, Russia was formally inducted in the group, which transformed G7 into G8.
- However, when **Russia annexed Crimea** in 2014, it was suspended from the grouping. As a result, the group became **G7 again in 2014**.
- **Current members are** - US, UK, Canada, France, Germany, Italy and Japan (Most developed and the advanced economies of the world)

First-ever World Youth Conference for Kindness

- **Organised by** - UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)
- **Held at** – New Delhi
- **Theme** - 'Vasudhaiva Kutumbakam: Gandhi for the Contemporary World: Celebrating the 150th birth anniversary of Mahatma Gandhi'.
- **Aimed at** - Providing youth with creative, effective methods of engaging and realising the United Nations Sustainable Development Goals (SDGs)

FDI Relaxation

The Union Cabinet has announced a number of decisions designed to attract increased foreign direct investment into the country.

Provisions For Single Brand Retail Company

- Currently, a single-brand retail company with more than 51% FDI needs to source 30% of its goods from within India. As per the new decision this 30% can be **calculated over the first five years of operation**. After that, the 30% requirement needs to be met on an annual basis.
- Moreover, the new rules will treat exports from India as part of the 30% domestic sourcing obligation.
- In order to help new entrants the government has allowed single-brand retail companies to start selling online before setting up a brick and mortar store.
- However, they will be required to set up a physical store within two years of starting online sales. Earlier, they had to set up a brick and mortar store before selling online.
- Further, sourcing of goods from India for global operations can be done directly by the entity or its group companies or indirectly by them through a third party.

Provisions For Coal Industry

- Currently, 100 per cent FDI under automatic route is allowed in coal and lignite mining for **captive consumption** in power projects, iron and steel and cement units.
- However, this was not extended to the sale of coal and mining, including associated processing infrastructure such as coal washery, crushing and coal handling.
- The new rules permit 100% FDI under automatic route for sale of coal, for coal mining activities including associated processing infrastructure.
- **Contract manufacturing:** The current FDI policy provides for 100% FDI under the automatic route in the manufacturing sector. But there was no specific provision for contract manufacturing in the policy. It has now been decided to allow **100% FDI under the automatic route** in contract manufacturing in India as well.
- **Digital Media:** The new rules permit **26% FDI, with government approval**, for uploading and streaming news and current affairs using digital media, on the lines of print media.

Impact Of The New FDI Provisions

- The provisions for SBRT will provide **greater flexibility and ease of operations** to SBRT entities. It will support **ease of doing business** in India and **drive in larger investments** from global companies like Ikea, H&M, Uniqlo and Puma to expand their India footprint.
- Online selling before a physical store will lead to **creation of jobs** in logistics, digital payments, customer care, training and product skilling.
- Adding exports to the local sourcing norms will help the country **build larger capacities**, in the process reinforcing India's stand as a **potential global manufacturing hub**.
- Allowing 100% FDI via automatic route in contract manufacturing will **aid the 'Make in India' initiative** and will attract global players like Apple looking to set up alternate manufacturing hubs.
- At a time when international players are looking at expanding their footprint beyond China, the steps will help in making Indian companies a **part of the global value chain**.

Coal Industry

- The change in rules for coal mining, is expected to open the doors for the **entry of global giants**, which will lead to the creation of an efficient and competitive coal market.
- The discoms will now be able to attract larger global operators with **lower cost of capital** to undertake end-to-end coal mining of their allocated blocks to **reduce the fuel costs**.
- The steps are also meant to **reduce coal shortages** in India, which is among the largest global producers of the mineral.

RBI Transfers to Government

The RBI Central Board has recently decided to transfer a record surplus of Rs 1.76 lakh crore to the government. This marks the first time when the RBI will be paying out such a huge amount, as a one-off transfer.

Background

- The RBI transfers its surplus annually to the government, the owner of the institution, after making adequate provisions for contingencies or potential losses. The profit that is distributed has varied, averaging over Rs 50,000 crore over the last few years
- Over the last decade or more, the government had sought higher payouts saying the RBI was maintaining reserves or capital buffers that were much higher than many other global central banks' buffers.
- Further the government claimed that such relatively lower transfers reduced the scope for public spending for infrastructure projects and social sector programmes.
- The Jalan committee after reviewing the capital structure, statutory provisions and taking into account the role of the central bank in ensuring financial stability, potential risks and global standards, had suggested a total transfer of Rs.1.76 lakh crore.

RBI's Surplus Generation

- A significant part comes from RBI's operations in financial markets, when it intervenes for instance to buy or sell foreign exchange and from Open Market operations, when it attempts to prevent the rupee from appreciating.
- It generates income from government securities it holds and as returns from its foreign currency assets that are investments in the bonds of foreign central banks or top-rated securities.
- Moreover, deposits with other central banks and lending to banks for very short tenures and management commission on handling the borrowings of state governments and the central government are other sources of income.
- The RBI's expenditure is mainly on printing of currency notes, on staff, besides commission to banks for undertaking transactions on behalf of the government and to primary dealers that include banks for underwriting some of these borrowings.
- The central bank's total costs, which includes expenditure on printing and commissions forms, is only about 1/7th of its total net interest income, which leads to a significant surplus.

Global and Indian scenario

- After the global financial crisis, the approach has been to build adequate buffers in the form of higher capital, reserves and other funds as a potential insurance against future risks or losses.

- A higher buffer enhances the credibility of a central bank during a crisis and helps avoid approaching the government for fresh capital and thus maintain financial autonomy.
- In many top central banks — US Federal Reserve, Bank of England, German Bundesbank, Bank of Japan— the laws make it clear that profits have to be transferred to the government or the treasury. The quantum of profits or percentage to be distributed is also specified in the laws.
- In the past the quantum in India was discussed and decided between the government and RBI, and has been guided by policies set out internally.
- However, the Central Board endorsing Jalan committee's recommendation on a profit distribution policy will mean a more transparent and rule-based payout from next year, which could help narrow differences between the government and RBI.

Utilisation Of The Transfer

- Normally, the money is transferred to the Consolidated Fund of India from which salaries and pensions to government employees are paid and interest payments done, besides spending on government programmes.
- However, this time the large payout can help the government cut back on planned borrowings and keep interest rates relatively low. Besides, it will provide space for private companies to raise money from markets.
- And if it manages to meet its revenue targets, the windfall gain can lead to a lower fiscal deficit.
- The other option is to earmark these funds for public spending or specific projects, which could lead to a revival in demand in certain sectors and boost economic activity.

Bank Consolidation

- The Finance ministry has announced a mega amalgamation plan that led to the merger of 10 public sector banks into four large entities, post which the number of state owned banks has come down to 12 from 27.
- The merger announcement was followed by an equity infusion move of Rs 55,250 crore in these banks to enable them to grow their loan book.
- The government also unveiled governance reforms in public sector banks, providing their boards greater autonomy, flexibility to fix sitting fee of independent directors, longer term to directors at management committee of boards.
- Banks will also recruit chief risk officer at market-linked compensation to attract best talent, while non-official directors will perform role analogous to independent directors.

Merger Details

- Punjab National Bank, Oriental Bank of Commerce and United Bank of India to merge to form the country's second-largest lender.
- The merger of Syndicate Bank with Canara Bank will create the fourth largest public sector bank with Rs 15.20 lakh crore business and a branch network of 10,324 branches.
- Andhra Bank and Corporation Bank's merger with Union Bank of India will create India's fifth largest public sector bank with Rs 14.59 lakh crore business and 9,609 branches.
- The merger of Allahabad Bank with Indian Bank will create the seventh largest public sector bank with Rs 8.08 lakh crore business with strong branch networks in the south, north and east of the country.

Background

- For years, expert committees starting from the M Narasimham Committee have recommended that India should have fewer but bigger and better-managed banks to ensure optimal use of capital, efficiency of operations, wider reach and greater profitability.
- Last year, the government had merged Dena Bank and Vijaya Bank with Bank of Baroda, creating the third-largest bank by loans in the country. Earlier, the State Bank of India had acquired its associate banks.
- The government claims the past merger to be a good learning experience as profitability and business of the merged entity has improved.

Rationale Behind The Mergers

- Instead of the government having several of its own banks competing for the same pie (in terms of deposits or loans) in the same narrow geographies, leading to each one incurring costs, it would make sense to have large-sized banks.
- It is believed that the merged entities would be able to respond better to emerging market trends or shifts and compete more with private banks.
- Further, by reducing the number of banks to a manageable count, the government hopes that the demands for capital infusion will lower progressively with increased efficiencies and well capitalised banks.
- It will also help that the government would now have to focus on fewer banks than in the past.
- It is also hoped that the big banks would be able to compete globally and improve their operational efficiency once they lower their cost of lending and improve lending.

Challenges

- Smooth integration of operations always poses a risk, especially with the prospect of resistance from staff and unions in the entities being merged. There are issues like cultural fit, redeployment of staff, and fewer career opportunities for many in a merged entity.
- Another concern could be deterioration of services and disruption in the near term as the merger process gets under way. It could also reflect in fewer options for customers, an easing of the personal touch which many of the midsize and smaller banks have.
- Yet another worry is the possible creation of what is known as systematically important institutions, or those too big to fail, leading to the prospect of bailouts in the future, which could hurt the government and financial stability.
- A bigger challenge will be in ensuring that there is no disruption in activity, especially lending, because of the proposed mergers at a time when banks have been loath to lend.
- There is also the danger that instead of the strong banks lifting the weak, the weak ones may sink the strong. The swelling of combined bad loans with some of these mergers is also an issue.

Time Release Study

- The Department of Revenue, Ministry of Finance, as part of its strategic commitment to improve global trade, has conducted India's first national Time Release Study (TRS).
- The exercise was conducted at the same time across 15 ports including sea, air, land and dry ports which cumulatively account for 81% of total Bills of Entries for import and 67% of Shipping Bills for export filed within India.

- The TRS is an internationally recognized tool advocated by World Customs Organization to measure the efficiency and effectiveness 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.

Impact

- Previously individual customs formations had been independently conducting TRS studies at the port level. The national TRS will take this a step further and evolved a uniform, multi-dimensional methodology which measures the regulatory and logistics aspects of the cargo clearance process and establishes the average release time for goods.
- Expected beneficiaries of this initiative will be export oriented industries and MSMEs, who will enjoy greater standardization of Indian processes with comparable international standards.
- Based on the results of the TRS, government agencies associated with cross border trade will be able to diagnose existing and potential bottlenecks which act as barriers to the free flow of trade, and take remedial actions for reducing the cargo release time.
- It will help India maintain the upward trajectory on Ease of Doing Business, particularly on the Trading Across Borders indicator which measures the efficiency of the cross border trade ecosystem.

Partial Credit Guarantee Scheme to PSBs

- In pursuance of the announcement made in the Budget, the Government has announced a Scheme to provide a one-time partial credit guarantee to PSBs.
- The Scheme would enable the public sector banks (PSBs) to purchase pooled assets of financially sound NBFCs amounting to Rs. one lakh crore.
- It is expected that this measure would provide liquidity to the NBFC Sector and, in turn, enable them to continue to play their role in meeting the financing requirements of the productive sectors of economy including MSME, retail and housing.
- The objective is 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.

Eligibility

- 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.

Details

- The assets shall be purchased by banks at fair value.
- The window for one-time partial credit guarantee will remain open for a period of six months, or till such date by which Rupees One lakh crore assets get purchased by banks, whichever is earlier.
- Assets to be assigned by NBFCs/HFCs must be rated by Credit Rating Agencies (CRAs) accredited by Reserve Bank of India (RBI).
- One-time guarantee provided on the pooled assets will be valid for 24 months from the date of purchase.
- The NBFCs/HFCs can have the option to buy back their assets after a specified period of 12 months as a repurchase transaction, on a right of first refusal basis.

- The guarantee shall cease earlier if the purchasing bank sells the pooled assets to the originating NBFC/HFC or any other entity, before the validity of the guarantee period.

Khanij Bidesh India Ltd

- A joint venture company, Khanij Bidesh India Ltd. (KABIL) is to be set up with the participation of three Central Public Sector Enterprises namely, National Aluminium Company Ltd.(NALCO), Hindustan Copper Ltd.(HCL) and Mineral Exploration Company Ltd. (MECL).
- The objective of constituting KABIL is to ensure a consistent supply of critical and strategic minerals to Indian domestic market.

Need For Such A Company

- The sustained source of mineral and metal commodities is imperative for the transportation and manufacturing segment.
- India has pledged to reduce greenhouse gas emissions and is taking steps towards greener mode of transportation, by emphasizing upon Electric Vehicle Mobility, for which it is important to ensure energy storage through batteries.
- Further segments like Aviation, Defence and Space Research also require minerals with lower weight and high mechanical strength.
- The sourcing of these minerals or metals is to be done by creating trading opportunities, collaborations with the producing countries or strategic acquisitions or investments in the exploration and mining assets of these minerals in the source countries.

Functions

- 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.
- While KABIL would ensure mineral security of the Nation, it would also help in realizing the overall objective of import substitution.
- The new company will help in building partnerships with other mineral rich countries like Australia and those in Africa and South America, where Indian expertise in exploration and mineral processing will be mutually beneficial bringing about new economic opportunities.

Competition Law Review Committee Report

The Competition Law Review Committee headed by Mr. Injeti Srinivas, has submitted its report to the Ministry of Corporate Affairs recommending amendments to the Competition Act, 2002.

Background

- The Competition Act was passed in the year 2002 and the Competition Commission of India was set up in pursuance of the same. The Commission started functioning from 2009 and has contributed immensely towards the development of competition and fair play practices in the Indian market.
- During the past nine years the size of the Indian Economy has grown immensely and India is today amongst the top five Economies in the World.
- In this context, it was found essential that Competition Law be strengthened, and re-calibrated to promote best practices which result in the citizens of this country achieving their aspirations and value for money.

Key Recommendations

- Introducing a dedicated bench in National Company Law Appellate Tribunal (NCLAT) for hearing appeals under the Competition Act.
- The present Act does not directly address cartels where a third party (a 'hub') facilitates collusion between two or more competitors (the 'spokes') by causing sharing of sensitive information between them. The committee recommended amendments to the Act to include liability of such hubs.
- 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. The panel suggested a board comprising a chairman, six whole-time and six part time members.
- Under the Act, combinations beyond a certain threshold require the approval of CCI. The Committee recommended a 'green channel' route for automatic approval of CCI for specific merger and acquisition cases, where there are no major concerns of an appreciable adverse effect on competition. This can include cases of combinations under the Insolvency and Bankruptcy Code.

Adi Mahotsav

- It is a joint initiative of Union Ministry of Tribal Affairs and Tribal Cooperative Marketing Development Federation of India (TRIFED). TRIFED will essentially play role of a Service provider & Market Developer.
- The Adi Mahotsav was recently held in the newly created Union Territory of Ladakh.
- Adi Mahotsav is a joint initiative of Union Ministry of Tribal Affairs and Tribal Cooperative Marketing Development Federation of India (TRIFED).
- TRIFED essentially plays the role of a service provider & market developer .
- The theme of the festival is "A celebration of the spirit of Tribal Craft, Culture and Commerce".
- As the name of this event Aadi Mahotsav suggests, it is the 'adi' factor that is important about them. The Adivasi way of life is guided by primal truths, eternal values and a natural simplicity.
- The greatness of the tribes lies in this that they have managed to retain the primal skills and natural simplicity.

Tiger Census 2018 Report

- On International Tiger Day 2019, Prime Minister Modi launched a **census report of tigers** in India.
- The report - '**The Tiger Estimation Report 2018**' - is a data about tigers in India.

Key Facts

- As per the report, the total **population of Tiger in India is 2967**. In 2014, the count was 2,226 which reflected **an increase of 741 individuals** (aged more than one year), or **33%, in four years**.
- India has **achieved the target of doubling the tiger count** four years ahead of the deadline of 2022.
- The **top Tiger States of India** (by Tiger population) - **Madhya Pradesh** (526); **Karnataka** (524); **Uttarakhand** (442).

- **Top states in terms of Percentage increase** in Tiger population: **Madhya Pradesh (71%), Maharashtra (64%), Karnataka (29%)**.
- **States with maximum Tiger Population Growth or Increase (since 2006)** – **Kerala (313 %), Tamil Nadu (247%), Bihar (210%)**.
- **Tiger Population Trend in India** – 1411 (2006), 1706 (2010), 2226 (2014), 2967 (2018)
- **Worst Performing States - Chhattisgarh and Mizoram** saw a decline in tiger population.
- **Chhattisgarh** had 46 tigers in 2014 census. However, it has decreased to 19 in 2018 census. Decline in Tiger numbers in Chhattisgarh can be attributed to the law and order problem as large parts of the state are hit by the Maoist insurgency.
- The tiger population in Mizoram has **decreased to 0 from 3 in 2014**.

Few Facts About Tiger Sanctuaries:

- Best-managed tiger reserves – **Pench Sanctuary** (Madhya Pradesh) and **Periyar sanctuary** (Kerala)
- Maximum improvement since 2014 - **Sathyamangalam Tiger Reserve** in Tamil Nadu
- **No tiger** has been found in the **Buxa** (West Bengal), **Palamau** (Jharkhand) and **Dampa** (Mizoram) reserves.

How Many Tiger Reserves Are There In India?

- There are 50 Tiger Reserves in India. The **oldest tiger reserve is Corbett Tiger Reserve** which was declared in the year 1973 under ‘Project Tiger’, Whereas **Kamlang Tiger Reserve** is the **newest Tiger Reserve of India** declared in the year 2018.

Information On Tiger Landscapes In India

In India, the tiger habitats have been divided into 5 landscapes. These are:

- Shivalik Gangetic Plains
- Central India and the Eastern Ghats
- Western Ghats
- North Eastern Hills and Brahmaputra Flood Plains
- Sunderbans

Landscape	2006 Census	2010 Census	2014 Census	2018 Census
Shivalik Gangetic	297	353	485	646
Central India and the Eastern Ghats	601	601	688	1,033
Western Ghats	402	534	776	981
North East Hills & Brahmaputra Plains	100	148	201	219
Sunderbans	NA	70	76	88

About Tiger Census in India

- Every 4 year the **National Tiger Conservation Authority** conducts a tiger census across India to figure out the Royal Bengal Tiger population in India.
- This was the fourth all-India Tiger census.
- So far the tiger census was **conducted using the doubling sample technique** in which the first phase includes sending the forest official, guards and forest rangers to collect raw data based on pugmarks, scat, and leftover pray.
- The **2nd phase** included **the data and images from camera traps**. Once both the data is in place, the data is then used to identify tigers individually.
- **Use of technology and digital techniques in recent Tiger Census 2018** - With the new Digital Tiger census technique the doubling sample technique will remain the same. Along with it, **an**

Android application had been introduced to make the tiger count more accurate. It was **the first time since 2006** that so much technology was used.

- **For the first time Bhutan, Bangladesh and Nepal** were part of India's Tiger census to jointly estimate the number of big cats in the region of shared borders areas.

Global Tiger Day:

- It is celebrated annually on **July 29**. It was observed for the **first time in 2010 at the St. Petersburg Tiger Summit in Russia**.
- The summit finalized **Global Tiger Recovery Plan** which outlines how each country can contribute to the ambitious goal, known as **TX2 (doubling the tiger population by 2022)**.

Code Red For Labour

The Centre's proposal to replace 44 labour laws with four codes saw the light of day after Finance Minister Nirmala Sitharaman announced it in her Budget speech. The question not being asked is: aren't these codes antithetical to the very idea of statutory protection of labour and dignified standard of living for workers?

- The most glaring instance of the government's failure to support labour standards is the Ministry of Labour's proposal to fix the national minimum floor wage at ₹178, without any defined criteria or method of estimation. This could lead to a dangerous race to the bottom by individual States, in a bid to attract capital and investments. This is rightly being called 'starvation wage', especially given that the Ministry's own committee recommended ₹375 as the minimum.
- Another concerning issue is that the four codes exclude over 95% of the workforce employed in informal units and small enterprises, who in fact are in greater need of legal safeguards.
- Above all, there is a deliberate ambiguity maintained on wording and definitions. There is no clarity on who constitutes an 'employer', an 'employee' or an 'enterprise', giving the owner greater discretion to interpret the provisions while making it more difficult for the worker to draw any benefits from them.
- To minimise wage bills and compliance requirements, it is proposed that 'apprentices' be no longer considered employees, at a time when evidence indicates that apprentices are made to do jobs of contractual as well as permanent employees.
- The code even has a provision on "employees below fifteen years of age", which can be construed as legalisation of child labour. The code on wages legitimises and promotes further contractualisation of labour, instead of abolishing it, by insulating the principal employer from liabilities and accountability in the case of irregularities on the part of the contractors.
- **Slavery-like provision:** And if all this were not enough, the wage code also brings back the draconian provision of "recoverable advances", a system that the Supreme Court clearly linked to coercive and bonded labour, wherein distressed and vulnerable migrant labourers could be bonded to work through advance payments. This is akin to modern forms of slavery, also encountered in rural labour markets.
- Similarly, the eight-hour workday shift has been done away with, and multiple provisions of increased overtime have been inserted. The code also gives ample alibis to employers to evade bonus payments.
- Further, seeking justice against unfair practices of employers has become even more difficult now as non-payment of wages will now not be a criminal offence and penalties in case of non-compliance have been reduced. The government wants to provide a "facilitative" rather than a regulatory and

punitive environment for the owners, with “facilitators-cum-inspectors” replacing the “inspectors” who used to ensure implementation of various labour laws to aid employees.

- Finally, the code on industrial relations too is replete with restrictions, on forming or registering unions, calling a strike (which would entail prior permissions and notices) and seeking legal redressal for workers.

To sum it up, it won't be a fallacy to assert that the proposed laws, as they stand, resemble 'employer codes' rather than 'labour laws'.

22nd National Conference on e-Governance 2019

- The Department of Administrative Reforms & Public Grievances (DARPG), in association with Ministry of Electronics & Information Technology (MeitY), Government of India and the State Government of Meghalaya organized the 22nd National Conference on e-Governance (NCeG) 2019 on 8-9th August, 2019 at Shillong, Meghalaya.
- The theme of this Conference was “**Digital India: Success to Excellence**”.
- At the valedictory session, ‘**Shillong Declaration**’ on e-Governance was adopted after intensive deliberations during the sessions held over two days.
- Over the two days, discussions were held on six sub-themes in Plenary sessions - India Enterprise Architecture (INDEA), Digital Infrastructure, Inclusion and capacity building, Emerging Technology for Practitioners, Secretariat Reforms, National e-Governance Service Delivery Assessment (NeSDA).
- Four Breakout Sessions were held on sub-themes - One Nation One Platform, Engaging with Innovators and Industry, End-to-End Digital Services: IT initiatives of State Governments.
- NCeG 2019 provided a platform for the delegates, including senior government officers from across the country, industry stalwarts and researchers, to share best practices, latest technology developments and leveraging them for achieving effective governance and public service delivery.

Key Highlights Of Shillong Declaration

- Improve the citizen's experience with Government services by promoting timely implementation of India Enterprise Architecture (IndEA).
- Consolidate the plethora of successful State level e-Governance projects with a focus to replicate them as a common application software
- Take steps to further improve connectivity in North Eastern States by addressing the issues of telecommunications connectivity at grassroot level
- Take steps to enhance the activities of Electronics Sector Skill Council in North Eastern States and explore the possibility for opening an electronics skill center in Shillong
- Promote use of e-Office and move towards less paper State Secretariats in the North-Eastern States and in the District level offices.

Supreme Court (Number of Judges) Amendment Bill 2019

- President Ram Nath Kovind has signed into law a Bill which seeks to increase the sanctioned strength of judges in the Supreme Court from 30 to 33 besides the Chief Justice of India.
- The move to increase the strength of judges by 3 or 10 per cent comes against the backdrop of rising cases in the top court which stand at nearly 60,000.

- The decision also comes days after Chief Justice of India Ranjan Gogoi wrote to Prime Minister Narendra Modi to increase the number of judges in the top court.
- Due to paucity of judges, the required number of constitution benches to decide important cases involving questions of law were not being formed, the CJI said.
- In 1988, about three decades ago, the judge strength of the SC was increased from 18 to 26, and then again after two decades in 2009, it was increased to 31, including the CJI, to expedite disposal of cases to keep pace with the rate of institution.
- Once the amended law comes into force, the Supreme Court collegium will recommend three names to the government for appointment as SC judges.
- **Article 124 (1)** of the Constitution provides Parliament the power to fix the strength of Judges. In lieu of this, Parliament has enacted **Supreme Court (Number of Judges) Act, 1956** which originally provided for a maximum of 10 judges (excluding the CJI).
- This number was increased to 13 by the Supreme Court (Number of Judges) Amendment Act, 1960, and to 17 in 1977.
- In 1986, the strength of the top court was increased to 25, excluding the CJI. Subsequently, the Supreme Court (Number of Judges) Amendment Act, 2009 further augmented the strength of the court from 25 to 30.