

IAS PARLIAMENT

A Shankar IAS Academy initiative



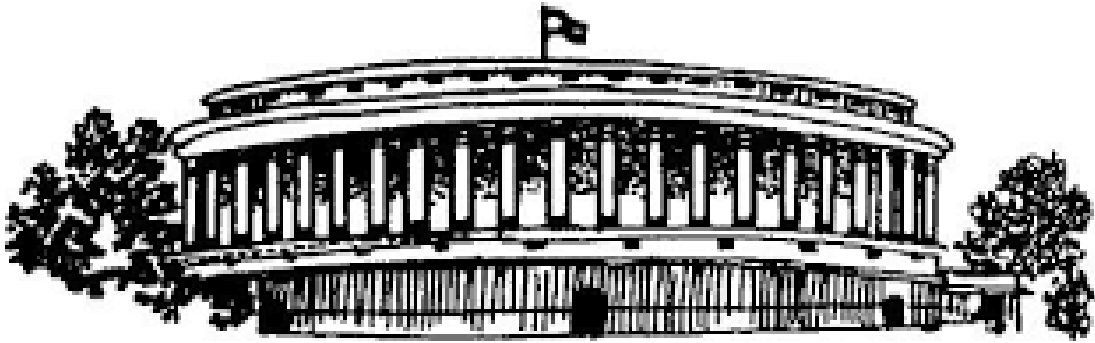
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JUNE 2017



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GS PAPER II

1. POLITY

1.1 NEED TO SCRAP SEDITION LAW

What is the issue?

The sedition law has been misused in recent times to suppress even minor dissent.

What is Sedition law?

- It was introduced in the 1870s, originally to deal with increasing Wahabi activities that posed a challenge to the colonial government.
- **Section 124a in The Indian Penal Code** made words or any visible representation that brings hatred or contempt, or excite disaffection towards the government punishable by law.
- Most of the penal code was retained intact after 1947.
- Despite demands to scrap it, the law of sedition remains enshrined in our statute book till today.

What is the need to scrap this law?

- Figures of the National Crime Records Bureau reveal that in the two years preceding the JNU case, there were a total of 77 sedition cases, of which only one resulted in conviction.
- But it is not rates of conviction but **the criminalisation of dissent** that makes the law draconian.
- **Legal process itself becomes the punishment.**
- So the slapping of sedition charges can be considered as an attempt to strong arm the protesters into submission.e.g An entire village in Kudankulam had sedition cases slapped against it for resisting a nuclear power project.
- It leads way to a totalitarian regime.
- It only serve to give a legal facade to the government's persecution of voices.
- It casts many legitimate protesters as anti-national.

1.2 SC'S CAUTION AGAINST USE OF 'GOONDAS ACT'

Why in news?

Supreme Court had recently struck down the detention of a man who had allegedly sold spurious chilli seeds in Telangana.

What are preventive detention laws?

- Preventive detention laws confer extraordinary discretionary powers on the executive to detain persons without bail.
- The period may extend to one year and courts tend to review them if the prescribed procedure was strictly followed.
- Several States have a law popularly known as the 'Goondas Act' aimed at preventing the dangerous activities of specified kinds of offenders.

What was the case about?

- The Telangana government invoked the stringent provisions of the Goondas Act against a district distributor of Genetic Seeds.

- The authorities had said the trader was harming poor, small farmers and jeopardising their safety and financial well-being.
- It stated that recourse to normal legal procedure would be time-consuming and would not be an effective deterrent against the sale of spurious seeds.
- The detention of Thirumurugan Gandhi, leader of the 'May 17 Movement', a pro-Tamil Eelam group, under the Goondas Act is also a brazen violation of their fundamental rights and another instance of abuse of the law.

What the Court's stand?

- The court termed this as a gross abuse of statutory powers.
- It has set aside the Telangana authorities' decision, calling it 'unsustainable'.
- It also said that the order was affecting the life and liberty of citizens.
- It also questioned the use of words such as "goonda" and "prejudicial to the maintenance of public order" as a "rhetorical incantation" solely to justify an arbitrary detention order.
- The Goondas Act is meant to be invoked against habitual offenders, but in practice it is often used for a various reasons.

1.3 BREACH OF PRIVILEGE OFFENCE

What is the issue?

- There is no codified laws for what constitutes a breach of privilege offence or prescriptions for punishment,
- This makes it **largely a grey area in legal terms.**

What happened recently?

- On June 21 2017, the Karnataka assembly Speaker ordered the **imprisonment of two journalists for a year.**
- It was based on recommendations in two separate reports of its privilege committees.
- It is seen as **an effort to throttle the media.**
- In Karnataka, over the years, prominent journalists have been summoned by privileges committees of the legislature.
- These motions have mostly ended with journalists apologising or clearing their stand and the committees have dropped proceedings after a few hearings.

What provisions protect the privileges of the legislature?

- **Article 105** pertains to the powers, privileges, etc, of Parliament, its members and committees while **Article 194**, protects the privileges and powers of the houses of legislature, their members and committees in the states.
- These sections **protect the freedom of speech of parliamentarians and legislators**, insulate them against litigation over matters that occur in these houses, and give powers to define the powers, privileges and immunities of a house, its members and committees

What constitutes a breach of privilege?

- There are **no clearly laid out rules** on what constitutes breach of privilege and what punishment it entails.
- In other words, these powers and privileges are not codified.
- In Karnataka, privileges panels often refer to ‘Practice and Procedure of Parliament’ by M N Kaul to define breach of privilege.
- The book states speeches and writing about the House or its committees or members can be punished as contempt on the principle that these actions “**tend to obstruct the Houses in the performance of their functions** by diminishing the respect due to them”.
- This ‘breach of privilege laws’ are often criticized for allowing **politicians to become judges in their own cause**, raising concerns of conflict of interest and violating basic fair trial guarantees.

1.4 ISSUES WITH FINANCE BILL 2017

What is the issue?

The cut down of tribunal autonomy by the finance bill 2017 has been a controversy.

What are the features of the bill?

- It was passed as a money bill and Raja Sabha cannot make any decisions on the bill.
- It is a bulk bill of 40 amendments to different laws, such as variety of existing taxation laws, use of Aadhaar, income tax returns and raids, caps in cash transaction.
- It laid the foundations for of the merger of several tribunals.
- The Bill included amendments to legislation on multiple subjects, in an attempt to rationalise the functioning of multiple tribunals.
- There used to be 26 tribunals but now they are down to 19.
- The Competition Appellate Tribunal will be merged with the National Company Law Tribunal.
- The Telecom Dispute Appellate Tribunal will also do the work of the Cyber Law Appellate Tribunal.
- The Airports Economic Regulatory Authority Appellate Tribunal.
- The tribunal relating to the Employees’ Provident Fund will be subsumed in the Industrial Tribunal.
- The qualifications, tenure, conditions of service, removal and emoluments of the chairpersons and members of these tribunals will all be under the control of the Centre.

Tribunals proposed to be merged by amendments to the Finance Bill, 2017		
Act	Tribunal being replaced	Tribunal to take over functions
Competition Act, 2002	Competition Appellate Tribunal	National Company Law Appellate Tribunal (under Companies Act, 2013)
Airports Economic Regulatory Authority of India Act, 2008	Airports Economic Regulatory Authority Appellate Tribunal	Telecom Disputes Settlement and Appellate Tribunal (under the TRAI Act, 1997)
Information Technology Act, 2000	Cyber Appellate Tribunal	
Control of National Highways (Land and Traffic) Act, 2002	National Highways Tribunal	Airport Appellate Tribunal (under the Airport Authority of India Act, 1994)
Employees Provident Funds and Miscellaneous Provisions Act, 1952	Employees Provident Fund Appellate Tribunal	Industrial Tribunal (under the Industrial Disputes Act, 1947)
Copyright Act, 1957	Copyright Board	Intellectual Property Appellate Board (under the Trade Marks Act, 1999)
Railways Act, 1989	Railways Rates Tribunal	Railway Claims Tribunal (under the Railways Claims Tribunal Act, 1987)
Foreign Exchange Management Act, 1999	Appellate Tribunal for Foreign Exchange	Appellate Tribunal (under the Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act, 1976)

What are the issues with the decisions on tribunals?

- There's no clear rationale behind this replacement, and seems to be rather arbitrary.
- The amendments make the independence of the tribunals questionable.
- Adjudicatory bodies under different laws cannot be abolished by a money bill.
- The reconstitution of the tribunals will be determined by the outcome of the legal challenge.
- The doctrine of separation of powers has been violated and the independence of judicial bodies compromised by the Finance Act.

1.5 END OF COMPAT

What is the issue?

- The government of India recently initiated the process of implementing its budgetary announcement of merging eight autonomous regulatory tribunals.
- As a part of the process Competition Appellate Tribunal (COMPAT) is now merged with the National Company Law Appellate Tribunal (NCLAT).
- It is done with the pretext that it would reduce cost and improve the efficiency and working of the quasi-judicial agencies.
- But there is little which suggests a consultation had taken place with the stakeholders before reaching this decision.

What are the concerns?

- There is a difference between how most of the sectoral regulators and their respective appellate authorities divide functions & responsibilities.
- The institutional capacity of COMPACT which was built in the last 8 years will be lost as all the pending cases will be transferred to NLCAT.
- It may need time to recoup the jurisprudence developed by its predecessor.

What should be done?

- Regulatory reform should be a top priority of any governance mechanism but it should be more than a mere *inter se* transfer of regulatory responsibilities of one agency to another incongruous one.
- Companies making investment decisions in India seek clear, predictable rules on how the country's antitrust regime shall function.
- Therefore, inconsistencies and frequent amendments in the Regulations can have major negative ramifications for the Indian economy.
- A regulatory assessment to determine the feasibility of merging non-congruous regulatory tribunals is essential.
- It should be done to ensure there is no detraction from the quality of the existing judicial decision-making functions of the replaced tribunals.

1.6 LANGUAGE POLITICS IN WEST BENGAL

Why in news?

GorkhaJanmuktiMorcha (GJM) renewed its demand for a separate Gorkhaland state.

What is the reason?

- GJM is a political party which campaigns for the creation of a separate state Gorkhaland within India, out of districts in the north of West Bengal.
- The recent protests started with the suspicion that Bengali would be made mandatory in the hills.
- Later it spiralled into a broad-based 'indefinite' agitation with the GJM targeting symbols of the state and ordering closure of all government offices.
- In May, Chief Minister of West Bengal had announced that all students would have to study Bengali from Class I.
- She later clarified that it would not be compulsory in the hill district of Darjeeling.

What should have been done?

- Language has been a fraught issue in the Darjeeling hills for more than a century.
- So the chief minister should have made the announcement without consulting the Gorkhaland Territorial Administration (GTA), the semi-autonomous body that runs the affairs of the hill town.
- Though later it was clarified that her government has no intention of making Bengali compulsory in schools in Darjeeling, the damage was done.

What is need for addressing the Gorkhaland?

- The Nepalese and Lepchas living in Darjeeling and the adjoining areas have a more distinct culture and history than the Bengalis in rest of the state.
- But since 1835 Darjeeling has been administered by the authorities in Kolkata.
- The agitations are also becoming costly for West Bengal and the country, economically and for other reasons.



How this conflict can be solved without bifurcation?

- Article 244 A provides for an autonomous state for certain tribal areas in Assam with its own legislature and council of ministers.
- By a small constitutional amendment, the applicability of this article can be extended to West Bengal even other states.
- This will enable the establishment of an Autonomous State of Gorkhaland, with a legislature and council of ministers within the existing state of West Bengal without bifurcating it.

What will be advantages of such decision?

- This solution will enable West Bengal to return to the path of development and welfare.
- The Autonomous State can concentrate on the aspirations and welfare of the people of the region.
- It can be an opportunity to secure all-round advancement of the STs, Scheduled Castes (SCs), and Socially and Educationally Backward Classes and the poor.
- This solution can be extended to other states where there is a demand for the formation of new states.
- But a massive drive to build public opinion, both among Nepali-speaking and Bengali-speaking people, has to be undertaken.
- The Nepali-speaking people must be told that an autonomous state will enable them to assume control over their future and development.
- Similarly, Bengalis should be assured that they will not lose Darjeeling, which will continue to be part of West Bengal while being the capital of the Autonomous State of Gorkhaland.

1.7 RATIFICATION OF CHILD LABOUR CONVENTIONS

Why in news?

India ratified two key global conventions on combating child labour.

What are the conventions?

- India ratified Conventions 138 and Convention 182.
- Convention 138 calls for the minimum age for employment not to be less than the age of completion of compulsory schooling.
- It is 14 years of age in case of India.
- Convention 182 calls for elimination of the worst forms of child labour.

What is the significance?

- India has ratified six out of eight core ILO conventions.
- Four other conventions were related to abolition of forced labour, equal remuneration and no discrimination between men and women in employment and occupation.
- Countries which ratify any of the ILO conventions have to go through a periodical reporting system every four years.
- So the government has to prove they are making progress.
- Conventions 138 and 182 of the United Nations body leave it to the member-states to determine what constitutes acceptable or unacceptable work for children at different ages.
- It will also ensure compliance of the government's 2016 legislation

What are the provisions of the act?

- The Central government had Child labour (Prohibition and Prevention) amendment Act, 2016.
- It banned the employment of child labour below 14 years of age in all occupations and processes.
- It linked the age of employment for children to the age of compulsory education under Right to Education Act (RTE), 2009.
- It prohibited employment of adolescents (14-18 years of age) in hazardous occupations.
- But children were allowed to "help" families in running their domestic enterprises after school hours.

- Given the sensitivities involved in monitoring activities within traditional households, effective enforcement will pose a challenge.
- Several industries were also declassified from being hazardous occupations.
- Rescue of vulnerable children is still uncertain.

2. GOVERNMENT POLICIES

2.1 COMMITTEE OF ADMINISTRATORS

What is the issue?

- The Supreme Court in January 2017 appointed a **four-member Committee of Administrators (CoA)** led by former Comptroller and Auditor General of India Vinod Rai.
- They were appointed to govern and reform cricket which was plagued by conflicts of interest and lapses in ethics.
- The SC had made the ruling on the basis of **Justice R.M. Lodha Committee's recommendations**.
- Now, six months later, the CoA is making news for the wrong reasons. And worse of all, the objective of the Lodha Committee recommendations still remains unaddressed.

Why it failed to achieve its objectives so far?

- The CoA's challenges and helplessness, have been exacerbated by the initially **stolid defence of the State bodies**.
- A case in point is the presence of N. Srinivasan at the special general meeting of the BCCI on June 26, 2017 on behalf of the Tamil Nadu Cricket Association.
- With one administrator (Mr Guha) already out, and another, due to leave shortly, Indian cricket now faces a crisis of leadership and confidence.
- There is also the issue of whether or not it will be supported, both financially and practically, by the BCCI and the State associations.
- Another issue being – the CoA deciding not to increase the overall remuneration percentage for domestic cricketers from 26% of the BCCI's revenue.
- The lingering **conflict of interest, ambiguity and insinuations** that led to the controversy of a 'superstar culture', also dragging in the duality of roles with the IPL as mentors, haven't helped matters either.

Why the success of CoA is important?

- **The future of reform in sports governance and administration** in India is dependent on the outcome of cricket's overhaul.
- The SC is already mulling a petition across numerous sports, asking for the Lodha Committee reforms to be adopted across federations.
- The recommendations have become the beacon for reform across sports, championing the cause of sportspersons, transparency, and ethics.
- But there will be reform elsewhere only on the basis of this precedent.
- If the CoA fails, then so may any future reform in any Indian sport.
- It might also stall the momentum of an imminent, revised national sports code and a vital national sports law.
- If a direct mandate from the SC putting the CoA in charge of the BCCI is unable to make any headway, then the code or statute will be even further away from implementation.

What is the way forward?

- The CoA needs clarity of thought and resolve, and must focus on its prime objectives, i.e., **the universal adoption of the Lodha Committee's recommendations**, making cricket transparent and protected from potentially harmful conflicts, and restoring cricket to its players and fans.
- With a finite specified tenure and mandate, and a clear path to eligible elections, a lot can be salvaged.

2.2 ISSUES WITH COAL ALLOCATION DECISIONS

What is the issue?

- The Union Cabinet took two important decisions aimed at streamlining coal allocation to the power sector and making it more transparent and objective.
- The decisions might address some near-term issues, but they are unlikely to cater to the future needs of the sector.

What was the first decision?

- The first decision was to approve the signing of **fuel supply agreements (FSAs)** by power plants holding letters of assurance (LoAs) and likely to be commissioned by March 31, 2022.
- This will assure such plants - **firm supply of coal** and will address the cases of many power plants not having a firm fuel supply in spite of excess coal availability.
- The reason for this paradoxical situation was that the existing policy only ensured FSAs for plants commissioned by March 31, 2015. Plants that did not meet this deadline had to rely on other mechanisms, to gain access to coal.

What is Shakti?

- The second decision was to approve a policy called Shakti (Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India) to **allocate coal to power plants without LoAs**.
- The government's move is likely to benefit 20,000 MW private-sector thermal capacities with **power purchase agreements (PPAs)**.
- The new policy will lead to gradual phasing out of the old one and is expected to bring 30,000 MW of locked capacity into generation.
- It also seeks to **alleviate the stress** that certain power units are under due to unavailability of linkages.
- It thus bodes well not just for the infrastructure sector but also for the public sector banks which have billions of rupees lying unpaid in loans given to the power companies.
- Coal linkages for power plants will be based on auction or through PPAs based on competitive bidding of tariffs.
- Power generation companies belonging to the **Centre and the states will not be part of the policy** as they will continue to get coal linkages as per the recommendations of the ministry of power.

What are the issues with Shakti?

- Shakti appears to be in **conflict with some pro-competition initiatives** of the coal and power ministries.
- As a result of Shakti, the burden of base load capacity addition might continue to fall on distribution companies (discoms) and this in turn would leave small consumers to effectively bear the cost.

- On the coal side, the ministry wants to **introduce commercial mining for coal**, and has been making statements to this effect.
- Since most of the upcoming capacity will be owned by the public sector, which will continue to get coal at notified prices from Coal India Ltd (CIL) under Shakti, CIL will be shielded from competition. This is at odds with the intention of introducing commercial mining.
- Shakti's architecture is also **skewed against private power generators**, as they have to bid for coal at a premium above the CIL-notified price unless they are willing to take a chance on other routes like buying coal from a commercial miner (if that exists).
- Given this distortion, discoms would find it easier to continue signing "cost-plus" PPAs with public sector generators.
- Since **small consumers will continue to rely on discoms** for their power supply, the inefficiencies of the public sector value chain shielded from competition will be passed on to their electricity tariffs.
- Effectively, under Shakti, the coal and power generation sectors will be fragmented along public and private sector lines, with **no competition between the two**.
- Also, most coal linkages will continue to be allocated to public sector generators based on "recommendations from the MoP".
- This would go **'against the grain' of making the allocations transparent**, unless the entire process is fully transparent.
- Thus, it appears, rather than powering the future of the electricity sector, Shakti is likely to hinder competition and discourage private sector participation, thus failing to meet the future needs of the power sector.

2.3 GOVERNMENT LITIGATION A KEY TO REDUCE PENDING CASES

What is the issue?

- Over 3 crore cases are pending in various courts in India—over 60,000 in the Supreme Court, 40 lakh in various high courts and 2.7 crore in various subordinate courts.
- The government's latest figures shows that 46% of cases are those involving the government, various PSUs and other bodies funded by the government.
- At the end of FY16, disputed cases in tax department alone involved a sum of over 6.8 lakh crore.
- Resolving atleast the government litigation will have a dramatic reduction of clutter in various courts.
- It would also free up considerable amount of resources, both within the government and the private sector, in terms of manpower as well as money.

Was the National Litigation Policy effective?

- The National Litigation Policy sought to transform government into an 'efficient and responsible litigant' with a nodal officer in each department whose job would be to curb frivolous litigation with the help of various regional empowered committees.
- Despite this, the average pendency in Indian courts remains 15 years instead of three, which was stated in the Policy.

How can the number of cases be reduced?

- If changes are to be brought in, it will have to be through an aggressive policy on mediation or arbitration and a policy rule that says the rulings will be challenged only under extremely trying circumstances.
- It is equally important to apply rules that take into account the likelihood of victory and the time consumed for each case.
- Groups can be set up in various ministries whose job is to examine all pending litigation and rank these on the basis of value and 'winnability', and then take a call on whether they should be carried on.
- Cases can be bunched on the basis of points of law like the SC and can be dealt accordingly.
- Similar parameters have to be put in for current cases since there is little point in fixing the stock if the flow is not dealt with.

2.4 IMPORTANCE OF COMMUNICATIONS POLICY

Why in news?

The RBI Governor announced that members of the Monetary Policy Committee (MPC) had refused an invitation from the Ministry of Finance for a private briefing.

What is the issue?

- What did the ministry want to share with the MPC which was not already available in the public domain? The answer probably is the official analysis of the data.
- The fact of the matter is that there is **no longer a robust communications policy**.
- Also, there is **inadequate economic research** emanating from official and institutional sources.
- While the RBI's detailed reports have become a pale version of what they used to be, the Finance Ministry's Economic Survey has become an overly theoretical tract.

What is happening in recent times?

- In recent years, with the world passing through a very uncertain economic period, communications policies and official publications have undergone a significant change.
- Traditionally, the Survey has been a rich source of information for economic analysts and officials. However, in the past few years, the Survey has been lacking in direction.
- The last Survey, released in January 2017, was more like a research-based conference volume with tentative propositions and hypotheses, but **very little by way of a review of the Indian economy**.
- Also, the Annual Report of the RBI has been shrinking and silent on many pertinent issues of the economy such as non-performing assets.
- The other statutory document, **Report on Trends and Progress of Banking (RTPB)** has become invisible, having been submerged into the Financial Stability Report (FSR).
- Last year, the RTPB was finally separated from the FSR, but was a shadow of its traditional size and quality.
- A similar story holds true for other research-based publications from the research wing of the RBI.
- **Centre for Advanced Financial Research and Learning (CAFRAL)**, was set up in 2011 to serve as a knowledge hub of the country.
- However, research output from CAFRAL has not gained prominence and respectability in both quality and quantity despite hosting a large number of foreign-based economists.

Why communications policy is important?

- The communication policy is expected to **cover four broad categories of issues** viz., interpretation of economic conditions including recent developments, content of policy decisions, strategy and outlook for the future.
- Globally, in recent years, the communications policy of governments has assumed significance, as **it promotes confidence in the policy regime.**
- The Indian economy is passing through a great transition.
- Ever since the new government took over, there has been a paradigm shift in economic policy.
- In such a transition, **communications policy through publications** seems worsening, when it should have been more transparent.
- The uncertain and tense economic environment is not conducive to growth.

2.5 NEW DIMENSIONS TO NATIONAL SECURITY

What is the issue?

Geo-politics, strategic and technological developments adds uncertainties and new dimensions to national security.

What are the recent trends?

- Recent trends show greater likelihood of **sub-conventional, hybrid and limited wars.**
- The nature of conflicts and the objectives of war are changing.
- New combat theatres, such as **cyber and space**, are emerging.
- The number of such conflicts has increased substantially in the last few years.

What is India's position?

- India has over 4,900 km of long **unresolved borders with two major neighbours**, whom both are nuclear armed.
- Over the years, they have established a strong strategic alliance against India.
- **With China:** In the last few years, China has extended its claim to the whole of Arunachal Pradesh.
- Already occupying Aksai Chin and Shaksgam part of Gilgit-Baltistan, it has shown **no desire to resolve the boundary dispute**, or even to delineate the line of actual control.
- The China Pakistan Economic Corridor (CPEC), if and when it succeeds, would affect our relationship not only with Pakistan, but also with Central Asia, and even Afghanistan, which has remained neutral so far.
- **With Pakistan:** In dealing with Pakistan, we now have to consider China, the US, and even Russia.
- China has been equipping Pakistan with strategic and conventional military capabilities.
- The US will continue to provide support to Pakistan, so long as it remains entangled in Afghanistan.
- The developing Russia-Pakistan military friendliness indicates that India can no longer take Russia for granted.

What are the important non-traditional security challenges?

- One - the lack of strategic and security awareness of our ruling elite;

- Two - **partisan politics over national security issues** which includes drawing the armed forces into political cross-fire;
- Our political leaders take little interest in long-term strategic and security issues other than rhetorical and emotional sound-bites.
- Three - **India's defence management.**
- The requirement to re-organise the Ministry of Defence, its business rules and appointment of a CDS has been recommended by the **Kargil Review Committee** in 1999, the Group of Ministers in 2002, and the Naresh Chandra Committee in 2012.
- It is essential to develop, prioritise and optimally employ inter-services capabilities and promote jointness in the armed forces.
- But vested interests and government unwillingness have successfully dodged this important national security challenge.
- Also, our **defence industrial base** will take 15-20 years to make up the armed forces' deficiencies with a reasonable level of modernisation.
- No country can stake claim to major power status unless it can design and produce a major proportion of the hardware required by its armed forces.

What could be done?

- On the internal security front, in recent years, cyber and space domains have added complexity.
- Any military cyber war infrastructure will have to **work inclose coordination with the National Information Board.**
- And, we require frequent updating of weapons, equipment, revision of security concepts and doctrines, greater level of jointmanship and synergy, and much faster decision-making.
- We need more **aware and abled political leadership** to handle both the external and internal factors, with soft as well as hard power, and with as much consensus as possible.
- Countering national security challenges and decision-making can no longer be dealt with in silos.
- These challenges require multi-disciplinary vertical and lateral consultations, and much faster decision-making.

3. SOCIAL JUSTICE

3.1 NEED FOR EDUCATIONAL REFORMS

Why in news?

PEW Research Centre in New York, a think-tank focusing on public issues released a research study with findings of a comparison of schooling standards in over 90 countries.

What does the study highlight?

- The study uses parameters prescribed by the UNESCO for assessing schooling standards, and number of years of schooling as the proxy for education accomplishment.
- It does not take into account the quality of education on offer.
- It focuses on "educational attainment" among the major religions of the world.

- It concludes that Hindus have the “lowest” level of “educational attainment” in the world.
- The “Christian” average is 9.3 years of schooling and “Buddhists” have 7.9 years.
- Muslims and Hindus of the world undergo 5.6 years of schooling against the global average of 7.7 years.
- It also points out that the Indian school educational system is at the bottom of the international league, along with Sub-Saharan Africa.

What similar studies highlights?

- **PISA** is the measurement standard adopted in Europe and utilised in a large number of countries.
- It also studied Indian school quality in two states.
- India ranked second last among 110 countries beating only Kyrgyzstan.
- India pulled out of the PISA study, thereafter.
- The **Annual Status of Education Report** conducted by Pratham, an Indian NGO, had assessed in 2014 that 75% of all children in Class III, over 50% in Class V and over 25% in Class VIII could not read texts meant for Class II.
- Reading levels for all children enrolled in government schools in Class V showed a decline between 2010 and 2012.
- **National Survey Sample** results in 2015 indicated sharp decline in learning outcomes in mathematics, science and English in the secondary schools.
- A recent study in Delhi has come out with the finding that only 54% of the city’s children can read something.

Where does the main problem lie?

- There is ample evidence that the Indian child is as good a learner as any in the world.
- Indian Americans are among the highly educated communities in the US.
- It is just sheer lack of basic opportunity that has kept the Indian child at very low education standards.
- The main problem is the abysmal quality of governance, with politics permeating every aspect of educational administration.
- Factors other than merit play a significant part in the management of affairs.
- Proper governance standards, with adequate incentives, and checks and balances, have not been put in place.
- The focus of the entire structure at the Centre and the states is on the minister, secretary, and the educational regulatory institutions.
- It is not focussed on the student, teacher, principal and school.
- The system is not “inclusive” and does not give a second chance to the weaker sections.
- The fundamentals of teacher management, teacher education and training as well as school governance and management are lacking at every step.
- The curriculum is rote-oriented and little practical thought has been given to pedagogy at any stage.

3.2 MULTIDIMENSIONAL POVERTY STATUS

Why in News?

- A survey conducted by Oxford finds that the country’s 217 million children, nearly 50% endure multidimensional poverty.

- About 31% of the world's "multidimensionally poor" children live in India, according to a new report by the Oxford Poverty and Human Development Initiative (OPHI).

What is importance of the issue?

- A "multidimensionally poor" child is one who lacks at least one-third of ten indicators, grouped into three dimensions of poverty: health, education and standard of living.
- The health dimension comprises indicators such as nutrition, child mortality, and education.
- Under standard of living are indicators such as access to cooking fuel, improved sanitation, safe drinking water, electricity, flooring, and asset ownership.
- In terms of the number of such multidimensionally poor children as a proportion of the total population, India stood 37th among 103 countries.

What is the way forward?

- In terms of absolute numbers, India accounts for both the highest and a staggering number of multidimensionally poor people.
- 528 million Indians are poor, which is more people than all the poor people living in Sub-Saharan Africa combined.
- multidimensionally poor children were "simultaneously deprived" in 58% of the indicators.
- the findings are "deeply disturbing", This is a wake-up call to the international community which has adopted the global Sustainable Development Goals and takes seriously Goal 1, the eradication of poverty in all its forms and dimensions.

3.3 GST - GENDER INSENSITIVE

Why in news?

- A 12 per cent tax on sanitary napkins has been imposed under the new GST regime.
- It is criticised as a tax on periods, rather than pads.

What's the issue?

- It is estimated that 355 million Indians are post-pubescent and pre-menopausal "females".
- Among this, a privileged minority (12-20 per cent) amongst them has access to pads. The rest rely on cloth, synthetic materials, sand, ash, even cow dung cakes to see them through their periods.
- One in four girls drop out of school when they start menstruating — girls miss as much as 20 per cent of the school year due to menstruation.

Why this is a deeper issue?

- Imposition of GST on pads is less about the increase in their cost than need for the blind promotion of gender norms.
- Indirect taxation regimes rely on distinctions between "essential" goods and "luxuries".
- With the given scenario, it ought to be obvious that pads, an aid to menstrual hygiene, cannot fall within "luxury goods", and should be exempt from taxes, in principle and practicality.
- This levy speaks to a lack of perspective in decision-making and the sad absence of feminist thought in the mainstream.

Whether taxing of pads is constitutional?

- Taxation is a powerful weapon with the State to mould behaviour and therefore it can be tested against constitutional norms.
- The imposition of GST on pads is incompatible with Article 15(1) of the Constitution as it is discriminating against women.
- Public spaces are not built to accommodate the menstruating body; a tax on pads feeds into this systemic disadvantage.

How the idea of women-hood blended into the GST?

- The statement made by the state in exempting kumkum, sindoor, bindis and bangles paints a picture of the ideal Indian woman as visibly married and Hindu.
- It appears that the GST Council has introduced the “male gaze” into the taxation regime where the reality of a menstruating body is decidedly un-holy in the Men’s gaze therefore the tax.

What are the arguments against exemption of tax on pads?

- The product is not indigenous to India, not comfortable, not sustainable.
- Reusable cotton rags could be hygienic and cost-effective.
- Whether pads are indigenous or not is no reason to deny them to Indian women as access to pads can be directly linked to access to healthcare.

4. GOVERNANCE

4.1 PAID NEWS

Why in news?

The Election Commission disqualified Narottam Mishra, Minister in the Madhya Pradesh government from membership of any State legislature and contesting polls for the next three years **for filing wrong accounts of election expenditure.**

What happened?

- The EC’s order cites **the issue of “paid news.”** Mr. Mishra had paid for favourable coverage in newspapers during the course of the elections but had failed to mention expenses incurred for the same.
- The candidate denies authorising the publication and takes the plea that he or she could not possibly account for something that was not paid for.
- So, in this case, the EC has taken the view that even if it were true that he made no payment, he should have included a notional amount in his accounts.
- Also, as long as the intention to boost someone’s prospects was clear (and there was no objection from the candidate), the EC can rule that there was **‘implied authorisation’**.

What is paid news?

- Paid news or paid content are those articles in newspapers, magazines and the electronic media, which indicate favourable conditions for the institution that has paid for it.

- The news is much like an advertisement but without the ad tag.
- This kind of news has been considered a serious malpractice since it deceives the citizens, not letting them know that the news is, in fact, an advertisement.
- Secondly, the payment modes usually violate tax laws and election spending laws.
- More seriously, it has raised electoral concerns because the media has a direct influence on voters.

Is paid news an electoral offense?

- Paid news is **not an electoral offence yet**, but there is a case to make it one.
- The EC has recommended that the Representation of the People Act, 1951, be amended to make the publishing or abetting the publishing, of **paid news to further a candidate's prospects or prejudicially affect another's an electoral offence**.

What should be the way forward?

- Mr. Mishra's case pertains to the 2008 election, and by the time the Commission has given its verdict he is into his next term.
- It is difficult not to notice that the enormous delay and is often created by candidates approaching the courts to stall inquiries.
- A legal framework in which electoral issues are expeditiously adjudicated must also be put in place if election law is to be enforced in both letter and spirit.

4.2 PROBLEMS WITH SMART CITY MISSION

Why in news?

The Ministry of Urban Development's released its fourth list under the Smart City Mission, taking the total number of cities picked under the Centre's flagship project to 90.

What is Smart City?

- There is **no universally accepted definition** of a smart city.
- The conceptualisation of Smart City varies from city to city and country to country, depending on the level of development, willingness to change and reform, resources and aspirations of the city residents.
- To provide for the aspirations and needs of the citizens, urban planners ideally aim at developing the entire urban eco-system, which is represented by the four pillars of comprehensive development-institutional, physical, social and economic infrastructure.
- This can be a long term goal and cities can work towards developing such comprehensive infrastructure incrementally, adding on layers of 'smartness'.

What are the concerns?

- A major share of the Centre's investment in the Mission will flow to well-developed pockets that account for less than 3% of the cumulative area of the cities.
- One of the objectives of the Smart City Mission was to act as a corrective to a lopsided developmental pattern.
- The mission intended to create employment and enhance incomes for all, especially the poor and disadvantaged leading to inclusive cities. This **emphasis on inclusive development has been diluted**.

- Only 26 of the cities selected have plans to provide affordable housing, education and medical facilities.
- The city development plans have not been aligned with some of the government's employment-generating initiatives.
- The government does have plans to promote start-ups and infrastructure projects. But these projects are concentrated in tiny pockets in the selected cities.
- Smart city plans have also **not found a way to deal with recurring problems.**
- For instance, Guwahati has no effective plan to deal with floods that ravage it every year.

4.3 ACTION PLAN FOR START-UPS

What is the issue?

- A year ago, the government launched its ambitious initiative for start-ups with an action plan containing 19 measures.
- However, the government's initiative has had an impact on only a small section of start-ups.

What should be done?

- **Self-Certification** - To facilitate ease of doing business, the government promised a compliance regime based on self-certification.
- It issued an advisory to states, union territories, EPFO and Employees' State Insurance Corporation offices not to inspect start-ups in the first year of set-up and, for the next three years, only with the approval of a senior officer.
- So far, only 12 states have confirmed compliance with the advisory.
- **IPR** - A fast-track, low-cost intellectual property regime was promised.
- Now, a list of more than 400 empanelled patent and trademark registration agents is published, and the government is supposed to pay them for services to recognized start-ups.
- However, there are only 1,006 such recognized start-ups that enjoy these benefits.
- **Innovation** - All start-ups, regardless of whether they are considered innovative by the government, should be able to enjoy these benefits.
- The government should not get into defining and deciding what innovation means.
- **Closure** - A critical measure to enable start-ups which could go on to fail is the ease of closure.
- The rules for voluntary liquidation are still in the works.
- They should be released and notified soon permitting start-ups to wind up business within 90 days.
- **Government Procurement** - The government is a huge buyer of goods.
- So central ministries and departments should be directed to relax the turnover and experience criteria for public procurement, so as to promote purchases from start-ups.
- The government instituted a Rs.10,000 crore fund-of-funds.
- So far, there have been only limited disbursements compared to the nearly Rs.16,000 crore start-up funding in 2016.
- Also, the details of the promised credit guarantee fund for start-ups are not out yet.
- Tax – An exemption from “angel tax” was announced.
- But so far only 13 start-ups have been certified for such tax benefits.

5. INDIA AND ITS NEIGHBOURHOOD

5.1 TENSION AT THE TRI-JUNCTION

Why in news?

Bhutan has protested to China over the construction of a road in disputed territory.

What is the source of the conflict?

- Doklam plateau is a 269-sq km plateau in Bhutan, which overlooks the strategic Chumbi Valley.
- The plateau is claimed by China.
- Bhutan has a written agreement with China that pending the final resolution of the boundary issue, peace and tranquility should be maintained.
- Now the construction of road raised concerns between Bhutan and China.



Why China is interested in the region?

- The road, which passes through Bhutan's territory, has significantly enhanced China's military logistics in the region.
- China is now in the process of extending the Beijing-Lhasa high speed railway line to Yadong, and is expected to begin test runs in less than two years.
- China was reported to have Pressured Bhutan by saying it would not agree to a border deal until Bhutan allowed it to open a diplomatic mission in that country.

How India and China relation is affected by it?

- The genesis the issue date back to the 1950, as tensions between China and India began to rise regarding the understanding of McMahon line
- The present clash is due to involvement of Indian troops to train Bhutan's armed forces.
- They are also deploys alongside the Royal Bhutan Army to patrol its frontiers against China.
- India has long had a presence along the Bhutan-China border.
- But it has never acted in defence of its ally's interests.
- China accused Indian border guards of crossing into its territory to stop the construction of the road.

What is china's stand on the issue?

- China describes the construction of the border road as "legitimate", maintaining that it was being built on Chinese territory that does not belong to India or Bhutan and no other country had the right to interfere.

- China also feels that Bhutan is an internationally recognised country and its sovereignty is to be respected.
- Even if the boundary is delimited, no third party should interfere and make irresponsible comments.
- India was likely intended to avoid drawing Bhutan into the controversy.

5.2 MADHESIS: FAITH IN DEMOCRACY

Why in news?

Nepal's Madhesis are seeking both grassroots democracy and state restructuring

What are the issues with Madhesis?

- A strong political movement seeking enlarged participation of the Terai in Nepal's politics and policymaking emerged in 2007.
- The Tharus, the largest group of original settlers of the terai region and do not like to get called as Madhesis.
- The Madhes has historically been part of the larger Mithila region and are slightly lesser than tharus population.
- There is a struggle for ethnicity, Identity and political sturdiness by the Madhesis
- Most of the Madhesis lives in Nepal Bordering Uttar Pradesh.
- On basis of this issue Nepal constitution as been amended many number of times.

What are the demands of the Madhesis?

- Federalisation is a desperate demand for recognition and inclusion.
- The Madhesis are expecting to meet their demands in a democratic way.
- They demand for opportunities in the government, the bureaucracy and the security forces.
- Few Madhesis parties, demand for amendments to be made to the Constitution before the Lok Sabha polls.

What are the hardships to attain the demands?

- The Community party had steadfastly opposed any change to the Constitution finalised in 2015.
- Specifically, amendments that would allow a redrawing of the provinces, as demanded by the plains-dwellers, the Madhesis.
- Many Madhesi parties are planned for boycotting the Lok Sabha polls.

What can be done?

- To meet their demands the Madhesis should contest in elections.
- This is why two other Madhesi forces the Federal Socialist Forum and the MadhesiJanadhikar Forum Loktantrik decided to participate in the elections.
- Madhesi faith in democracy must be secured with the promised amendments.
- India needs to help in safe guarding the Madhesis democratic interest.

5.3 DIAMER-BHASHA DAM PROJECT

Why in news?

China has offered to make a dam project on the Indus River.

Why it was rejected earlier?

- It was first announced in 2006.
- It is a \$14 billion dam project on Indus river in Pakitan-occupied Kashmir (PoK).
- The project is on Indus river in Gilgit-Baltistan in PoK.
- It is expected to generate a power output of 4,500 MW.

- It will also supply drinking water to Peshawar in addition to mitigating the danger of floods in Nowshera
- World Bank declined to fund the project as Pakistan refused to seek anNoC from India.
- ADB rejected considering the volume of funds required.

What is the current move?

- China had offered to bring Diamer-Bhasha dam project under the China-Pakistan Economic Corridor (CPEC).
- The decision was taken considering the fact that currently no mega hydel project was included in the CPEC.
- India is both against the project and CPEC as it runs through PoK, which is a disputed territory between India and Paksitan.

6. BILATERAL RELATIONS

6.1 INDIA EU FREE TRADE AGREEMENT

Why in news?

A European Court of Justice recently gave ruling regarding FTAs that might will have bearing on India-EU pacts.

What is ISDS mechanism?

- The European Commission negotiated an FTA with Singapore from 2010 to 2013 covering a wide range of issues including the investor-state dispute settlement (ISDS) mechanism.
- The ISDS provision gives investors a choice between bringing a dispute against a host state before the national court of the country where the investment has been made and submitting the dispute to international arbitration.

What is the recent case about?

- The European Commission and the EU member states disagreed as to who had the competence to ratify the FTA.
- European Court of Justice (ECJ) is the highest court in the EU in matters of EU.
- It decided that EU had the exclusive competence over almost all aspects of the FTA except non-direct foreign investment and the ISDS mechanism.
- In other words, for agreements containing non-direct foreign investment and/or ISDS provisions, EU member states enjoy mixed competence to approve such treaties.
- The court held that since the ISDS provision allowed the removal of the disputes from the jurisdiction of the courts of an EU member state, it could not be done without the consent of the member states.

What are the challenges for India?

- The 2016 Indian Model BIT requires a foreign investor to litigate in national courts for at least five years before approaching an international tribunal.
- This would also mean that all BIT disputes would be settled by the multilateral investment court (MIC) and not through ad hoc arbitration as India currently proposes in its Model BIT.

- Bilateral investment court system will be created with tribunal members being appointed for a five-year period and with an appellate mechanism.
- But the method of dispute resolution in the Indian Model BIT is based on ad hoc arbitration through party-appointed arbitrators though the possibility of creating an appellate mechanism is recognised.
- India should use the ECJ decision to rethink the best way of approaching the ISDS, such as whether it should move forward with the option of negotiating for a MIC.

6.2 INDIA - JAPAN NUCLEAR DEAL

Why in news?

Japan's Parliament, the Diet, had recently approved the India-Japan civil nuclear energy deal.

What is the significance?

- Japanese PM believes that nuclear exports are key to kick-starting the Japanese economy.
- 2008 waiver it received from the Nuclear Suppliers' Group so far has had limited tangible benefits for the country's power industry.
- This deal represents hope that it might finally begin paying off.
- It is also a necessity for enabling India's bilateral nuclear deals with other countries.
- Key elements of certain reactors like the AP 1000 and EPR, including safety components and domes, are a near-Japanese monopoly.

Has Japan lost significance in nuclear market?

- Circumstances in the nuclear industry are undergoing tumultuous changes.
- It makes the India-Japan deal less significant than it would have once been.
- Recent developments have diminished Japan's previously formidable nuclear capabilities.
- The most dramatic example is that of Toshiba, once a titan of the Japanese nuclear reactor industry that is currently struggling to stay afloat following the enormous losses.
- Hitachi Ltd., another nuclear heavyweight, also booked 'an estimated \$588 million write-down for fiscal 2016.
- The company said 'demand for nuclear fuel in the U.S. was unlikely to grow as strongly as had been expected'.
- In the aftermath of the 2011 Fukushima nuclear disaster, the nuclear industry is facing a global crisis.
- Stricter safety regulations have spiked the costs of constructing plants and 'some countries have become more cautious about new reactors.
- In Japan there has been no domestic construction on a new reactor for the past eight years.
- Hitachi, Mitsubishi and Toshiba are all focussing on repair and maintenance of existing plants rather than on construction of new ones.
- The emergence of cheap shale oil and gas has made competition in the energy sector tougher than ever.
- Wind and solar power generation are also growing as viable, alternative energy sources.
- According to the International Atomic Energy Agency (IAEA), just three nuclear reactors started construction worldwide last year, and only 51 were begun between 2010 and 2016.
- In contrast 20 to 30 new were being built every year in the 1960s and 1970s.

6.3 PM'S THREE NATION VISIT

Why in news?

Prime Minister completed his three-nation tour of Portugal, United States and Netherlands.

What are the outcomes?

- **Portugal** - PM met his Portuguese counterpart and signed 11 MoUs in areas including double taxation avoidance, investments, science and technology, and culture.
- The two nations have agreed to establish a joint science and technology fund worth 4 million euros.
- **U.S** - PM met with US President, following which the two nations issued a joint statement.
- He also interacted with the Indian diaspora as well as top US CEOs inviting them to invest in India.
- PM faced three imperatives in making U.S visit a success.
- **Establishing a personal understanding** with U.S President - Both the leaders established some personal warmth.
- But they should also move beyond their early affinity and identify global issues on which they can seek each other's advice and support.
- **To signal that the US-India relationship remains solid** -
- The joint statement reaffirmed an emphasis on cooperation in the Indo-Pacific maritime collaboration and articulated a common understanding of the terrorist threat.
- It also highlighted deepening defense ties, including a significant offer of Guardian UAVs.
- The UAV deal is significant because it required the administration to overcome a 'presumption of denial' under its MTCR obligations.
- But issues like India's concerns on the immigration process, H1B visa curbs and U.S' withdrawal from the Paris climate accord were not brought up.
- **To shape the new administration's view of regional challenges** - It is particularly related to that of China and Pakistan. Here the fruits of the summit are somewhat less clear.
- The joint statement reaffirmed the US-India strategic convergence in Asia.
- **On China** - It highlighted a shared concern over North Korea and posed a critique of China's Belt and Road Initiative.
- But it did not made it clear whether India and U.S have a similar view of the challenge that China poses to our shared interests in Asia.
- Without that common view, US-India defence cooperation could eventually wane.
- **On Pakistan** - US made a strong statement in the wake of the Uri attacks.
- It also designated Syed Salahuddin as a Specially Designated Global Terrorist.
- This might suggest that U.S is moving towards present Indian government's view of Pakistan.
- But it is yet to develop a complete South Asia strategy to address the problems of cross-border militancy from Pakistani territory.
- U.S still has numerous investments with Pakistan.
- It also cannot afford to alienate Pakistani when it is considering reinvesting in an Afghan peace process.
- For the US, the visit might mean finding ways to ensure that trade disputes are handled respectfully and involving in areas of strategic importance with ease.

- **Netherlands** - PM lauded the Netherlands for helping India successfully get a membership of MTCR.
- The Netherlands expressed its support for India's early membership to the 48-member NSG and the Wassenaar Arrangement.
- Netherlands also welcomed India's recent application for membership in the Australia Group and supported the country's bid for a permanent UN Security Council seat.
- MTCR membership enables India to buy high-end missile technology and also enhances its joint ventures with Russia.
- The aim of the MTCR is to restrict the proliferation of missiles, complete rocket systems, unmanned air vehicles and related technology for those systems capable of carrying a 500 kilogramme payload for at least 300 kilometres, as well as systems intended for the delivery of weapons of mass destruction (WMD).

6.4 SPECIALLY DESIGNATED GLOBAL TERRORIST

Why in news?

The US administration has declared HizbulMujahideen chief Syed Salahuddin a 'Specially Designated Global Terrorist'.

Who is Syed Salahuddin?

- He is a Kashmiri militant and **currently the chief of HizbulMujahideen (HM)**, one of several homegrown militant groups that have been operating from the Valley for decades.
- He is also the head of an alliance of anti-India militant groups, the United Jihad Council, that works to annex the Indian state of Jammu and Kashmir to Pakistan.
- He **contested the 1987 elections** from the Muslim United Front (MUF).
- Salahuddin lost the election, then alleged it had been rigged.
- Many Pakistanis think he is a well-educated Kashmiri from Srinagar who was forced to pick up the gun after the rigged in 1987.

What does the designation of global terrorist mean?

- Such categorisation is aimed at disrupting the financial support network for terrorists and terrorist organisations.
- It deters donations or contributions to designated individuals or entities.
- The designation also authorises US government to block the assets of foreign individuals and entities that commit or pose a significant risk of committing acts of terrorism.
- It also **increases public awareness** and knowledge of individuals or entities linked to terrorism.

How is the list different from the UN's sanction list?

- A UN designation is recognised by all countries and is considered a **non-partisan global sanction**.
- Whereas, the US designation is limited only to the United States.
- India had sought the UNSC's global terrorist designation for Syed Salahuddin but the move was blocked by China.
- Although the US sanction is confined to that country, it can compel other Western countries to follow suit.

What significance does this hold to India?

- This is the first time a Kashmiri militant has been designated a “global terrorist”.
- By branding Syed Salahuddin as SDGT, the US has accepted that HM is not an “indigenous terror group” in Kashmir and poses a greater threat to the world, even though the outfit has confined itself to the Kashmir Valley.
- The US move is a recognition of India’s longstanding position that **cross-border terrorism is behind the crisis in Kashmir**.

6.5 INDIA-MYANMAR JOINT TRADE COMMITTEE MEETING

Why in news?

The 6th India – Myanmar Joint Trade Committee (JTC) Meeting was held recently at New Delhi.

What is the importance of Myanmar?

- Myanmar is India’s gateway to South East Asia and ASEAN with which India is seeking greater economic integration through ‘Act East’ Policy.
- Myanmar shares a long land border of over 1600 Kms with India as well as a maritime boundary in the Bay of Bengal.
- Trade and Commerce play a significant role in the bilateral relationship of the two countries.
- India’s trade with Myanmar grew by 6.01% from USD 2.05 bn in 2015 -16 to USD 2.18 bn in 2016-17.

What are the highlights of the meeting?

- India sought the cooperation of the Myanmar side in actively pursuing **enhanced road, sea and air connectivity** between the two countries.
- Highlighting the progress made by India in various components of the **Kaladan Multimodal Transport Project**, India sought the cooperation of the Myanmar to speed up the work.
- The Kaladan Multi-Modal Transit Transport Project is a project that will connect the eastern Indian seaport of Kolkata with Sittwe seaport in Myanmar by sea.
- It will then link Sittwe seaport to Paletwa in Myanmar via Kaladan river boat route and then from Paletwa on to Mizoram by road transport.



- India also called for swift negotiation of a Motor Vehicle Agreement bilaterally which would facilitate seamless movement of cargo vehicles.

- **Border Haats** -India sought the cooperation of Myanmar side in quick finalisation of the Mode of Operation (MoO) for making the Border Haats functional on the 'India-Myanmar border'.
- It was noted that 10 points spread across 4 states viz., Arunachal Pradesh, Mizoram, Nagaland and Manipur, have been identified for operationalising Border Haats.
- Both sides also agreed to explore opening of two new Border Trade Points at Pangkhuwa and Zoninpuri.
- Comprehensive MoUs would be explored in areas of Health Care and Textiles.
- The MoUs on capacity building between RBI and CBM and on cooperation in the field of Power Sector will be operationalised quickly.
- The proposed MoU between RBI and Central Bank of Myanmar on currency exchange rate fixation also needs to be expedited.

6.6 GLOBAL SCIENCE INNOVATION ADVISORY COUNCIL

Why in news?

Visiting Malaysian PM who presided over Global Science Innovation Advisory Council (GSIAC) said India to reap its demographic dividend has to renovate and reinvent its education system.

What is GSIAC?

- GSIAC is a joint initiative between the Malaysia Industry-Government Group for High Technology (MIGHT) and the New York Academy of Sciences.
- The New York Academy of Sciences is the world's nexus of scientific innovation in the service of humanity.
- For nearly 200 years—since 1817—the Academy has brought together extraordinary people working at the frontiers of discovery and promoted vital links between science and society.
- Academy's Membership has featured leaders in science, business, academia, and government, including U.S. Presidents .
- Today, the Academy President's Council includes 30 Nobel Laureates as well as CEOs, philanthropists, and leaders of national science funding agencies.
- One of their programmes includes Scientists without Borders.

What reform needed in India's education sector?

- First, our streams of education should change.
- We need inter-disciplinary approaches in education.
- But, our current regulatory systems do not provide this space though a large number of private universities are attempting to play the game.
- Second, a lot is said about experiential learning.
- But we have not ensured that our teachers and research guides un-learn and re-learn how to impart such experiences.
- Mostly, these approaches stop at the level of advertisements.
- Third, self-learning and peer-learning has to be promoted.
- Examination based education will compromise our abilities to design jobs for the future.
- This needs support from parents, teachers (read mentors), prospective employers and policymakers.
- Finally, we need education and training that responds to societal needs and challenges.

- If artificial intelligence is to rule the science and technology world in the next few decades, we cannot be training students in age-old subjects.

6.7 INDIA RUSSIA MEET

Why in news?

Indian Prime Minister and Russian President Vladimir met at an economic forum at ST.Petersburg.

What were the deals signed?

- They released a vision document strongly condemning terrorism in all its forms and asserted willingness to fight menace.
- They called for an end to cross-border movement of terrorists. They asserted that a decisive collective response from the international community without “double standards and selectivity”.
- An agreement on setting up two more units of a nuclear power plant in Tamil Nadu was signed.
- Russia would also loan India \$4.2 billion to help fund construction
- India and Russia also decided to give a “new direction” to the defence cooperation between the two “great powers”.
- They also decided to hold the first tri-Services exercises, named ‘Indra-2017’.
- A joint manufacture of frigates, adding to the co-production of Kamov-226 military helicopters is also planned.

6.8 MAJOR DEFENCE PARTNER

Why in news?

The U.S. recognises India as a major defence partner.

What is the significance of the recognition?

- India is not a treaty partner of the US i.e not a formal alliance partner with close cooperation with Washington e.g Japan and Australia.
- It is also not a part of the NATO. e.g Britain.
- But this move brings India at par with that of these closest allies of U.S and ensures enduring cooperation into the future.
- Procurement of weapons’ systems, spares for those that are already in the Indian inventory and the transfer of technology are expected to get smoother.

Why did U.S make such a move?

- Challenges like maritime security and the spread of terrorism are growing in Southeast Asia.
- So by empowering countries in the region U.S can maintain peace and stability in the region and address its own interests.
- U.S said that it is partly out of respect for India’s role in maintaining stability in the Indian Ocean region.

6.9 INDIA’S LAW ON ANTARCTICA

Why in news?

India is drafting new legislation on Antarctica.

What is the need?

- In future, Antarctica might see more tourists, over-exploited fisheries, disputes and crime.
- India is also expanding its infrastructure development in Antarctica.
- DakshinGangotri, the first Indian base established in 1984, has weakened and become just a supply base.
- The government is rebuilding its station, Maitri, to make it bigger and long lasting.
- Keeping this in mind, India is drafting a dedicated Antarctica policy and a law.
- India also acceded to the Antarctica Treaty.
- So it is expected to have a clear policy on the consequences of its activities in the region.
- Ministry of Earth Sciences is tasked with drafting the law.
- Countries like South Africa and Australia already have specific laws.

What is Antarctic Treaty?

- The treaty is framed to ensure that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene of international conflict.
- It prohibits military activity, except in support of science.
- It also prohibits nuclear explosions and the disposal of nuclear waste.
- It promotes scientific research and the exchange of data and suspends all territorial claims.

Quick Facts**Signing a treaty**

It is a means of authentication and expresses just the willingness of the signatory state to continue the treaty-making process.

Ratification

It indicates the state's consent to be bound to a treaty if the parties intended to show their consent by such an act.

Accession

- It is the act whereby a state accepts the offer to become a party to a treaty already negotiated and signed by other states.
- It has the same legal effect as ratification except that it occurs after the treaty has entered into force.

7. INTERNATIONAL ISSUES**7.1 ASIA AFRICA GROWTH CORRIDOR (AAGC)****Why in news?**

- An annual meeting of the African Development Bank (AfDB) held recently in Gandhinagar, Gujarat.
- Prime Minister released a vision document on the "Asia Africa Growth Corridor (AAGC)".

What is AAGC?

- It is a study jointly produced by three research institutions of India and Japan in consultation with other Asian and African think tanks.

- It envisages closer engagement between India and Africa for “sustainable and innovative development”.
- It will be anchored to four pillars -
 1. Development and cooperation projects;
 2. Quality infrastructure and institutional connectivity;
 3. Enhancing capacities and skills and
 4. People-to-people partnership.
- It will accord priority to development projects in health and pharmaceuticals, agriculture and agro-processing, disaster management, and skill enhancement.
- It will have special focus on Africa, India and South Asia, Southeast Asia, East Asia and Oceania.

How it is different from China's OBOR?

- The approaches of India and China towards Africa are essentially different.
- China concentrates on infrastructure and cheque-book diplomacy, whereas India promotes a broader spectrum of cooperation projects and programmes focussed on the development of Africa's human resources.
- China goes solo, while India is desirous of working with other willing nations to assist Africa as per the latter's priorities.

What should be done to make AAGC effective?

- China is rapidly expanding its footprint in Africa.
- So India and Japan do not have the luxury of time.
- India and Japan should immediately initiate a few joint pilot projects involving the companies of India, Japan and a few African countries in identified areas such as health care, agriculture and blue economy.
- They should increase the scope of their development projects, create synergy among themselves and engage proactively with other willing partners.

7.2 QATARI CRISIS

Why in news?

Qatari nationals are now officially on notice to leave neighbouring countries due to an unprecedented diplomatic freeze of the nation by key allies and neighbours.

What is the immediate trigger for this crisis?

- According to Gulf News, the emir of Qatar called Hezbollah a legitimate resistance movement and called Iran a "big power in the stabilisation of the region" and said that there was "no wisdom in harbouring hostility toward Iran".
- It was published by the Qatar News Agency (QNA).
- However, Qatar's government communications office claimed that QNA had been hacked.
- The broad reason given for this drastic move is that the emirate poses a threat to their national security and they have accused the Gulf state of supporting terrorism.

What is the background of the issue?

- Gulf allies have repeatedly criticized Qatar for alleged support of the Muslim Brotherhood, a nearly 100-year-old Islamist group considered a terrorist organization by Saudi Arabia and the UAE.
- The UAE accused Qatar of "funding and hosting" the group in its statement announcing the severance of ties.

- The rift is also driven by the belief that Qatar is too closely aligned with Iran.
- The diplomatic crisis came two weeks after Saudi Arabia, the UAE, Bahrain and Egypt blocked several Qatari media outlets.

How this will affect Qatar and rest of the world?

- Qatar is rich in oil and gas but it doesn't really produce its own food -- almost all of comes from Saudi Arabia. Now the borders have been shut, food prices could skyrocket.
- Qatar Airlines is a major global airline but it's no longer allowed to use the airspace above Saudi Arabia, Egypt, Bahrain and the UAE.
- This causes raising of fuel costs, flight times and potentially ticket prices.
- Qataris are a minority in their own country it's home to as many as two million foreign workers, mainly from India, Nepal, Bangladesh and the Philippines.
- Any kind of instability in the Middle East tends to send up oil prices, and the longer prices stay high.
- Qatar is the world's biggest LNG exporter. It has pipelines in the Gulf and could retaliate but cutting off supplies to its neighbours.
- The diplomatic crisis is also the latest complication for the 2022 World Cup, which Qatar is preparing to host.
- The tournament is already facing allegations of worker misconduct, and it had to slash the budget for the soccer tournament by more than 40% because of the falling price of oil.

How this crisis would affect India?

- Qatar has a high number of foreign workers, and most of them are from India, there are over six lakh Indian workers in Qatar.
- Ministry of External Affairs is trying to assess who and how many are stuck in the middle, and then It will make a move.
- Securing the Indian diaspora in the Gulf is, of course, of paramount importance.
- India must, however, look at the current crisis, and West Asia and North Africa as a whole, from a broader prism than just Indian labour in the region.

7.3 UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL

Why in news?

The India got re-elected for another three-year term on the Economic and Social Council (ECOSOC).

What is ECOSOC?

- It is one of the six principal organs of the United Nations.
- It guides sustainable development policies and coordinates the activities of several UN units and organisations working development and social and economic issues.
- The Council's 54 member Governments are elected by the General Assembly for overlapping three-year terms.
- Seats on the Council are allotted based on geographical representation.
- 11 of them are allotted to Asian states.
- For the nations to be the elected members of ECOSOC for a three-year term, it needs two-thirds majority of UN General Assembly votes.

- India was seeking re-election as its current term is set to expire this year.
- It received backing of the Asian and Pacific group of nations and secured 183 of the 188 votes to serve again.
- NeeruChadha was also elected a judge of the International Tribunal for the Law of the Sea in a measure of its influence at the UN.

7.4 MACEDONIA GREECE CONTROVERSY

Why in news?

Macedonian Foreign Minister formally requested the government of Greece for help in Macedonia's bid to join the North Atlantic Treaty Organisation (NATO) and the European Union.

Why Macedonia is approaching Greece?

- Greece was stonewalling all efforts by Macedonia to join the two organisations for a long time.
- In 2004, the Republic of Macedonia had submitted its application for membership of the EU.
- The EU accepted the application in 2005.
- But Greece objected saying Macedonia's name implied a territorial claim on the northernmost Greek province of the same name.
- Membership negotiations cannot start until all EU governments agree, in the form of a **unanimous decision by the EU Council**, on a framework or mandate for negotiations with the candidate country.

Why Greece was objecting?

- Over the past three decades, Greece has been accusing Macedonia neighbour of "cultural theft".
- Macedonia seceded from Yugoslavia and became a sovereign state by a popular referendum held in September 1991.
- Greece immediately demanded from the international community not to recognize the country under its name Macedonia.
- Greece alleges that -
 1. The Macedonians should not be recognized as Macedonians because the Macedonians have been of Greek nationality since 2000 BC.
 2. Those Macedonians whose language belongs to the Slavic family of languages, must not call themselves Macedonians because 4000 years ago, the Macedonians spoke Greek and still speak nothing but Greek.
 3. Macedonia has no right to call itself by this name because Macedonia has always been and still is a region of Greece.



- In the early 1990s, Greece blockaded Macedonia's southern border, in part to protest Macedonia's use of the symbol - Vergina Sun in their national flag.
- Greece lodged a claim for trademark protection of the Vergina Sun as an official state emblem.

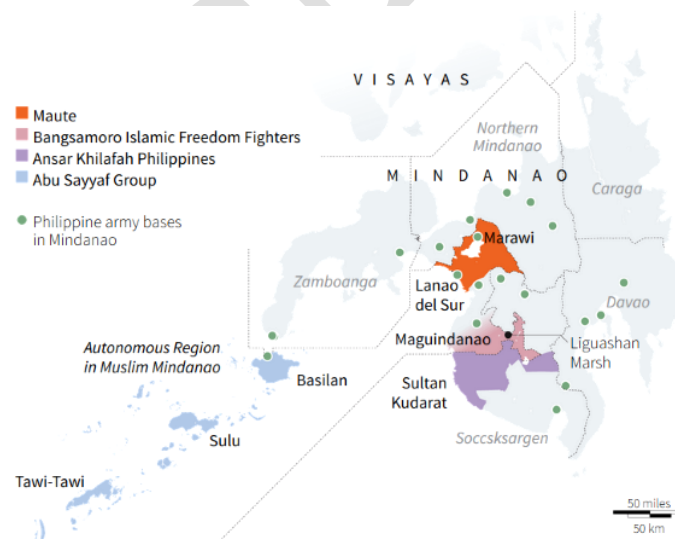
7.5 MARAWI SEIGE

Why in news?

The city of Marawi has been engulfed by a deadly, ongoing siege since late May.

What is the reason for conflict?

- Marawi City, is the capital and the largest city of the province of Lanao del Sur on the island of Mindanao in the Philippines.
- Marawi siege started in May 2017 when Philippine government security forces began to take on heavily armed militants linked to the Islamic State.
- Militants also include the Maute and Abu Sayyaf Salafi jihadist groups.
- The siege is also aimed to capture or kill Isnilon Hapilon.
- Hapilon is the leader of the Abu Sayyaf Islamist group who was named emir of the "Caliphate" in Southeast Asia by IS head Abu Bakr al-Baghdadi in 2016.
- Philippine President declared martial law across the island for 60 days.
- Some blame the political leadership for ignoring the rise of the IS. e.g Philippine President rejected a ceasefire offer from the Maute group.
- This group is on the front lines in the fight against the Philippine military in Marawi.



What is the present situation?

- The death toll is estimated to be above 300.
- Over 200,000 residents have fled what has effectively become an urban battlefield.
- U.S' military advisers and intelligence analysts have been deployed to aid Philippines.
- Rebels still control key areas.

- Many civilians remain in the area, complicating any planned government assault.

What is the significance?

- IS jihadist have set Singapore as a target in their publications and videos.
- Malaysia faced its first IS attack when a grenade injured eight people at a nightclub near Kuala Lumpur.
- As the world's largest Muslim-majority country, Indonesia is concerned that IS members could easily infiltrate.
- So the present war has political significance throughout the region and beyond.
- It is also seen as a move by Mr.Duterte's to divert attention beyond the infamous brutal drug war that his government has waged.
- Nevertheless, now Mr.Duterte is aiming to bring the battle to a quick, decisive end, and if necessary, to resume negotiations with some groups.
- Tackling the humanitarian crisis created by this conflict depends on these negotiations and on relief efforts.
- Mindanao has been rocked by armed insurgency for years. So to prevent future crisis the long neglect of Mindanao should be ended.

7.6 FINE ON GOOGLE

Why in news?

The European Commission found that **Google abused its dominance** in the Internet search market to give itself an unfair advantage via comparison shopping services and slapped \$2.7 billion fine.

What happened?

- Google's comparison shopping service disadvantaged competitors by **placing them lower in its search results**.
- It systematically gave Google's own services higher placement and greater visibility, leading to more clicks.
- The fine is unlikely to pose financial problems for Google. So, the Commission has said, that it would leave it to Google to remedy the situation.

How important is the verdict?

- The ruling could guide future decisions on complaints around Google favouring its own products and services via its search engine.
- The old idea that **market power cannot be used to stymie competition**, a result of which is a lowering of consumer choice and welfare, is good even when the market is new and changing rapidly.
- The White House refrained from getting involved after the EU fined Google.
- While technology is constantly changing, valuing choice, competition and consumer welfare never gets outdated or obsolete.

7.7 U.S WITHDREW FROM PARIS AGREEMENT

Why in news?

U.S withdrew from the 2015 Paris climate agreement.

Why is U.S pulling out?

- The new U.S administration is of the view that the Paris agreement as a deal is aimed to disadvantage and impoverish the US.
- U.S said that it would cost the US \$3tn in lost GDP and 6.5 million jobs while rival economies like China and India were treated more favourably.

What is the importance of U.S?

- The 'domino effect' is forcing a few other countries to follow suit.
- US payments to the UN Green Climate Fund, which helps developing countries cope with the effects of climate change, will stop.
- During 2010-15, the US significantly increased its climate-related spending and outward investment in developing countries.
- It committed nearly \$15.6 billion on bilateral programmes for promoting clean energy, sustainable infrastructure and land use.
- This by itself is a threat to keeping global warming within safe levels.
- U.S. is also not likely to fulfil its obligation to provide support for the implementation of NDCs by other countries.
- Therefore, not just the U.S., but other countries too may fail without the means to implement their proposals.

GS PAPER III

1. ECONOMY

1.1. MUNICIPAL BONDS IN INDIA

What is the issue?

- Pune Municipal Corporation recently succeeded by issuing municipal bonds.
- It may not be easy to replicate, but it can serve as a role model for local bodies.

What is municipal bond?

- A municipal bond is a debt security issued by a state, municipality or county to finance its capital expenditures, including the construction of highways, bridges or schools.
- Municipal bonds are mostly exempt from federal taxes and from most state and local taxes, making them especially attractive to people in high income tax brackets.

What is the history of municipal bonds?

- Between 1997 and 2010, the city corporations of Ahmedabad, Nashik and Bengaluru experimented with bond issues but barely managed to raise ₹1,400 crore.
- The poor investor response was due to the fact that these bonds were not tradable and lacked regulatory clarity.
- SEBI's detailed guidelines for the issue and listing of municipal bonds in March 2015, clarified their regulatory status and rendered them safer for investors.

What is the recent incident?

- The municipal bond market in India is coming alive with
- Pune Municipal Corporation (PMC) raised ₹200 crore in the first set of a proposed ₹2,264-crore offer.
- It also listing the bond on BSE recently.
- It is a ten-year bond offer carrying a coupon of 7.59%.
- It received a good reception raising hopes that future offers will be well-received.

What is the significance of municipal bond market?

- The take-off of the municipal bond market is critical for India's large cities and towns to upgrade their creaking infrastructure.
- The ability of municipal bodies to be self-sustaining is also critical to the success of the Centre's pet projects such as Smart Cities and AMRUT.

1.2 CAPITAL GAINS TAX

Why in news?

The Centre has notified new rules on capital gains tax.

What is capital gains tax?

- Capital assets are those that generate income like property, precious metals, stocks and bonds.
- A capital gains tax (CGT) is a tax on the profit obtained on the sale of capital assets.

What are the new rules?

- Under the previous provisions of the Income Tax Act, unaccounted income can be declared as exempt long-term capital gains by entering into fake transactions.
- An amendment has been made in the Finance Act 2017 to curb it.
- This notification specifies the transactions on which the tax would apply and those on which tax would be exempt.
- The new rule specifies equity transactions that will attract capital gains tax if securities transaction tax (STT) was not paid on them.
- It include –
 1. acquiring existing listed equity shares through a preferential issue in a company whose shares are not frequently traded,
 2. transactions off the stock exchange and
 3. acquisition during the delisting period of the company.

1.3 FINANCIAL RESOLUTION AND DEPOSIT INSURANCE BILL

Why in news?

The Union Cabinet has approved the Financial Resolution and Deposit Insurance (FRDI) Bill, 2017 to be introduced in the Parliament.

How it is different from IBC?

- This Bill is similar to the Insolvency and Bankruptcy Code, 2016.
- Both of these are about issues that can arise when companies go bankrupt or insolvent.
- The difference is that the Bill deals only with the companies that are in the financial sector entities such as banks and insurance companies..
- The insolvency code Act deals with companies in all other sectors.

What does the bill seek?

- It seeks to protect customers of financial service providers in times of financial distress.

- It aims to inculcate discipline among financial service providers by limiting the use of public money to bail out distressed entities.
- It would help in maintaining financial stability in the economy by ensuring adequate preventive measures.
- It also aims to strengthen and streamline the current framework of deposit insurance for the benefit of retail depositors.
- A resolution corporation will be setup to strengthen the stability and resilience of the financial sector.
- Finally it seeks to decrease the time and costs involved in resolving distressed financial entities.

1.4 DIVERGENT VIEWS OF CREDIT POLICY

Why in news?

- The fifth meeting of the Monetary Policy Committee (MPC) held on June 6 and 7.
- For the first time, it broke with unanimity and also went against widespread industry aspirations of a policy repo rate cut.

What is the background of the issue?

- The unanimous approach towards the rate cuts has been replaced by an exchange, if not a clash of contrary views.
- The concern is of members now doing their own leap, coming as they do from different backgrounds, so that divergent.
- The members placed on record that the readings on “a clear declining trend” in inflation.
- Contrary to that of the RBI, as actual inflation had turned out to be lower than the latter’s projections.
- There is a wait and watch scenario in the decisions made.

What are the concern with the decisions taken?

- The question on how the meeting is likely to influence market perspectives, particularly since there isn’t any clear forward guidance provided as a holistic view of the Committee as a whole.
- There remains a larger risk of a policy decision arising out of a melange of views that prosecute individually held or ideologically driven opinion.
- The “output gap”, which is the actual output minus potential output, and is an important measure to help a central bank assess short-run inflationary pressures.
- A negative gap calls for an expansionary monetary policy, which in this case means a policy repo rate cut.
- An output gap calculated on data for 2016-17 that profile a slowdown will, by definition, be negative and wider than otherwise.
- For an economy that is projected to grow at 7.3 per cent in 2017-18, however, it must be the case that the output gap would narrow and close.
- These are very divergent views, and they might indicate a reiteration of held positions, rather than a discussion in which the two convince each other.

What is the way forward?

- The quiescent investment cycle remains a key macroeconomic concern and there are most critical aspects of the monetary policy.

- Even if a rate cut is offered, a likely scenario is that banks will not reduce the lending rate, or make very minor changes and will take up the “wait and watch” approach.
- But they will be tempted to cut the deposit rate further, this brings some unintended and undesirable results for a policy that is meant to boost the dormant investment cycle.
- The members are in hurry for a policy repo rate reduction, mirroring what possibly is a view that is usually said to be held by the government wanting a booster for the economy.
- Hence there is a good clash of ideas building up, bringing a new kind of dynamic to the RBI.

1.5 NEW EXIM REGIME

What is the issue?

Exporters will benefit from the subsuming of 17 central and state taxes in the GST and a comprehensive set-off of input tax on goods and services.

How will GST help Export and Import?

- The provisions in GST would reduce the cost of manufactured goods and services and make exports competitive.
- In addition, the exports will be exempted from payment of GST and, if paid, the tax would be refunded.
- This tax exemption/refund policy is in keeping with the WTO rules that say no taxes should be exported.
- Accordingly, exports have been treated as “zero-rated supply” under the IGST Act.
- Supplies made to a SEZ developer or SEZ unit have also been accorded the same status.
- Exporters can avail credit of the input tax on the inputs procured for the production of such zero-rated supplies.
- An exporter would get the refund of GST paid on inputs and exemption from payment of GST on the final product.
- It has been agreed that 90 per cent of the refund amount would be granted within seven days of the filing of an application.
- Refund of the balance would be granted after verification of documents.
- The GST route of refund on taxes paid would not be available to exporters who procure goods from the firms (a) not registered with GST on account of low turnover, or (b) opting for GST under the composition scheme.
- Import will be treated as inter-State supplies and IGST will be levied as the additional duty of customs in addition to the basic customs duty on import.
- Customs duty will now have only two components in most cases: basic customs duty and IGST.
- However, other duties such as anti-dumping or safeguard duties, etc., wherever applicable, will be levied as before.
- Tax paid (IGST) on imported goods will be eligible for credit as input tax credit to the importer.
- GST would affect the efficacy of all export promotion schemes.
- Till now, the facility of exemption from the payment of all duties is available to exporters under export schemes like Advance authorisation or the Export Promotion Capital Goods.
- Post GST, the exemption only from the basic customs duty would be available.
- Similarly, 100 per cent Export Oriented Units would lose the duty exemption privilege and be like any DTA unit that will get exemption only from payment of basic customs duties on exports.

- Also, no supplies would be treated as deemed exports.
- This means the supplies to EOU/STPI/mega power projects that are currently exempt from central taxes will become taxable.
- The new Duty Drawback scheme under GST will refund only the Basic Customs Duty and Central Excise duty paid on the exempted inputs.
- But the exporter would pay GST at the time of buying of inputs and will get the refund after the exports that would take place after 6-12 months.
- High-interest rates would increase the working capital cost and make exports expensive.
- However, these increased expenses would be partly offset by the lower tax rates and reduced cascading effect.

1.6. WHY MNES NEED TO RECALIBRATE THEIR STRATEGIES?

Why in news?

- India recently signed a multilateral pact that would help it gain a better understanding on the way multinational enterprises (MNE) structure their operations around the world and allocate incomes and taxes paid.

What is the issue?

- The Base Erosion and Profit Shifting (BEPS) project represents a number of coordinated actions agreed upon by several countries, intended to avoid double “non-taxation” that comes to be when companies take recourse in tax treaties.
- However, its implementation and consequences go well beyond that and touch aspects of businesses that require MNEs to draw up a different set of strategies and restructure operating models.

What is the need of BEPS?

- The BEPS project is a response to several developments in the global economy that existing tax treaties had not envisaged, in addition to the overarching nature of the technological advances that allowed MNEs to conduct their businesses legitimately without significant presence on ground.
- In the process, MNEs took advantage of fiscal incentives provided by certain countries and retained the share of profits in such jurisdictions, not having to pay taxes where a majority of customers would transact with them digitally across jurisdictions, or structuring transactions by way of capital structures that allowed excessive deductions for cost of financing.

How BEPS is a solution for this?

- The 15 Actions arising out of BEPS are built on pillars of coherence, substance and transparency and rest on the foundations of the digital economy that represents the ecosystem and the Multi-lateral Instrument (MLI) that breathes life into these actions.
- The BEPS Actions and MLI are characterised by the OECD member countries and the G-20 nations to work in coordination in implementing the measures, that have been formulated and legislated globally in a record time of about 36 months.

What is the impact on India?

- One of the BEPS actions that impact decision-making for businesses in India, is interest limitation.
- By placing a ceiling of 30% of EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) on interest deduction, in respect of borrowings from or borrowings guaranteed by associated enterprises, MNEs will have to reconsider their capital structures, so as to either stay within this limit, or structure the debt in a manner that the interest can be effectively absorbed by the ebitda over a period of eight years.

What is equalisation levy?

- Equalisation levy is a measure introduced by India in response to the digital economy.
- The scope of equalisation levy, charged at the rate of 6% on specified services, presently extends to payments made for online advertising and operates as a deduction from the consideration paid to non-resident e-commerce companies to put them on an even keel with residents; however, it is non-creditable under tax treaties.
- The scope of services, could increase to include cloud services, for instance, and MNEs have to therefore factor this as a cost for doing business in India.

What is the role of Transfer pricing?

- Transfer-pricing aims at structuring transactions between enterprises within the MNE group as if they had been between unrelated parties in uncontrolled conditions.
- There are a raft of transfer-pricing measures that set up booby traps to prevent MNEs from following intra-group transaction structures that disconnect actual functions performed from the assumption of risk and control of capital.

How CBCR can be utilised?

- Country by country reporting (CBCR) and the maintenance of three-tier documentation will provide revenue authorities across the globe “world-on-a-page” profile of the MNE.
- The CBCR is intended to be used as a risk-assessment tool, but its widespread usage and the possibility of making it public in the European Union, could make it a bone of contention for Revenue authorities, leading upto disputes on transfer-pricing or characterisation by adopting profit-split or similar approaches, in line with the principle that enterprises should pay tax where they actually make profits.

What is the way forward?

- Businesses have to therefore brace for more controversy in the wake of BEPS, and the unique construct of the MLI—that is to be read alongside existing treaties for the implementation of BEPS—to that end, facilitates dispute resolution by way of mutual agreement procedures.
- BEPS is a double-edged sword that promises to usher in an era of cooperative competition among Revenue authorities by eliminating harmful tax practices and treaty abuse, while requiring MNE businesses to recalibrate their geographical presence, asset-allocation and people-deployment strategies in light of this new reality.

1.7. REVERSE CHARGE MECHANISM

What is the issue?

The reverse charge mechanism of GST is an additional check that every business has to ensure that its suppliers, of both goods and services, are paying the right amount of taxes on time.

What is Reverse Charge Mechanism?

- The GST has to be typically paid by the supplier of goods and services. But in some cases, **the liability to pay the tax falls on the buyer.**
- This reverse charge is, however, applicable only under certain circumstances.
- The most common instance is when a business buys goods or services from a supplier who is not registered to pay GST.

Example:

- Let's assume that business A that is GST-compliant buys goods worth ₹100 from business B that is not registered to pay GST.
- If the GST on the goods supplied is ₹5, then business A, instead of business B, will have to pay ₹5 to the Government.
- Business A can, however, claim input tax credit of the GST payment of ₹5, when it sells the goods to its client.

What are the other implications?

- Besides purchases from an unregistered supplier, the reverse charge kicks in in other circumstances as well.
- **An importer is liable to pay the GST under the reverse charge mechanism.**
- Also government departments making payments to vendors above a specified limit (₹2.5 lakh under one contract) are required to deduct tax (TDS) and e-commerce operators are required to collect tax (TCS) on the net value goods or services supplied through them.

Why is it important?

- The best part about GST is its **self-policing mechanism.**
- The Centre is trying to check tax evasion and expand the tax net through couple of clauses in this tax regime.
- First, seamless flow of input tax credit is possible only when all the suppliers of a business pay GST.
- So each business will make sure that its suppliers have paid the GST so that they can take input tax credit.
- Reverse charge is an additional check.
- By putting the burden of paying the tax on the buyer, in cases where the supplier does not pay GST, the Government is gently coercing all businesses to sign up for GST.

How this self-policing mechanism helps tax department?

- The major hindrance for the tax department in going after tax evaders is shortage of man-power.
- With all resources being allocated to chase large tax evaders, its difficult to check the small evaders.
- This self-policing mechanism is, therefore, expected to do the trick for the government, helping it grow the tax base as well as tax collection.

How does it affect the business?

- If one runs a business, he/she need to hurry and ensure that all the entities who supply you goods and services are registered for GST.
- If they aren't, then he/she will have to pay the GST on their behalf. This will increase your paper-work and can cause cash-flow issues as well.
- If one plans to escape the GST net by misstating the turnover, to show that it is below the threshold limit, or through some other means, think again.
- With the reverse charge falling on the buyer, his/her order book might shrink as companies would prefer to deal with only those entities who are registered for GST.

1.8. DISTRESS WITH PSB MERGERS

What is the issue?

- The consensus among policymakers about greater consolidation in the public sector banking through mergers is gaining momentum.
- NITI Ayog and RBI are working, to submit their recommendations to the Finance Ministry.
- The key question, however, is whether PSB mergers can solve the problem that the Indian banking sector is facing.

What is the concern regarding PSB Merger?

- Merger as an important reform was suggested by the Narasimham Committee in 1998, which had argued for a three-tier structure for Indian banks: Three large banks with international presence at the top, eight to 10 national banks at tier two, and a large number of regional and local banks at the bottom. But the fact is that both the structure and logic have changed.
- The recent need for mergers is to hide weakness of the growing non-performing assets (NPAs) in almost all PSBs.
- Another alarm is, most of the NPAs were accumulated due to inefficient functioning of the PSBs. Merging 2 PSBs with high NPAs may not be a wise decision.
- A merger in the private sector will include changing the shareholders but this is difficult with PSBs, where the government is the dominant shareholder.
- Cultural compatibility, employee integration, synchronizing accounting, policies for recognition of bad loans, etc could be some of the challenges during merger.

What is the way forward?

- The policymakers have to remember that merging two weak banks, or a relatively strong bank with a weak one, are more likely to make things worse, particularly if the entire process is forced upon the merger candidates.
- For example, the financial performance of the merged State Bank of India was in stark contrast to standalone SBI's sterling show in the fourth quarter of the last financial year. This shows merging several laggard PSBs one big profitable one is more likely to hurt the latter.
- Instead, clearing the NPAs, improving administration, increased transparency in the working of PSBs would be a better way out in the current situation.

1.9. WIDENING JOB DEFICIT

Why in news?

- The Confederation of Indian Industry on 09th June released a study of India's employment requirements in the coming years.
- The study pointed out that the jobs deficit is greater than is generally understood.

What is the background of the issue?

- Not only are 10-12 million young people joining the labour force every year, but millions more are seeking to leave the increasingly unprofitable and precarious existence provided by the agricultural sector.
- The report estimated that 17-20 million jobs needed to be created annually much higher than the rate at which jobs grew until 2012.
- The government's own figures say that just 135,000 jobs were created in the frontline sectors of textiles, leather, metals, automobiles, gems and jewellery, transport, information technology, and handlooms in 2015.
- It is clear that the government is failing on the jobs front.
- It was recently reported that the Skill India mission will no longer set itself targets on how many young people it has imparted skills to it had set an ambitious target of 500 million by 2022, which is unlikely to be achieved.

What are the reforms taken by the government?

- Providing skills to India's relatively unskilled workforce is an important component in moving them up the value chain and making them eligible for formal employment
- The government at few instances admitted itself that it was "impossible" to provide employment through jobs to a country of 1.25 billion people, and that instead the government has "tried to create self-employment opportunities for 80 million people".
- the MUDRA (Micro Units Development Refinance Agency) scheme, which provides collateral-free loans of up to Rs 10 lakh to small borrowers to start small businesses or otherwise hedge uncertainties in the agricultural sector.
- About 40 million MUDRA loans were taken out in the recently concluded financial year.
- There are about 80 million such loans overall, Some of course are repeat borrowers turning over loans or topping them up.
- Others may be the product of rebranding microfinance loans and microcredit from banks may have been redesignated MUDRA loans.

What is the way forward?

- The amount of additional lending under the MUDRA scheme is not clear in any case.
- Schemes that promote self-employment in this manner can simply not be scaled up to the level needed in India at this time of demographic transition.
- There is no substitute for mass employment and thus for manufacturing.
- While the government must certainly promote self-employment, it must recognise that an economy dominated by such small and micro enterprises will not provide the stability and prosperity for 17-20 million additional people a year that is needed.
- It must re-focus its energies on fundamental structural reform that will aid the creation of an export-oriented manufacturing sector, and thus jobs.

1.10 USEFULNESS OF WPI

What is WPI?

- The wholesale price index is an index that measures and **tracks the changes in the price of goods** in the stages before the retail level.
- WPI is used as a measure of inflation in some economies.
- WPI includes three components viz,
 - Manufactured products - 64.2%
 - Primary articles - 22.6%
 - Fuel and power - 13.1%
- Instead of the earlier 2004-05, base year for the WPI will be 2011-12.
- The number of items covered in the new series of the WPI has increased from 676 to 697.

What are the issues with WPI?

- Following the Urjit Patel Committee recommendations, the RBI Act has been amended and flexible inflation targeting (FIT) has been put in place with **CPI inflation as the nominal anchor**.
- Under the FIT, as the RBI has been mandated to achieve price stability measured in terms of CPI inflation, **the use of WPI inflation has been completely done away with**.
- All projections relating to inflation are currently done in terms of CPI.
- As of now, **WPI is predominantly used for converting GDP/GVA at current prices to the same at constant prices**.
- In fact, the GDP deflator (often argued as the true indicator of inflation), which is defined as a ratio of GDP at current prices to GDP at constant prices multiplied by 100, closely tracks WPI inflation.
- The sharp decline in the GDP deflator and the dramatic decline in WPI inflation coincided. This contributed significantly to real GDP growth in India.
- Also, separate services sector input/output price indices are required to deflate services sector GDP for which WPI is anyway not appropriate.
- One of the striking features of the new WPI series is that the item level averaging is being **done by using geometric mean**. This is as per international best practice.
- The geometric mean itself has significantly moderated WPI inflation, besides other factors such as change in the composition of basket.
- Moderation of WPI as per revised base has **pushed up real GDP considerably** during recent years.
- Exclusion of excise duty from the computation of WPI has also partly contributed to lower WPI inflation during recent years, which in turn has pushed real GDP up to some extent.

What could be done?

- A better way to estimate GDP accurately is to deflate input and output prices through separate indices, popularly known as **double deflation**.
- When output prices move relatively faster than the input prices, the single deflation method overestimates GDP/GVA and vice versa.
- **In order to ensure accuracy**, it is high time to discard the single deflation method to estimate GDP/GVA by using WPI as a deflator.

1.11. RESPONSE OF MARKETS TO FED RATE HIKE

Why in news?

The US Federal Reserve hiked the interest rates by a quarter point.

What was the response of markets?

- The dollar was pushed up against a number of currencies and led the much-tracked **U.S. Dollar index** (a basket of key exchange rates against the dollar) to climb up quite a bit from around 96.5 before the Fed announcement to close to over 97.5, a respectable gain by any standards.
- It also gained against a number of G-7 currencies like the Euro as well as a basket of emerging market currencies.
- The Fed successfully portrayed itself as serious about unwinding liquidity at a steady pace without an adverse market reaction.
- Currency markets responded to the Fed move, although nowhere as vehemently as during the taper tantrum of 2013.

What is Taper Tantrum?

- Taper tantrum is the term used to refer to the 2013 surge in U.S. Treasury yields, which resulted from the Federal Reserve's use of tapering to gradually reduce the amount of money it was feeding into the economy.
- The taper tantrum ensued when investors panicked in reaction to news of this tapering and drew their money rapidly out of the bond market, which drastically increased bond yields.

What could be the possible expectations?

- The fact that the Fed stood its ground, hiked the rate and seemed reasonably convinced about another rate hike during the rest of the calendar year seemed to indicate to markets that the Fed was in a “hawkish” mode.
- Besides, the clarity on liquidity withdrawal (that is the reversal of Quantitative Easing) appeared to have strengthened this view.
- Even as the Fed remains confident about inflation rising to its target of two per cent over the medium term bolstered by a robust labour market many questions about the performance of the US economy continue to remain unanswered.

What's the state of unemployment?

- It is hard to explain why the unemployment rate has been falling steadily but there are no signs of acceleration in wage growth.
- A possible explanation can lie in demographic factors which have brought down the natural rate of unemployment (the rate at which inflation goes into a steady state, neither accelerating nor decelerating).
- This means that even with tightening labour market conditions, inflation pressures could remain soft putting the Fed in a perpetual dilemma.

Why did the Fed maintain its forecast of raising interest rates?

- The real reason may be to move ahead in the task of normalising monetary policy from a long period of extreme accommodation which outweighs any concern over recent economic data falling short of expectations.

- To this end, the Fed also laid out its plan for a steady reduction in its assets starting towards the end of this year. While the Fed has been extremely cautious on the planned reduction, the liquidity drain is bound to have an impact on asset prices going forward.

1.12. INSOLVENCY AND BANKRUPTCY CODE (IBC)

What is the issue?

The success of the bankruptcy law depends on the jurisprudence that develops under the Insolvency and bankruptcy code.

What are the steps taken to resolve NPA?

- No concrete steps have been taken to help resolve India's problem of large and mounting non-performing loans/assets, or NPAs.
- Recently SEBI said that companies that are pursuing acquisitions as part of resolution plans approved under the IBC would be exempted from open offer obligations.
- RBI stating its decision to focus on 12 stressed accounts, totalling about 25% of the current gross NPAs and referring them to the IBC immediately.
- Prior to that, the government had cleared an ordinance to amend the Banking Regulation Act, giving the RBI more powers to direct banks to resolve bad loans.
- RBI's direct involvement in referring cases to the IBC, do well to add attention and urgency to the NPA resolution efforts.
- However, they do not address some of the underlying characteristics of the Indian economy and the banking sector.
- Indian banks need to accept significant haircuts to resolve the NPA cases as several of them are in sectors where market conditions are in a slump, such as steel, power and textiles.
- In this environment, it is difficult for banks to find suitable buyers of distressed assets at desired valuations.
- The government will require immense political will to allow bankers to take the necessary haircuts without bankers fearing that their decisions will be questioned or investigated in the future.
- The tight resolution timelines envisaged under the IBC cannot be achieved if bankers do not have the commercial flexibility and the autonomy to sell distressed assets.

What is the role of promoters in IBC?

- Another issue not addressed by the recent regulatory changes is what role promoter's play in delaying NPA resolution.
- The majority of businesses in India remain under the control of their founding promoters.
- In India, bankers cannot make significant management changes in distressed companies as promoters closely control key aspects of a business such as relationships with suppliers, customers.
- It becomes critical that promoters should agree to and be involved in any resolution process.
- However, the RBI does not regulate promoters and other shareholders, and hence cannot force resolutions on to them.

How well is institutional framework equipped to manage cases?

- The severe capacity constraints of the NCLT in handling the present and past backlog of cases are well recognised.

- The lack of qualified insolvency professionals is another issue in clearing the huge back log of cases.
- Apart from their technical capabilities, it will be crucial to ensure that the IPs is truly independent and do not allow promoters or other key stakeholders to manipulate the resolution process in any unfair manner.

1.13 BITCOINS IN INDIA

How do Bitcoins work?

- Bitcoin was introduced in 2008 by still unidentified inventor who goes by the name 'Satoshi Nakamoto'.
- Bitcoin has no central monetary authority.
- It is underpinned by a peer-to-peer computer network made up of its users' machines called block chain.
- Bitcoins are mathematically generated as the computers in this network solve various mathematical tasks.
- This procedure is known as Bitcoin "mining".
- The mathematics of the Bitcoin system is set up in such a way that it becomes progressively more difficult to "mine" Bitcoins over time.
- The total number that can ever be mined is limited to around 21 million.
- For every verified number that is 'mined', the Bitcoin network allocates 12.5 bitcoins [~ \$30,000] to the miner.
- When more people accept bitcoin or other cryptocurrencies for goods and services, their value increases.
- There is therefore no way for a central bank to issue a flood of new Bitcoins and devalue those already in circulation.
- The entire network is used to monitor and verify both the creation of new Bitcoins through mining, and the transfer of Bitcoins between users.
- A log is collectively maintained of all transactions, with every new transaction broadcast across the Bitcoin network.
- Participating machines communicate to create and agree on updates to the official log.
- Bitcoins can be bought and sold in return for traditional currency on several exchanges, and can also be directly transferred across the internet from one user to another using appropriate software.
- This makes Bitcoin a potentially attractive currency.

What is their true value?

- The real answer is no one knows.
- Unlike fiat currencies, whose long-term relative values are driven by differentials in purchasing power, we do not have a good understanding of what determines the long-term relative value of these crypto currencies.
- Yet investors have increased the acceptance of various versions of block chain technology and its currency units.

How prevalent are bitcoins?

- Since 2014, the American tax authorities have treated crypto currencies as 'property' subject to appropriate capital gains tax rate.
- Japan and Australia deemed bitcoin as a legitimate payment method in 2017.
- Chinese authorities have aggressively stepped in to ensure crypto currency exchanges function well.
- But the successive Indian governments have ignored crypto currencies.

- Only in April 2017 the Indian government constituted an inter-disciplinary committee to study regulatory frameworks for crypto currencies.

What should the government do?

- It should follow China, South Korea, and Japan.
- It should enshrine minimum capital requirements, force segregation of customer accounts, and make potential criminal activity difficult.
- Failing to help structure the growth of crypto currencies will drive the whole enterprise underground beyond its control.

1.14 NEW RELAXATIONS BY SEBI

Why in news?

The Securities and Exchange Board of India (SEBI) relaxed norms for investors acquiring assets in companies with stressed assets and facing bankruptcy proceedings.

What are the key decisions of SEBI?

- **On acquiring stressed assets**, under the current rules certain exemptions are allowed only to banks while acquiring stressed assets.
- There has been a demand for the extension of these exemptions to investors as well.
- One such exemption could be the waiver of the requirement for an open offer after the acquisition of a stressed asset.
- By reducing the listing time to four days, the market regulator may want to send the right signal to investors.
- **On Initial Public Offering**, under existing rules, a company is allowed to list on stock exchanges six days after the close of bidding in the IPO.
- It is seen to be detrimental to investors as their funds are locked.
- Here the main proposal is to reduce the listing time for IPOs to four working days from six.
- Further it has decided to exempt the acquirers from making open offers after buying stakes from lenders while including checks such as a three-year lock-in for new investors
- It also mandates that such relaxation would have to be approved by a special resolution.
- **On participatory notes**, SEBI has been taking a hawkish approach in an attempt to curb the potential for money laundering through this investment route.
- At the same time, foreign portfolio investors complying with global regulatory standards may get direct access to Indian stock markets without facing any procedural delay.
- The regulator has decided to provide a for acquisitions post the resolution plans approved by National Company Law Tribunal (NCLT) under the Insolvency and Bankruptcy Code 2016.
- **On forensic auditing**, the regulator is in the process of appointing a forensic auditor to look into the co-location matter of the National Stock Exchange (NSE)
- It is alleged that certain brokers got preferential access to the exchange systems for trade execution.
- **On ODI**, SEBI has decided to levy a 'Regulatory Fee' of \$1,000 on each subscriber of offshore derivative instrument (ODI).

- It has to be collected by the registered foreign portfolio investor (FPI) that issues the ODIs.
- It has also decided to prohibit ODIs from being issued against derivatives except on those that are used for hedging purposes.

1.15 EXTENDING DEADLINE ON BASEL III NORMS

Why in News?

Government is in talks with RBI to postpone the implementation of the Basel-III norms in India.

What is the scenario?

- Till March 2017, the government owned banks maintained an average common equity ratio of 8.5%.
- According to the RBI regulations on Basel accord, Indian banks must maintain a minimum common equity ratio of 8% and a total capital of 11.5% **by 2019**.
- Discussions are on to postpone this deadline.

What are Basel norms?

- Basel guidelines refer to broad supervisory standards formulated by the Basel Committee on Banking Supervision (BCBS), Basel, Switzerland.
- The purpose is to ensure that financial institutions have enough capital to meet obligations and absorb unexpected losses.
- **Basel III norms**(2009) was introduced in response to financial crisis of 2008 and introduced tighter capital requirements.

What is the rationale behind the discussion?

- RBI guidelines in this regard are more stringent compared with actual Basel-III norms.
- The Indian banking sector is struggling with the mounting stressed assets.
- The Banks are thus doubtful of raising the additional capital requirement to meet the norms by 2019.

How do banks benefit by the extended deadline?

- It will help banks increase their lending and meet the additional capital requirement.
- Flexibility in the implementation of norms will help banks in settling bad loans and recover.
- It could increase credit flow to productive sectors.

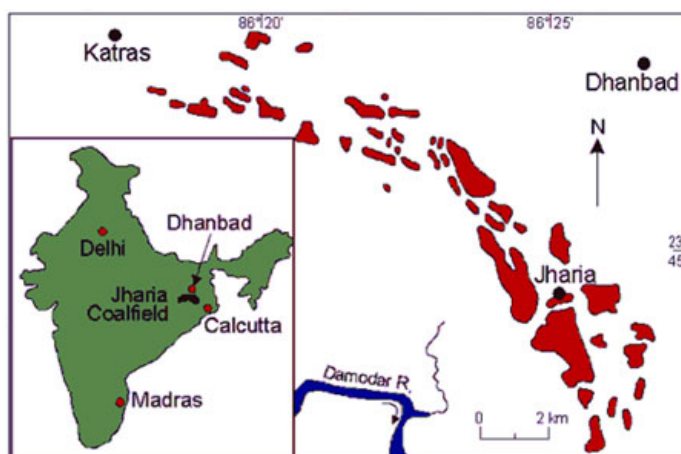
2. INFRASTRUCTURE

2.1. JHARIA COAL FIRES

Why in news?

- Jharia is estimated to have nearly 80 underground fires in the years since 1916.
- The Government has decided to shift all major public utility assets from areas around the coalfield.

What has been the problem in Jharia over the years?



- Jharia coalfields are in Jharkhand's Dhanbad district and span over 160 square kilometres.
- Unsafe and illegal mining has led to fires in coal deposits under the surface of these coalfields.
- They now pose a risk to the population living on the surface like cave-ins and gas spills and are a threat to rail transport.
- Most of the affected mines date back before Independence and nationalisation (private owners ran collieries earlier), when the thrust was on production and profit, with little regard for safety.

What is the extent of the problem?

- When the coal mines were nationalised in 1971, at least 70 mining areas within Jharia were on fire.
- The problem later spread to seven more mining zones.
- Rail routes, including the key Dhanbad-Chandrapura line that is currently in focus, fall in the affected region.
- The number of affected areas has reduced to about 67, as around 10 fires have been extinguished using different methods.

What is being done now?

- The principal secretary to the PM held a meeting and sought time-bound action on shifting out arterial railway lines through Jharia, and rehabilitation.
- The Jharia Rehabilitation and Development Authority (JRDA, formed by the Centre) has now been asked to look into the possibility of putting prefabricated structures at the resettlement site to increase the number of houses as quickly as possible.
- The railways has been asked to draw up its diversion plan for the Dhanbad-Chandrapura line.

What is the issue in diverting?

- Unlike a couple of the other affected rail lines, the nearly 41-km Dhanbad-Chandrapura line is used by 37 pairs of daily train services.
- Besides, there are goods train that carry excavated coal from the mines.
- If the rail line is shut, it could lead to revenue losses close to Rs 2,500 crore.
- Besides, creating a new diversion alone is expected to cost around Rs 3,000 crore.
- There is pressure from the local population, several thousand of whom depend on the line, not to close down the line.

2.2. KEN BETWA PROJECT

Why in news?

The Forest Advisory Committee of the environment ministry has removed the last major hurdle to the implementation of this Rs 10,000-crore project (first phase) that has been pending for years.

What is interlinking necessary?

- The interlinking of the Ken River in Madhya Pradesh with the Betwa in Uttar Pradesh is finally seeing the light of the day.
- This multipurpose project is meant to create additional irrigation potential of 600,000 hectares, provide drinking water to 1.34 million people and produce 60 MW of power.
- The endorsement of this project, more importantly, sets the tone for similar clearances to many other river-connecting proposals to transfer surplus water from river basins to deficient ones for equitable distribution of water across the country.
- The idea of a national network of interconnected rivers is over a century old.
- Interlinking all Indian rivers is loaded with potential gains, such as additional 35 million hectares irrigation and 34,000 MW of power generation.
- Other benefits include flood control, navigation, fisheries and domestic water supply.

What are the other linkage projects?

- Ken-Betwa project will be the first among the 30 linkages proposed by the water resources ministry under its national water plan.
- The Godavari and Krishna rivers have already been linked with the Pattiseema scheme in Andhra Pradesh in 2015.
- The other inter-basin river linkages executed earlier included Sarda-Sahayak, Beas-Sutlej, Kurnool-Cuddapah, Periyar-Vaigai and Telugu Ganga.

What are the hurdles involved in these projects?

- Apart from the environmental, financial and feasibility impediments, the implementation of projects on such a mammoth scale may pose many situation-specific glitches, including population dislocation, which may be hard to surmount.
- Besides, building a political consensus to take up inter-state water linkages may not be as easy since water is a state subject.
- Even in the case of the Ken-Betwa project, the government will need to be watchful of its adverse fallout on the Panna tiger reserve, a part of which is anticipated will be submerged.
- This bodes ill for some critical animal species such as tigers, vultures and gharial.
- Though the project sets apart 5 per cent of its budget exclusively for conservation and rehabilitation of this sanctuary, the action plan for this purpose will have to be result-oriented.

What is the water quantity condition in India?

- India is not an inherently water-short country.

- Its total annual rainfall of around 120 cm, including 89 cm during the monsoon season, is well above the global average of around 100 cm.
- If the bulk of this water, especially that falling during the monsoon, can be prevented from running off to the sea, eroding precious top soil in its wake, and can, instead, be distributed fairly, no part of the country will remain water-starved.
- However, the geological, ecological and environmental aspects of such a massive redistribution of water cannot be disregarded.

2.3. NATIONAL HIGHWAYS AND NPAS

What is the issue?

- A recent ordinance empowered the Reserve Bank of India to ensure recoveries from wilful defaulters.
- If only it were to examine the anatomy and modus operandi of national highway projects, it would discover a large-scale plunder of public money.

How NPAs increase due to highway projects?

- The contractor-engineer-politician trio is always in command of highway projects, since the very inception of the National Highways Authority of India (NHAI).
- It bloomed when the construction of the Golden Quadrilateral commenced in 2000.
- This initiative drew much applause in the initial years.
- But it was soon overtaken by delays, cost over-runs and gold-plating.
- The contractual framework remained archaic and PWD-style.
- But the damage was comparatively limited as the programme was confined to budgetary resources of the central government.
- Later public private partnership (PPP) was introduced for ramping up investment from 2005.
- But crony capitalism soon took over.
- NHAI soon gave up the international best practice of short-listing five bidders to ensure healthy and sustainable competition.
- Soon the bidders invented ingenious ways to attract bids.
- e.g Consider a project requiring an investment of Rs 1,200 crore.
- The bidder would manipulate and get the banks to approve a cost of say, Rs 2,000 crore.
- This would not only fund the entire project cost, including the promoter's equity, but also enable siphoning of large sums of surplus cash while relieving the concessionaire of all financial risk.
- As a result, bidders started bidding ever more aggressively to corner more projects.
- Public sector banks are also part of this via reckless lending.
- RBI only allowed loans falling within the official estimates of the NHAI to be recognised as secured lending.
- The rest was unsecured lending, entirely at the risk of the banks.
- Since the highly inflated loans could never have been repaid from toll revenues, several projects have predictably turned into NPAs.
- The rejuvenation of the NHAI and the banks is critical for mobilising new capital and entrepreneurs.

2.4 CONSTRAINTS IN RENEWABLE ENERGY

What is the issue?

The recent frenzy in renewable energy, particularly in the solar space, has raised expectations of coal-free, sunshine driven power for India at the lowest cost in about a decade's time.

Whether the targets are Over-optimistic?

- It took coal (1815 onwards), oil (1915 onwards) and gas (1930 onwards) 60 years to get to be the world's major share of energy supply.
- The Government intent of **175 GW of installed renewable capacity by 2022 is admirable.**
- Carbon free renewables are at the 5 per cent stage today.
- Similarly, the 100GW of planned solar capacity addition by 2022 will mean an addition of 18GW of solar capacity per year — which is certainly aggressive at the current stage of solar development.
- The **financing issue is also particularly problematic**, as the estimated \$170 billion in investment is, in all likelihood, beyond the capacity of the domestic financial sector even with subsidies.

What are the constraints to renewable energy?

- Firstly, cost is not the only factor, which determines the suitability of solar, and renewables for what is known as **baseload power.**
- Apart from affordability and climate impact, availability, reliability, consistency and feasibility are key determinants of 24X7 power for industry and consumers.
- If we aim to meet the total requirement of utility scale power through renewables, the requirement of land will likely be beyond our ability to mobilise in a reasonable time frame, and in an economically viable manner.

What is the role of weather factor?

- Secondly, nature places some hard constraints on solar and wind, and that has undesirable effects on harnessing solar energy in an effective manner through the grid.
- **Wind and solar both depend on weather conditions, and are both variable and uncertain.**
- Solar also has the problem of intermittency due to cloud cover and rain, which further reduces effective capacity.
- The grid was designed for “dispatchable” power on which you have control.
- The original grid was not designed keeping uncontrolled intermittent power load of renewables in mind and this means that the grid needs to be re-engineered over time to support renewables without compromising baseload power supply.

What is to be done?

- India today has 200GW of coal power, which uses mostly subcritical technology —spewing a tonne of carbon dioxide per MWh generated.
- With the right carbon reduction incentives and investments we should be able to induce accelerated adoption of economically attractive low carbon coal technologies like supercritical, ultra supercritical and, possibly, coal gasification for power generation.

What is the way ahead?

- We must engineer practical solutions to this energy challenge with conventional and renewables. The war should be on carbon emissions, not coal.

2.5. NEED FOR NUCLEAR POWER

Why in news?

Nuclear power is in need as the renewable power is subject to weather.

What are the issues with renewable power sources?

- Solar power is available only when the sun is shining unless it is stored in some way.
- In a year, a solar PV plant of one KW capacity generates no more than 2,000 KWh of electricity,
- A coal-based or nuclear plant can generate around 7,000 KWh/year per KW of capacity
- The hydro power is unevenly distributed across months.
- There is a need of balancing Power source even there is a fully developed renewable power source.

What are the problems with coal power?

- There is a threat of climate change and the concern for environmental pollution.
- The plants to reduce air pollution will increase the cost of coal power.
- The cost of carbon capture and storage (CCS) is quite high and requires more energy.
- The cost of coal power would be some 30 to 50 per cent higher in coming days.

What is the need for Nuclear Power in India?

- To provide power when the sun is not shining, this balancing power is needed.
- In India, more than 70 per cent of petroleum products are based on imports.
- India's known extractable coal reserves will run out in about 40 years.
- For India, renewable energy is inevitable and nuclear option should be retained as an insurance.
- Nuclear power helps diversify the system and adds to energy security.

How Nuclear Power can be generated effectively?

- India announced an agreement with international companies to set up 7,000 MW of nuclear plants based on our domestic technology.
- Nuclear plants have been run in the past with more or less constant load.
- Design change will assure to run the power plants in a required load.
- The cost of nuclear electricity will depend on how it is financed and cheap storage systems should be developed.
- India can install the nuclear plants without delay and within budget, they are economically attractive.

3. AGRICULTURE

3.1 INEFFECTIVE MSP

Why in news?

Market prices of some crops have gone below the MSP which could discourage sowing, thus latest MSPs for crops may aggravate farm distress.

What is the present status of MSP?

- Except in the case of paddy and wheat, minimum support price has yet to offer remunerative prices
- The government's pricing policy for the 2017 kharif crops might worsen the farmers demand
- The new minimum support prices (MSPs) for major kharif crops, communicated discreetly to the states instead of being announced formally from New Delhi, are only marginally higher than those of the previous season.

What makes the new MSPs worse?

- Notably for cotton, moong and sunflower seed, are lower than the actual expenses incurred in cultivation, as calculated by the Commission for Agricultural Costs and Prices (CACP).
- This essentially means farmers are staring at a net loss in the coming season.
- Such low increases in MSPs are unlikely to pacify irate farmers or ease their distress.
- The overall value of farm produce has also been on a slide for several years.
- Data from the National Accounts Statistics 2017 indicate that between 2011-12 and 2015-16 the total value of cereals and pulses fell by 3 per cent, oilseeds by over 13 per cent, and sugar by 1 per cent.
- Clearly, the costs incurred by farmers on inputs such as seeds, fertilisers, pesticides and labour are rising faster than the prices of their produce.

How this issue can be addressed?

- A few states such as Gujarat and Madhya Pradesh have begun offering small amounts by way of cash subsidy on these crops, but even this offsets barely a fraction of the losses.
- Government can fix support prices at 50 per cent above actual costs.
- The progress in agriculture should be measured in terms of the rise in farmers' incomes instead of the quantity of farm output.
- Extending market intervention-based price support to other crops should be considered after evaluating what steps are needed to make it effective and successful.
- One such possibility could be the "price deficiency payment mechanism" mooted by a task force of the NITI Aayog.
- This involves setting floor prices for crops and compensating growers for any shortfall in realising these rates.
- Being a non-procurement based system, it can be applied to all crops and in all areas without accumulating unwanted stocks.
- Trying out such a setup on a pilot basis would be a reasonable starting point

3.2. ISSUES IN INDIA HORTICULTURE

Why in news?

- Market inefficiencies and faulty policies are the present situation of Horticulture in India.
- At a time when there is considerable farm unrest in the country, there is a paradigm shift happening in Indian agriculture in the shape of a horticulture revolution.

What is the background of the issue?

- Latest data from the ministry reveals that the production of horticultural crops in 2016-17 outstripped food grain output for the fifth year in a row.

- The fact that the record horticultural harvest of 295 million tonnes has been gathered from just one-fifth of the area under food grain is a significant aspect.
- It is also noteworthy that this surge has come about without the kind of government support and funding that triggered the cereals-based green revolution in the 1960s and 1970s.
- Horticulture has received merely 3.9 to 4.6 per cent of the broad agriculture sector's annual plan outlay since the Ninth Five-Year Plan.
- However, if the prices of horticultural produce are allowed to slide unabated, the way they have done this year, the uptrend in output may be difficult to sustain.

What is the situation of the Horticulture in India?

- It is well known that the growers of several fruits and vegetables, especially onions, potatoes and tomatoes, have failed to recover even their production costs.
- Frustrated, some of them even resorted to dumping their produce on the roadside instead of selling it at ridiculously low prices.
- The most likely fallout will be a dip in production in the next cycle.
- The blame lies as much with market inefficiencies as with ill-advised government policies.
- An enduring horticultural revolution is, indeed, vital for several reasons.
- For one, horticulture now accounts for more than one-third of the agriculture sector's gross domestic output (GDP).
- Besides, it holds the key to the much-needed diversification in agriculture.
- Moreover, horticulture is more suited to millions of India's small and marginal farmers as fast-growing crops, such as vegetables, ensure a quicker cash flow to the producer.
- Lastly, horticulture has tended to expand in the areas which had been slow to adopt green revolution technologies.
- The top 10 vegetable growing states now include Bihar, West Bengal, Odisha, Madhya Pradesh and Karnataka.
- But exempting vegetables and fruits from the purview of the agricultural produce marketing committee (APMC) laws, as some states have done, too, has not resulted in either better market access or higher prices.

What is the way forward?

- In this regard, vegetable and fruit producers' cooperatives, formed on the lines of the milk cooperatives, or private enterprises can be incentivised to bridge the gap between producers and consumers.
- The indigenously developed milk marketing model may suit these crops because, much like milk, horticultural crops, too, are produced in small quantities by tiny landholders and have to be disposed of without much delay.
- Simultaneously, post-harvest processing and value-addition, which is rather low at present, needs to be stepped up substantially to prolong the shelf life of such products and ensure their year-round availability.
- Also needed is an extensive network of refrigerated warehouses to store horticultural products and minimise wastage.
- The government needs to put in place a stable policy regime, particularly with respect to the domestic and external trade of vegetables and fruits, to prevent violent price fluctuations that hurt the interests of both producers and consumers.
- In the absence of timely reforms, the horticultural revolution might fizzle out.

3.3. TARGETED PUBLIC DISTRIBUTION SYSTEM

What is the issue?

From providing minute digital records to seeding out fake claims, the targeted public distribution system is visibly reforming.

How is the PDS reforming?

- With 2011-12 National Sample Survey (NSS) data, two-thirds of the population (75 per cent rural, 50 per cent urban) is entitled to subsidised foodgrain through the Antodaya Anna Yojana (AAY) and Priority Households (PHH) schemes.
- There are other provisions on the Integrated Child Development Services, ICDS, Mid Day Meal Scheme, MDMS, and maternity benefits.
- Though the NFSA came into force on July 5, 2013, because states needed to evolve criteria and identify beneficiaries, its adoption by states was staggered, with Nagaland, Kerala and Tamil Nadu the last to join, in 2016.
- All states and/or Union Territories (UTs) are now part of the NFSA.
- The reforms in NFSA include doorstep delivery of foodgrains to the Targeted Public Distribution System outlets.
- Application of information and communication technology tools including end-to-end computerisation in order to ensure transparent recording of transactions at all levels, and to prevent diversion.
- Leveraging “Aadhaar” for unique identification, with biometric information of entitled beneficiaries for proper targeting of benefits under this Act.
- Full transparency of records.
- Preference to public institutions or public bodies such as panchayats, self-help groups, co-operatives, in licensing of fair price shops and management of fair price shops by women or their collectives.
- Diversification of commodities distributed under the Public Distribution System over a period of time.
- Support to local public distribution models and grains banks.
- Introducing schemes, such as cash transfer, food coupons, or other schemes, to the targeted beneficiaries in order to ensure their foodgrain entitlements.

How the reforms help in better targeted approach?

- For subsidised grain, there are 186.6 million ration cards, 23 million AAY and 163.5 million PHH.
- If these are digitised and seeded with Aadhaar numbers, duplication is reduced.
- Ghost ration cards are eliminated.
- All 36 states and UTs have digitised ration cards now.
- For some states, there are live links or reports on digitisation.
- As of March 31, 2017, 77.04 per cent of ration cards (178.2 million) have been seeded with Aadhaar numbers.
- Between 2013 and 2016, 23.3 million bogus ration cards were identified and removed.
- Once records and databases have been fixed, one moves to the online allocation of foodgrains, down to the FPS (fair price shop) level – 30 states/UTs have done this.
- Since Chandigarh and Puducherry (and partly Dadra and Nagar Haveli, in urban areas) opted for direct benefit transfers (DBTs), with an equivalent cash transfer into seeded bank accounts.

- Now, 2,33,520 households are covered by such cash transfers, the bulk in Puducherry.
- The “equivalence” is worked out by multiplying the minimum support price (MSP) by a factor of 1.25 and subtracting the central issue price (CIP).

What is the way forward?

- The next step is the automation of the supply chain management (delivery orders, release orders, truck chalangans, gate passes, receipts and issuance of foodgrains, monitoring of stock positions, payments and SMS alerts when opted for).
- As of now, 20 states and/or UTs have done this, some featuring live links.
- All have transparency portals and toll-free helplines.
- Except for Arunachal Pradesh and J&K, all have online grievance registration facilities.
- The last step in this end-to-end computerisation of the TPDS which is the most difficult task.
- This is the automation of fair price shops, through handheld devices or computers like EPOS (electronic point of sale) devices.

4. SCIENCE AND TECHNOLOGY

4.1. INO PROJECT

What is the issue?

- In March 2017, National Green Tribunal (NGT) suspended the environmental clearance (EC) granted to the India-based Neutrino Observatory (INO), and ordered it to file a fresh application for clearance.
- This had made India to suffer a procedural delay to join the elite club of countries undertaking neutrino research.

What is the INO project?

- Neutrinos are tiny particles, almost massless, that travel at near light speeds.
- They are born from violent astrophysical events like exploding stars, nuclear fusion in the sun and gamma ray bursts.
- They are abundant in the universe, and can move easily through matter.
- They are very difficult to track down.
- The proposed INO project primarily aims to study atmospheric neutrinos in a 1,300-m deep cavern in the Bodi West Hills in Theni district, Tamil Nadu.
- If completed, it would house the largest magnet in the world.
- Neutrinos hold the blueprint of nature, which the INO project aims to use to understand some of the unsolved mysteries of the universe.

What are the concerns?

- The explosives used in construction are considered a threat to the highly sensitive ecology of the Western Ghats.
- But the excavation is planned to be carried out by a controlled blast, limiting the impact of vibrations with the help of computer simulations.

- There are questions about the relevant radiation safety studies for carrying out the long baseline neutrino experiment.
- But an underground lab accessed by a 2 km-long horizontal access tunnel, resembling a road tunnel is to be constructed.
- Such tunnels have been built extensively in India and the relevant studies show that the environmental impacts have been managed.
- In the second phase, a far detector for the Neutrino Factory has been initially planned.
- It is a proposed particle accelerator.
- This may not be necessary because of the discoveries already being made in the field.
- Even if you build it, the radiation from the neutrino beam would be one in 100 millionth of the natural radiation, which is negligible.

What should be done?

- Allegations such as neutrinos being radioactive particles and that the INO will double up the storage of nuclear waste do not hold ground.
- Such assumptions and procedural lapses have pushed this project into a limbo.
- Any further delays could defeat the purpose of the project because similar projects elsewhere could undermine India's efforts.
- We should generate sufficient public support for such high technology and science projects.
- The communication between the scientific community and the public should be more basic and democratic.

4.2 WHO GUIDELINES ON ANTIBIOTICS

Why in news?

World Health Organisation has revised the antibiotics classes in its list of essential medicines.

What is the current move?

- WHO's guidance classifies antibiotics into different categories.
- A first-line 'access' group of antibiotics should be available at all times.
- Drugs that are placed under a 'watch' category are second choice.
- Drugs that are classified as 'reserve' should be deployed as a last resort.
- Under this graded approach some medicines are reserved for the most resistant microbes.
- This can stop their misuse as broad-spectrum treatments.

What is the need?

- Antimicrobial resistance is the phenomenon of bacteria becoming resistant even to the most potent drugs.
- The prescription of antibiotics is often guided by such factors as patient demand, competing alternative treatment systems, and even financial incentives.
- The Indian Council of Medical Research issued a warning two years ago, that resistance to antibiotics was found in 50% of patients.
- The current move is a welcome step in the global initiative to push back against antimicrobial resistance.
- A large number of infants were dying due to infections that did not respond to treatment.

- The revised WHO classification can mitigate the problem if the many issues associated with use of the drugs can be monitored and regulated.

What should be done?

- Access to speedy and accurate diagnosis is equally important in order to deploy the correct antibiotic early.
- While the medical community can be sensitised to its responsibility to prevent antimicrobial resistance, it will take enlightened policies on housing, sanitation and hygiene education to prevent new infections and the spread of disease-causing organisms.

4.3. GSAT-19 INDIA'S BIGGEST HIT

Why in news?

- June 6th launch of GSAT-19, is perhaps ISRO's most important mission in the last three decades.
- This is bigger in technological significance than even the hugely popular Chandrayaan or Mangalyaan space missions.

What is the background of the issue?

- Behind the success of the launch is nearly three decades of hard work in taming cryogenic technology and an interesting history of this technology was denied to ISRO by the United States in the early 1990s, forcing it develop it on its own.
- ISRO had planned the development of a cryogenic engine way back in the mid-1980s when just a handful of countries the United States, the erstwhile USSR, France and Japan had this technology.
- In 1991, ISRO and the Russian space agency, Glavkosmos, had signed an agreement for supply of two of these engines along with transfer of technology.
- However, the United States, which had lost out on the engine contract, objected to the Russian sale, citing provisions of Missile Technology Control Regime (MTCR) that neither India nor Russia was a member of.
- In an alternative arrangement, Russia was allowed to sell seven, instead of original two, cryogenic engines but could not transfer the technology to India.
- But ever since the cancellation of the original Russian deal, ISRO got down to develop the cryogenic technology on its own at the Liquid Propulsion Systems Centre at Thiruvananthapuram.
- It took more than a decade to build the engines and success did not come easily.

What is a Cryogenic engine?

- Cryogenics is the science that addresses the production and effects of very low temperatures.
- A cryogenic rocket engine is a rocket engine that uses a cryogenic fuel or oxidizer.
- That is, its fuel or oxidizer (or both) are gases liquefied and stored at very low temperatures.
- Notably, these engines were one of the main factors of NASA's success in reaching the Moon.
- Amongst all rocket fuels, hydrogen is known to provide the maximum thrust.
- But hydrogen, in its natural gaseous form, is difficult to handle, and, therefore, not used in normal engines in rockets like PSLV. However, hydrogen can be used in liquid form.
- The problem is hydrogen liquefies at very low temperature, nearly 250 degrees Celsius below zero.

- To burn this fuel, oxygen also needs to be in liquid form, and that happens at about 90 degrees Celsius below zero.
- Creating such a low-temperature atmosphere in the rocket is a difficult proposition, because it creates problems for other material used in the rocket.
- That's why cryogenic upper stage engines are used.

What are the specifications of the project?

- The launch is a giant leap for ISRO because of the rocket it is using.
- The mission happens to be the first “developmental” flight of the next generation Geosynchronous Satellite Launch Vehicle, called GSLV-MkIII with an entirely indigenous cryogenic upper stage.
- This cryogenic stage, that involves handling fuel at very low temperatures, is crucial to providing the extra thrust required by the rocket to carry heavier satellites deeper into space.
- GSLV-MkIII is meant to carry payloads up to four to five tons and that was not possible with conventional propellants used by ISRO's main launch vehicle, called PSLV.
- PSLV can take satellites only up to 2 tons to orbits and that too until orbits of 600-km altitude from the earth's surface.
- It will not just help ISRO probe deeper into space but will also bring it extra revenue, enabling it to make commercial launches of heavier satellites.
- By its successive successful launches ISRO once again proved India's Space Exploration capability to the world.

4.4 BIO-REMEDIATION

Why in news?

Raagini Jaain, a national expert on the Swachh Bharat Mission, has developed a rapid bioremediation process for old dumps successfully.

What is Bio-remediation?

- Bioremediation is a waste management treatment that uses naturally occurring organisms to break down hazardous substances into less toxic or non toxic substances.
- Biomining is an environment friendly technique of extracting metals from ores, other solid materials like waste using micro-organisms.
- These methods are simple and low cost solution for reducing the garbage hills and also permanently reduce the emission of harmful gases and leachate.

What are the harmful effects of garbage fills?

- It causes many issues right from foul odour, emission of harmful gases which contributes global warming, leachate (a black liquid oozing from the waste) that seeps into soil polluting the ground water.
- As the cities are expanding, landfills become closer to the human establishments.

What are the steps taken by the government?

- Based on the report of an expert committee in 1998, the Municipal Solid Waste (Management and Handling) Rules, 2000 were notified by the Ministry of Environment and Forests.
- It specified that landfill sites should be allocated on which sanitary landfills should be developed to receive the final residual waste.
- The Solid Waste Management Rules, 2016 now cover more than only municipal areas, provide for collection charges and for penalties on waste generators for non-compliance.
- Unlike the earlier Rules, it makes it the duty of every waste generator to segregate the wet waste from dry waste.

How does the new process work?

- In the new process developed by Raagini Jaain, organic fraction of the original waste is degraded biologically by the bioculture.
- Once the waste is stabilised, it goes for bio-mining.
- There it is separated into different fractions which can then be used for different purposes, eg, for compost, road sub-grade, making RDF (Refuse Derived Fuel) pellets, recycling plastics, or inerts for landfills.

What are the advantages?

- After 4 weeks of this process developed, there is about 40% volume reduction in the waste.
- The previously held waste dumps are now fully recovered for alternate uses such as waste management and reduced ill-effects of the waste in landfills.

4.5 THE F-16 DEAL

Why in news?

- The f-16 deal between India and USA is not going to be a game changer.
- If realized, the F-16 deal will bring some jobs but nothing more no market, no cutting-edge technology, and certainly no leverage against Pakistan.

What is the background of the issue?

- The wording of the deal which was signed at the Paris Air Show is very clear it states only the “intent to partner together to meet India’s Make-in-India requirement through the establishment of an F-16 production line in India”.
- The most obvious takeaway from this is that the deal is not a firm agreement to manufacture the F-16 in India, but only a letter of intent to assemble the plane in India if and when the Indian Air Force (IAF) chooses that platform.
- This deal will result in the transfer of the entire F-16 production line to India, irrespective of the IAF’s choice, are plain wrong.

What are the features of F-16?

- The F-16 is one of the most remarkable fighters of the last century.
- When it started out, it was a triumph of globalization sourcing parts from across the width and breadth of the North Atlantic Treaty Organization (Nato) and other major non-Nato US allies.
- The brilliance of this was that even though it started off as a US national programme, it effectively became the national fighter of a cluster of five northern European countries, of Turkey, Israel and South Korea with each cluster heavily buying into the production and supply chains.
- Each of the companies buying in benefitted from the massive economies of scale in a production run of over 4,600 units as well as from being able to innovate follow-on sub-systems that were incorporated into the several upgrades that the F-16 has seen.
- The F-16 did was to spawn a global production and supply chain of sub-systems manufacturers, that was highly innovative but still flexible enough to be highly adaptive and competitive.

What is the downside of the issue?

- The downside of this, for India, is that by some estimates, less than 40% of the F-16 is actually Lockheed technology.
- The remaining 60% is proprietary technology owned by hundreds of sub-systems manufacturers spread across the globe.
- This means that about 60% of the F-16 technology remains unavailable to India unless its signs deals with each of the hundreds and possibly thousands of sub-component manufacturers, some of whom are based in countries like Turkey that are less than enthusiastic about India.
- The F-16 engine, core crystal-blade technology is off limits to even the closest US allies.
- The F-16 patents are owned by General Electricals an US based firm, the slow growth of new engines globally it hardly suits GE's business interests to transfer such technology to India.

What is the way forward?

- One of the most compromises with the F-16 is that purchasing the plane will mean India can effectively cripple the Pakistani F-16 fleet by controlling the supply of spare parts.
- The F-16 block 70 being sold to India is a vastly different beast from the F-16 block 50 sold to Pakistan.
- This means that the supplier chain India will get will be different from the supplier chain that Pakistan has access to.
- Indeed, the globalized supplier and manufacturer chain means that Pakistan's tap can never be turned off.
- The F-16 is a brilliant plane, it is at the end of its life cycle but India, which isn't as technologically advanced as the US, should be able to easily absorb whatever technology it gets from the deal.
- However, prospects for further external sale and secondary maintenance contracts are non-existent given that the F-16 best exemplifies an anti-monopoly product.
- In the end, India gets a superb fighter and a few thousand jobs but nothing more not a monopoly, not a market, not innovation, not cutting-edge war-winning technology and, certainly, not "strategic autonomy".

5. ENVIRONMENT

5.1. CLEAN ENERGY WORKFORCE

What is the issue?

Over the next 20-25 years, about 600 million additional people will join the workforce.

What are the problems?

- The current median age in India is 27.6 years.
- Many of the sectors, which traditionally accounted for large employment, are now adding fewer jobs year-on-year.
- Employment in public sector enterprises has decreased from a peak of 1.49 million in 2009-10 to 1.23 million in 2015-16.
- Automation is going to hit annual job growth in almost all existing industries, whether agriculture, construction, textiles or IT.

What will be the requirements of future jobs?

- The shape of enterprises will change, requiring a more mobile workforce.
- Many services will be delivered through decentralised channels.
- New industries will need systems of lifelong learning, in order to adapt to rapid changes in technology.

Which sector has potential?

- In this context renewable energy is on a rapid growth trajectory in India.
- Solar capacity increased from less than 20 megawatts (Mw) in 2010 to above 12,000 Mw.
- In the last three years, investments in the power sector have been primarily in renewables, accompanied by sharp falls in solar and wind tariffs and increasing investor confidence.
- But only little attention is given to the employment potential in renewable energy.
- In February 2015, the Council on Energy, Environment and Water (CEEW) and the Natural Resources Defense Council (NRDC) had projected that India's 160,000 Mw of solar and wind targets would generate about 1.3 million full-time equivalent (FTE) jobs.
- Most jobs fall in the semi-skilled and unskilled categories.
- The greatest potential for the renewables workforce lies in smaller, decentralised projects.
- Per Mw, rooftop projects create 24.7 jobs, compared to 3.4 jobs in utility-scale solar and 1.27 jobs in wind.
- Decentralised energy also increases the potential for creating jobs locally, giving opportunities to local entrepreneurs or for recruiting workers from near project sites.
- Every state has potential for jobs in solar.
- In addition, new jobs could be created to manufacture solar photovoltaic modules, solar PV installation structures, wind turbines, towers, wind blades, etc.

5.2 ISSUES WITH THE ELECTRIC VEHICLES

Why in news?

- Electric vehicles (EVs) seem to be gaining in prominence as part of the renewable energy zeitgeist
- The government's stress on clean energy is commendable but it **should let the market decide the winning technology**

What is the background of the issue?

- In May, Nagpur became the first Indian city to have an electric cab fleet with about 100 EVs.
- The state-run power giant NTPC set up its first EV charging stations in Delhi and Noida.
- Importantly, these are not isolated initiatives; they are underwritten by broader policy shifts.
- Power ministry has announced that government officials and agencies will soon be using only EVs, Public buses are also expected to go electric.
- Niti Aayog, has already put out a road map for India's mobility transformation that has three core elements: "shared", "electric", and "connected".
- The goal, according to the power ministry, is to have no diesel or petrol car sales in the country by 2030.

What are the Pros and cons with the initiative?

- Mainstreaming electric vehicles will require an overhaul of the country's energy and transport infrastructure.
- For example, EV charging stations will have to be set up on a war footing, and electricity generation will have to improve significantly.
- EV technology (especially the battery) will have to become much cheaper before it can perform well in a price-sensitive market like India.
- If these challenges can be tackled effectively and India can leapfrog to EV technology, then of course, the benefits to be had are numerous.
- According to the Niti Aayog report, switching to EVs as part of the larger "shared, electric, and connected" mobility paradigm will cut India's energy demand by 64%, its carbon emissions by 37%, and save the country \$60 billion in energy bills by 2030.

What is issue with government's strategy?

- Niti Aayog recommends that to push EVs, the government must subsidize the EV industry while penalizing conventional cars.
- It calls for lowering taxes and interest rates for loans on EVs while limiting the sale and registration of conventional cars, and using taxes from diesel and petrol car sales to create electric charging stations.
- It also suggests the government open a battery plant by the end of 2018.
- The Ministry of power has claimed that the plan is to let market forces decide how the EV industry will shape up and that the government is only offering a helping hand until the industry can find its feet.
- The issue is the kind of support the government is offering.
- For instance, hydrogen-powered fuel cells offer an equally eco-friendly option.
- Both lithium-ion and hydrogen fuel cells are zero emission, and the hydrogen-powered fuel cells can in fact be recharged faster.
- They also give more mileage than the lithium-ion batteries commonly used in EVs today.

- Certainly, fuelling stations for hydrogen-powered fuel cells are much more expensive,
- But in that case, there is no greater push for CNG vehicles.
- They are cheap, almost as clean as EVs, and the related infrastructure is already in place.
- The government has made its choice, it is choosing only the winning technology which is globally growing.

5.3 TOO HOT TO FLY

Why in news?

American Airlines cancelled nearly 50 regional flights out of Sky Harbor International Airport in Phoenix, Arizona.

What is the reason?

- Every aircraft has performance limitations that also depend on factors other than the weather.
- The reason for cancellation was the high day temperature which was expected to touch 120 degrees Fahrenheit.
- Extreme heat alters the density of air, making it thinner.
- Thin air prevents generation of required 'lift', and makes it more difficult for aircraft to take off.
- Thus, as it gets hotter, planes need progressively longer runways and greater engine power to reach the speeds needed to become airborne.
- In these situations, airlines often put restrictions on onboard weight, and offload cargo and fuel to become lighter.
- Larger jets, with more powerful engines, have higher maximum operating temperatures.
- At these temperatures even the larger jetliners were affected.

5.4 NEW BIODIVERSITY AREAS IN GOA

Why in news?

Birdlife International, a conservation organisation, has recognised three new sites in Goa as hotspots for protection.

What is hotspot for protection?

- A hotspot is a biogeographic region that is both a significant reservoir of biodiversity and is threatened with destruction.
- This areas supports many of the world's plant, bird, mammal, reptile, and amphibian species.

What is the significance of this notification?

- The new list now added
 1. Bondla Wildlife Sanctuary,
 2. Navelim Wetlands and
 3. Netravali Wildlife Sanctuary.
- The sites have been added to the list of "Important Bird and Biodiversity Areas" by birdlife international.

- The inclusion of these ecological hotspots in a new book comes after systematic data collection by the Goa Bird Conservation Network (GBCN).

What are other important biodiversity areas in Goa?

Goa earlier had four recognised biodiversity areas:

1. Bhagwan Mahavir Wildlife Sanctuary and Mollem National Park,
2. Carambolim Wetlands,
3. Cotigao Wildlife Sanctuary
4. Mhadei Wildlife Sanctuary.

What is the role of GBCN?

- GBCN is a NGO, which monitors and takes conservation measures of the birds of Goa.
- BirdLife International encourages national and State governments to recognise the areas as sites of vital importance for conservation of wildlife.
- It empowers local community-based conservation initiatives.
- The Forest Department has already provided support to GBCN in setting up the long-term bird monitoring project, which has completed one year in Cotigao Wildlife Sanctuary.
- The information will help the Forest Department in planning their management strategies.

6. INTERNAL SECURITY

6.1 COMMITTEE TO STUDY FREE MOVEMENT ALONG MYANMAR BORDER

Why in news?

The Union Home Ministry has constituted a committee to examine methods to curb the misuse of free movement along the Myanmar border.

What is the present status?

- India's 1,643-km border with Myanmar touches four states i.e Arunachal Pradesh, Nagaland, Manipur and Mizoram.
- It has a visa-free movement regime for people living within 16 kms on either side of the border.
- They can stay up to 72 hours if they have valid permits issued by the designated authority on either side.
- This is to maintain the traditional social ties among the border people.

What is the reason for the change?

- The ministry is of the view that the free movement regime is being misused.

- Militants and trans-border criminals smuggle weapons, contraband goods and fake Indian currency notes.
- Taking advantage of the free-movement regime they enter India, commit crimes and escape to their hideouts.
- This also indicates a significant shift in India's policy towards Myanmar.
- This is the second time a committee is being constituted to study the free movement across the Myanmar border.
- India Bangladesh border has dedicated crossing points in border villages, where policemen would be made in charge of regulating the movement of people.
- Earlier formed committee recommended the government to replicate this model.

6.2 RANSOMWARE ATTACK

Why in news?

Petya ransomware hit operations at one of the three terminals at Jawaharlal Nehru Port Trust (JNPT)

What is Petya?

- Petya is a ransomware, similar to the Wannacry attack.
- It is part of a new wave of cyberattacks that has hit computer servers all across Europe, locking up computer data and crippling enterprise services in the corporate sector.

How exactly does Petya spread?

- The ransomware locks up a computer's files and demands \$300 Bitcoins as ransom to unlock the data.
- All data on a computer, network gets encrypted.
- Once the malware infects the computer, it will wait for an hour and then reboots the system.
- After the rebooting, the files are encrypted and the user gets a ransom note on their PC asking them to pay up.
- Users are also warned against switching off their PC during the rebooting process, because it could make them lose their files.

Which are the most affected countries?

- The attack is believed to have started in Ukrainian software called **MeDoc**.
- It is used by many government organisations in the country.
- According to reports, this is also the reason why **Ukraine was the worst affected**.
- Over 60% of attacks took place in Ukraine.
- Russia is second on the list with 30%.

How can the ransomware attack be stopped?

- When it comes to decrypting files, currently there is no solution.
- For now, users who have lost their data can't really recover it unless they have a backup.
- There's no way of getting the decryption key from the hackers, since the email account has been shut down.
- However, according to a tweet from HackerFantastic, when the system goes in for a reboot, the user should power off the PC.
- There is no way of stopping the attack from the spreading, given it exploits vulnerabilities in the network.
- For users, it is best to keep a back up of all their data. Preferably this data should not be online, and it should be encrypted.
- Users should also not click on email links from suspicious ids or click on links asking for access to personal information.
- Also keep your Windows PC updated with the latest software.

PRELIM BITS

1. ART AND CULTURE

Lord Jagannath Temple

- The Jagannath Temple of Puri is an important Hindu temple dedicated to Lord Jagannath, a form of Vishnu located on the eastern coast of India, in the state of Odisha.
- The temple is an important pilgrimage destination and one of the four great '**Char Dham**' pilgrimage sites.
- The construction of the Jagannath temple was initiated by King Anantavarma Chodagangadeva in 12th century.
- The temple is famous for its annual Rath Yatra, or chariot festival.
- It is also called as White Pagoda.

2. GEOGRAPHY

World's largest floating solar plant

- China switched on the world's largest floating solar plant, offshore from the city of Huainan in the eastern Anhui province.

Bosphorus Strait

- Bosphorus Strait is a narrow, natural strait and an internationally significant waterway located in northwestern Turkey.
- It forms part of the continental boundary between Europe and Asia, and separates Asian Turkey from European Turkey.
- It is the world's narrowest strait used for international navigation.
- It connects the Black Sea with the Sea of Marmara, and, by extension via the Dardanelles, the Aegean and Mediterranean Seas.
- Recently, Sudden Plankton explosion has caused the change in colour of the water and it was captured by the NASA's Terra Satellite.
- The plankton responsible for this is "Emiliana huxleyi", which is a single-celled organism visible only under a microscope and plated with white calcium carbonate.



First Total Yoga Village

- Kunnamthanam in Kerala is the first total yoga village with at least one member of each family in the Panchayat trained in yoga.

4th and 5th ODF States in India

- Under the Swachh Bharat Mission Gramin (SBM-G), rural Uttarakhand and rural Haryana have declared themselves as the 4th and 5th Open Defecation Free (ODF) States of India.
- The two states joined the league of Sikkim, Himachal Pradesh and Kerala, which were the first three states to be declared ODF.
- Nationally, the sanitation coverage has increased from 42% to over 64% since the launch of SBM.
- With the total number of ODF States now rising to 5, more than 2 Lakh villages and 147 districts have also been declared ODF across the country.

Bhupen Hazarika Bridge

- Prime Minister inaugurated India's longest bridge across the Lohit river, a tributary of the Brahmaputra, in Assam.
- It is also called as Dhola – Sadiya Bridge, connecting the north eastern states of Assam and Arunachal Pradesh.
- It is named after the famous singer Bhupen Hazarika.
- It will reduce travel time between Assam and Arunachal Pradesh from six hours to one hour.

Rutland Island

- Recently, the country's long-range missile test facility at **South Andamans' Rutland Island** has finally secured the clearance of the National Board of Wildlife, which has been held up since 2012.
- The island is very rich in marine life and was once home to the indigenous Andamanese group '**Jangil' or Rutland Jarawa**.
- As of now, long-range missile tests are being carried out from the Odisha coast and are tracked by naval vessels.
- DRDO requires a land-based test area as well **to accurately track its longrange missiles**, with the island in the Andaman being ideally located due to its distance from mainland.
- The clearance has been given with conditions like preparation of marine and terrestrial wildlife conservation plan, installation of deflectors and anti-radiation screens to reduce the impact of radiation, no forest material to be collected and no effluent or domestic sewage shall be disposed in to the sea.

Bilaspur-Manali-Leh Rail line

- Recently final survey for Bilaspur-Manali-Leh Rail line has been launched. It is going to be one of the highest railway tracks in the world.
- It is laid at the height of 3,300 mt and 498-km long stretch will overtake China's Qinghai-Tibet Railway.

- Currently, the road route is open only for about five months in a year. Thus the rail line aimed at connecting Leh with the rest of the country through all weather rail line.
- The all-weather Leh rail network is one of the four important railway connectivities identified by the defence ministry along the China border.



Bilaspur Manali Leh Railway line

Sardar Sarovar Project

- Sardar Sarovar is a gravity dam built on the Narmada River, one of the largest water resources project covering four major states such as Maharashtra, Madhya Pradesh, Gujarat and Rajasthan.
- Narmada main canal would be the largest irrigation canal in the world.
- The project will provide irrigation facilities to the drought prone areas in Gujarat, Maharashtra and Rajasthan.
- This will provide a useful peaking power to western grid of the country which has very limited hydel power production at present.
- Wild life sanctuaries viz. "Shoolpaneshewar wild life sanctuary" on left Bank, Wild Ass Sanctuary in little Rann of Kachchh, Black Buck National Park at Velavadar, Great Indian Bustard Sanctuary in Kachchh, Nal Sarovar Bird Sanctuary and Alia Bet at the mouth of River will be benefited.
- **Khosla committee** was set up to resolve the disputes in sharing the narmada waters between Gujarat and Madhya Pradesh.

3. POLITY

Election to the Office of President of India, 2017

- The President is elected by the members of the **Electoral College consisting of:**
 - Elected members of both Houses of Parliament, and
 - Elected members of the Legislative Assemblies of all States including National Capital Territory of Delhi and the Union Territory of Puducherry.

- The nominated members of either Rajya Sabha and Lok Sabha or Legislative Assemblies of the States are not eligible to be included in the Electoral College and therefore, they are not entitled to participate in the election.
- Similarly, members of the Legislative Councils are also not electors for the Presidential election.
- **Article 55 (3)** of the Constitution provides that the election shall be held in accordance with the System of Proportional Representation by means of single transferable vote and the voting at such election shall be by **secret ballot**.

The election of the Vice-President of India

- The term of office of Vice-President of India, is up to 10th August 2017.
- The election of the Vice-President needs to be completed before the expiration of the term of the present incumbent.
- The Vice-President is elected by the members of the Electoral College consisting of the members of both Houses of Parliament in accordance with the system of proportional representation by means of the single transferable vote.
- The nominated Members of Rajya Sabha as well as of Lok Sabha are also eligible to be included in the Electoral College.
- Article 324 of the Constitution read with the Presidential and Vice-Presidential Elections Act, 1952 and 1974, vests the superintendence, direction and control of the conduct of election to the office of the Vice-President of India in the Election Commission of India.

4. SOCIAL ISSUES

Child Marriages

- According to the recent research by Young Lives and National Commission for Protection of Child Rights (NCPCR), **Rajasthan** has reported the highest incidence of child marriages.
- Rajasthan also topped in the percentage (4.69%) of boys marrying below the legal age of 21 years.
- The report also highlighted that, No marriage below 10 years of age was reported across the country.

Anuyatra

- It is an initiative of the Social Justice Department and the Kerala Social Security Mission, aimed at making the State disabled-friendly.
- It focuses on several interventions from disability prevention to self-reliant rehabilitation.

5. GOVERNMENT INITIATIVES

Operation Swarn

- Operation Swarn is launched by the Railway Ministry to improve services in Rajdhani and Shatabdi Express trains.

- Under the project, the Indian Railways will focus attention on 10 key areas — punctuality, cleanliness, linen, coach interiors, toilets, catering, staff behaviour, security, entertainment, housekeeping and regular feedback.

MERIT Portal

- 'MERIT' - Merit Order Despatch of Electricity for Rejuvenation of Income and Transparency.
- The portal has been developed by Ministry of Power in association with POSOCO and Central Electricity Authority.
- It displays extensive array of information regarding the merit order of Electricity procured by States such as daily source-wise power purchases of respective states/UTs.
- Information available in the Portal shall help State Discoms to optimize their power procurement in more efficient way leading to lower cost of power to consumers.

Inclusive India initiative

- The National Trust under Ministry of Social Justice & Empowerment in collaboration with key partners organised the conference "Inclusive India Initiative".
- It focuses on specifically catering to persons with intellectual and developmental disabilities with an objective to include these people in the mainstream and in all important aspects of social life, namely education, employment and community 'Inclusive India' in about changing the attitudes.

SMARTGRAM initiative

- Recently, the **SMARTGRAM initiative of Rashtrapati Bhavan** was inaugurated for five villages of Haryana by the President of India.
- On May 1, 2017, it was approved that the initiative be extended to 100 villages in the vicinity of the initially selected five village of Haryana.
- A smart gram would have the required basic physical and social infrastructure with a layer of smart information and communication embedded in the infrastructure to improve governance and delivery of services, livelihood and economic opportunities.
- A large number of projects have been undertaken in the initially selected five villages of Haryana under the initiative in the fields of agriculture, skill development, energy, education, etc.,

Swachh Rail Campaign

- Under this campaign, Quality Council of India conducted its 3rd survey to rank railway stations.
- Visakhapatnam railway station in Andhra Pradesh was rated the cleanest station among the 75 busiest stations in the country.
- It is followed by Secunderabad, Jammu, Vijayawada.
- It is based on the criteria such as toilets on platforms, management of tracks and dustbins.

COMMIT

- The Ministry of State for Development of North Eastern Region launched a new **training programme** Comprehensive Online Modified Modules on Induction Training (COMMIT) for State Government officials.
- The objective of this training programme is to improve the public service delivery mechanism and provide citizen centric administration.
- COMMIT will be launched in 6 States of Assam, Haryana, Maharashtra, Tamil Nadu, Telangana and West Bengal initially on pilot basis.

INAM-Pro +

- The Minister of Road Transport & Highways and Shipping launched INAM-Pro +.
- It is an upgraded version of INAM-Pro, **the web portal** designed by National Highways and Infrastructure Development Corporation Ltd (NHIDCL) two years back as a common platform to bring cement buyers and sellers together.
- This reduced the time and effort in preparation of proposals and bid submissions, and helped increase efficiency in procurement of construction materials as one could place orders, obtain price quotes and track them in swift manner on this portal.

RSETI Diwas 2017

- Ministry of Rural Development (MoRD) is undertaking two initiatives in skill development under the National Rural Livelihoods Mission (NRLM).
- Placement linked skill development program called **Deen Dayal Upadhyaya Grameen Kaushalya Yojana**(DDU-GKY) which allows skilling and assured wage employment.
- Skill development through **Rural Self Employment and Training Institutes (RSETI)**, which provides skilling, thereby enabling the trainee to take bank credit and start his/her own Micro-enterprise.
- Recently 4th RSETI Diwas was celebrated in recognition of outstanding performance of RSETIs in various states and awards were given to best performing states and lead banks administering RSETIs.

Vatsalya – Maatri Amrit Kosh

- Ministry of Health and Family Welfare has inaugurated the 'Vatsalya – Maatri Amrit Kosh', a **National Human Milk Bank and Lactation Counselling Centre** at Delhi.
- It is opened in collaboration with the Norwegian government, Oslo University and **NIPI Newborn Project**.
- It will collect, pasteurize, test and safely store milk that has been donated by lactating mothers and make it available for infants in need. It also act as the teaching, training and demonstration site for other milk banks.

DigiYatra

- The initiative aims to bring together entire aviation industry to develop a digital ecosystem that will deliver Indian airtravellers a seamless, consistent and paperless service experience at every touch point of their journey.
- All aviation stakeholders – airlines, airport operators, security and immigration agencies, cab operators, retail establishment and others are working to devise digital standards which can enable seamless exchange of data and information.
- The platform will be built on 4 key pillars such as connected passengers, connected airports, connected flying and connected systems.

SATH program

- NITI Aayog has launched SATH, a program providing '**Sustainable Action for Transforming Human capital**' with the State Governments.
- The program will be implemented by NITI along with McKinsey & Company and IPE Global consortium.
- The vision of the program is to initiate transformation in the education and health sectors.
- SATH aims to identify and build three future 'role model' states for health systems.

Eklavya Model Residential Schools

- Eklavya Model Residential School Scheme was started in 1998 and first school was started in the year 2000 in Maharashtra.
- EMRSs have been functioning as **institutions of excellence for tribal students**. Results of these schools have been generally better than other Government schools in the tribal areas.
- As per existing EMRS Guidelines of 2010, **at least one EMRS is to be set up** in each Integrated Tribal Development Agency (ITDA) / Integrated Tribal Development Project (ITDP) having 50% ST population in the area.

National Mission on Cultural Mapping of India

- Ministry of Culture & Tourism launched the implementation of the "National Mission on Cultural Mapping of India"
- The portal will serve as a repository/consolidated database of information about cultural assets and resources.
- It is a cultural inventory at one place for essential planning, sustainable economic development and for preserving the scattered and near extinct art forms.

Voter Registration Reminder

- Election Commission of India (ECI) is launching a 'Special Drive to enrol left out electors.

- It is about to Launch First Time Nationwide “Voter Registration Reminder” on Facebook
- With over 180 million people in India on Face book, the ‘Register Now’ button is designed to encourage Indian citizens to register themselves with the Election Commission of India.

GOVERNMENT SCHEMES

VAJRA scheme

- Recently, Department of Science and Technology (DST) launched a scheme named 'Visiting Advanced Joint Research Faculty' (VAJRA).
- Under this scheme, scientists or senior researchers abroad of Indian origin or otherwise can collaborate with Indian faculties for conducting joint researches in India.
- The foreign researchers would receive endowments at par with those in their own countries.
- The broad areas of research like energy, health, advance material and others would be promoted under the scheme.

India BPO Promotion Scheme (IBPS)

- Recently, Andhra Pradesh has emerged as the first state in the country to exhaust all the seats allocated to it under the India BPO promotion scheme (IBPS).
- India BPO promotion scheme (IBPS) aims at setting up business process outsourcing (BPO) units in rural areas to secure balanced regional growth of the industry.
- The scheme is under the Digital India Programme to create 150,000 employment opportunities and promotion of BPO operations.
- The scheme provides capital support along with special incentives up to Rs 1 lakh in the form of viability gap funding (VGF) to companies to create BPO units.
- The target under the scheme is to create 48,300 BPO seats across states and Union territories (UTs) based on population percentage according to Census 2011.
- Metro cities such as Bengaluru, Chennai, Hyderabad, Kolkata, Mumbai, National Capital Region (NCR), and Pune, along with their urban agglomeration were excluded.

Kanyashree Prakalpa Scheme

- The scheme aims to improve status of adolescent girls from disadvantaged families through small cash transfers.
- Through the initiative, cash was deposited into the bank account of girls for every year they remained in school and were unmarried.

Ek Bharat Shreshtha Bharat

- It was announced on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel.
- Through this innovative measure, the knowledge of the culture, traditions and practices of different States & UTs will lead to an **enhanced understanding and bonding between the States**, thereby strengthening the unity and integrity of India.
- All States and UTs will be covered under the programme. There will be pairing of States/UTs at national level and these pairings will be in effect for one year, or till the next round of pairings.
- The activity will be very useful that will connect people through exchanges in areas of culture, tourism, language, education trade etc. and citizens will be able to experience the cultural diversity of a much larger number of States/UTs while realising that India is one.

DAY-NULM

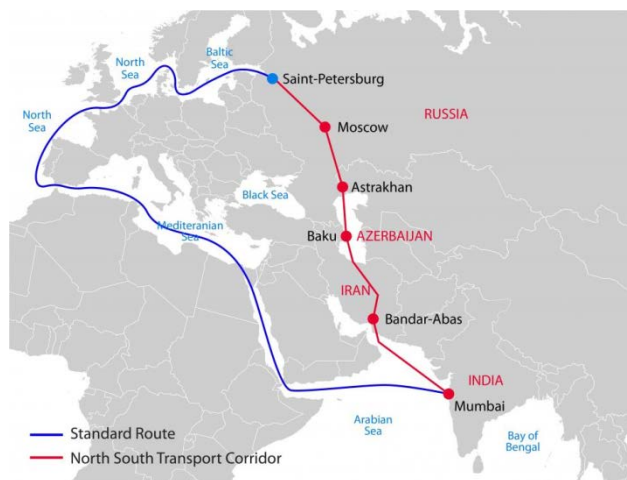
- National Urban Livelihood Mission is now renamed as 'Deen Dayal Antyodaya Yojana-NULM' and in Hindi as 'Deen Dayal Antyodaya Yojana- **Rashtriya Shahri Aajeevika Mission**'.
- This mission seeks to **enhance the employment opportunities and incomes of the urban poor** through skill development and training, setting up of individual and group micro-enterprises, formation of Self-Help Groups, building shelters for homeless, supporting street vendors in creating infrastructure, innovative support to rag pickers, differently abled etc.
- NULM introduced in 2013 is being presently implemented in only 791 cities across the country covering all district headquarters and cities and towns with a population of above one lakh each.
- Now all the States and Union Territories have been empowered to implement DAY-NULM in all the remaining 3,250 statutory urban local bodies even if they have a population of less than one lakh each.
- Under skill training, it was decided to enhance financial provisions for differently-abled.

6. INTERNATIONAL INSTITUTIONS AND ISSUES

TIR Convention

- India became the 71st country to ratify the United Nations TIR (Transports Internationaux Routiers) Convention.
- TIR Convention is an international transit system under the auspices of the United Nations Economic Commission for Europe (UNECE). It came into force from 1975.
- The TIR Convention facilitates the international carriage of goods from one or more customs offices of departure to one or more customs offices of destination (up to a total of four customs offices departure and destination) and through as many countries as necessary.

- It would enable India to move goods seamlessly along the **International North South Transport Corridor (INSTC)** and also boosting trade with the Central Asian Republics and other Commonwealth of Independent States (CIS).



International North South Transport Corridor (INSTC)

BIO International Convention

- The BIO International Convention is hosted by the Biotechnology Innovation Organization (BIO).
- Recently, BIO 2017 was held in San Diego and India is represented by Minister of State for Science and Technology and Earth Sciences.
- The key benefits of attending the BIO International Convention are access to global biotech and pharma leaders via BIO One-on-One Partnering, exposure to industry thought-leaders and networking opportunities.
- BIO is the largest trade organization in the world that represents the biotechnology industry.
- The organization was found in 1993 and its members include companies that make Pharmaceutical drugs, biofuels, industrial enzymes, and genetically modified crops.
- The **Biotechnology Heritage Award** presented annually at the Biotechnology Innovation Organization (BIO).
- The award recognizes individuals who have made significant contributions to the development of biotechnology through discovery, innovation, and public understanding.

UN Public Services Award

- The United Nations Public Service Awards is the most prestigious international recognition of excellence in public service.
- It rewards the creative achievements and contributions of public service institutions that lead to a more effective and responsive public administration in countries worldwide.

- Through an annual competition, it recognizes the work of public servants, and encourages young people to pursue careers in the public sector.
- This year, India was named **first in the Asia-Pacific group** for the category: 'Reaching the Poorest and Most Vulnerable through Inclusive Services and Participation'.
- The West Bengal government is among the winners to receive this Award for its initiative named "Kanyashree" to combat child marriage and ensure education to the girl child in the state.
- The award is given on the occasion of The United Nations Public Service Day. It is celebrated in The Hague, Netherlands this year.

India top remittance-receiving country

- According to a recent UN report, Indians working across the globe sent home USD 62.7 billion last year, making India the top remittance-receiving country surpassing China.
- In the decade between 2007 and 2016, India surpassed China to become the top receiving country for remittances.
- The top 10 sending countries account for almost half of annual flows, led by the US, Saudi Arabia and Russia.

Six days War

- The Six-Day war was the third in the long line of Arab-Israeli wars that started in 1948.
- It began on June 5, 1967 resulting in a massive reorganisation of territories in the middle-east.
- Both Israel and Palestine were dissatisfied by British rule in the British Mandate of Palestine, revolted in the late 30s and 40s.
- Once Israel was carved out of the territory, Egypt, Jordan, Syria and Iraq tried to invade the area.
- Israel fought against a combined force of Egypt, Jordan, Syria.
- The war spanned only six days during which Israel almost destroyed Egypt's air force and captured new territory.

ANUGA

- ANUGA - General Food and Non essential Provisions Exhibition is the **world's biggest and most important trade fair** for Food and beverage trade.
- It takes place **biennially**. ANUGA 2017 is the 34th edition.
- It offers an extensive supporting programme with Lectures, Special exhibition and attractive industry events.

International Tribunal for the Law of the Seas

- ITLOS is an intergovernmental organization created by the mandate of the Third United Nations Conference on the Law of the Sea. The body governs the laws on international waters.

- The Convention entered into force in 1994, and established an international **framework for law over "all ocean space, its uses and resources"**.
- The tribunal is based in **Hamburg, Germany**. There are currently 167 signatories, 166 states plus the European Union.
- **Dr Neeru Chadha** has become the first Indian woman to be elected as a judge at the International Tribunal for the Law of the Seas (ITLOS).

BRICS Media Forum

- China's state-run news agency Xinhua has announced a \$1 million fund to institutionalise media cooperation among the BRICS countries.
- The BRICS media forum is the result of a joint initiative by Xinhua News Agency, Brazil's CMA Group, Russia's Sputnik News Agency and Radio, The Hindu group of publications from India, and South Africa's Independent Media.
- It includes awards for journalists from the five member states.
- The proposal would also focus on joint development of BRICS digital media, financial information services and promoting people- to-people contacts.

7. ECONOMY

e-waybill

- An e-waybill is an electronic bill documenting any transport of a good of a value of more than 50,000.
- Though few items which may be exempted from GST, they would require generation of e-waybill for their transportation.
- For e.g. The National flag, temple prasadam, Khadi fabric and Gandhi caps may be exempt from GST, but for their transportation, generation of e-waybill may be required.
- Sensitive technology that goes into spacecrafts and satellites will be exempt.
- Recently held GST council failed to reach consensus over the implementation of the e-waybill system and authorized the continuation of the current e-waybill system.

Banking Ombudsman

- Recently, RBI has widened the scope of the Banking Ombudsman Scheme 2006 to mobile banking and electronic banking services.
- Thus it enables a customer to lodge a complaint against the bank for non-adherence to instructions related to mobile and electronic banking services.
- The Banking Ombudsman Scheme enables an expeditious and inexpensive forum to bank customers for resolution of complaints relating to certain services rendered by banks.

- The Banking Ombudsman is a senior official appointed by the Reserve Bank of India to redress customer complaints against deficiency in certain banking services.
- All Scheduled Commercial Banks, Regional Rural Banks and Scheduled Primary Co-operative Banks are covered under the Scheme.
- The Banking Ombudsman does not charge any fee for filing and resolving customers' complaints.
- If one is not satisfied with the decision passed by the Banking Ombudsman, one can approach the appellate authority which is vested with a Deputy Governor of the RBI.

Morgan Stanley Capital International (MSCI)

- MSCI is the world's biggest index compiler, with more than \$10 trillion in assets benchmarked to its products.
- Recently it said, China's local currency shares referred to as China 'A' shares would be added to the index.
- MSCI is closely tracked by global investors and inclusion of china's shares will open up investment interest from foreign investors and adds financial credibility.
- If china continues to gain more weightage on the index, more money could flow out of India.

Qualified Institutional Placement (QIP)

- SBI, India's biggest lender by assets has planned share sale by year-end through a qualified institutional placement (QIP).
- QIP is a method under which a listed company can issue equity shares and some other securities to a select group of institutional buyers.
- It allows an Indian-listed company to raise capital from its domestic markets without the need to submit any pre-issue filings to market regulators.

8. ENVIRONMENT

Rhododendron

- Rhododendron is a large genus of flowering plants and is found mainly in Eastern Himalayas, Western Himalayas and Nilgiris.
- Some plants of Rhododendron are evergreen and some are deciduous in nature.
- The species is found in varied habitats from subtropical forest to alpine shrubs, rhododendrons range from dwarf shrubs to large trees.
- The cold, moist slopes and deep valleys of the eastern Himalayas form a conducive habitat for the luxuriant growth of Rhododendron species and rich diversity in North Eastern States.
- The species has been designated as the **State tree of Uttarakhand** and its blooming in the Garhwal Himalayas is celebrated as 'Phool Sankranti', a festival of flowers.

- The studies on the flowering cycle have revealed that they are prominent indicators of climate change.
- In high altitude areas of Arunachal Pradesh rhododendrons are routinely cut for firewood by local people, forest fires in the dry seasons in Manipur and Nagaland were threatening the survival of many species.

Salt Water Crocodiles

- The Estuarine or salt water crocodiles are found in the eastern coast and Andaman & Nicobar Islands in India.
- Bhitarkanika National park on the odisha coast houses 70% of India's salt water crocodiles.
- Project Crocodile was launched by Government of India and UNDP to save the salt water crocodiles in Bhitarkanika.
- Unlike other crocodiles, estuarine crocodiles lay eggs by creating a mound made of leaves of a particular mangrove species, which are plentifully available in Bhitarkanika.
- Crocodiles start laying eggs by mid-may, with an incubation period of 75 days.
- Other Crocodile species in India: Mugger crocodile and Gharial Crocodile.

Orang Tiger Reserve

- Recently, the census carried out in the Orang Tiger Reserve has shown that the reserve has the highest density of tigers in the country.
- Orang Tiger Reserve is the 49th in the country. **Kamlang Tiger Reserve in Arunachal is the 50th and latest to be notified.**
- Orang has the density of 28 big cats followed by Kaziranga National Park (12.72) in Assam, Jim Corbett National Park (11) in Uttarakhand and Bandipur National Park (10.28) in Karnataka.

First Biodiversity Heritage Site

- Ameenpur Lake is an ancient man-made lake that dates back to the time of Ibrahim Qutb Shah, who ruled the kingdom of Golconda between 1550 and 1580.
- It becomes the first Biodiversity Heritage Site in the country.
- The lake is now divided into two parts called Pedda Ameenpur and Chinna Cheruvu.
- With the biodiversity heritage tag given under the Biological Diversity Act 2002, the lake, which will now be managed by a locally constituted Biodiversity Management Committee, also becomes eligible for funding for upkeep of the lake as well as its protection.

Important Bird and Biodiversity Areas

- **BirdLife International** has recognised three new sites in Goa as hotspots for protection. The sites have been added to their list of Important Bird and Biodiversity Areas (IBA).

- Now, seven areas in Goa have been termed important biodiversity areas by Bird Life.
- Goa harbours a good population of the **lesser adjutant and the Nilgiri wood pigeon** in certain pockets of the State apart from the identified sites.
- An IBA is an area identified using an internationally agreed set of criteria as being globally important for the conservation of bird populations. Currently there are over 12,000 IBAs worldwide.

New species of flying squirrel discovered

- Scientists have discovered a new species of flying squirrel known as **Humboldt's flying squirrel**, in North America.
- The new flying squirrel species inhabits the **Pacific Coast region of North America**.
- This new discovery is the **45th known species of flying squirrel in the world**.

Animal Discoveries & Plant Discoveries 2016

- Animal Discoveries 2016, New Species and Records, brought out by the Zoological Survey of India and Plant Discoveries 2016 by the Botanical Survey of India.
- Animal Discoveries 2016 says that for the first time, the number of animal species in the country, including protozoa, has crossed one lakh.
- The geographical distribution of the new plant species reveals that most discoveries were made in the Western Ghats (17%), followed by the Eastern Himalayas (15%).

Karkata

- Karkata, which stands for crab in Sanskrit, has been given a separate genus, indicating a higher order of distinctive features.
- It is endemic to the Western Ghats.
- Recently, the scientists have discovered a new genus and six new species of **freshwater crabs** in the Western Ghats biodiversity hotspot.

New Green Building Code

- The Bureau of Energy Efficiency (BEE) launched a code for new commercial buildings in the country.
- Energy Conservation Building Code (ECBC) 2017 was developed by Ministry of Power and BEE.
- The code sets parameters for builders, designers and architects to integrate renewable energy sources in building design with the inclusion of passive design strategies.
- It promotes low-carbon growth and lead to 30-50% energy savings by commercial buildings by 2030.

- In order for a building to be considered ECBC-compliant, it will need to demonstrate minimum energy savings of 25 per cent.
- Additional improvements will enable new buildings to achieve higher grades like ECBC+ or SuperECBC, leading to further energy savings of 35 per cent and 50 per cent, respectively.

Solar Rooftop Investment Program

- The **Asian Development Bank** (ADB) and the Punjab National Bank (PNB) signed a \$100 million loan—that will finance large solar rooftop systems on industrial and commercial buildings throughout India.
- This is the **first tranche loan of the \$500 million** multi tranche finance facility Solar Rooftop Investment Program (SRIP) approved by ADB in 2016.

Early Warning Dissemination System

- The Odisha government is all set to commission the ambitious Early Warning Dissemination System (EWDS) in 6 coastal districts to reduce the vulnerability of coastal communities to natural calamities.
- Odisha will be the first state in India to install EWDS to provide early warning to coastal people.
- The government will install 122 towers to disseminate early warnings about cyclone, tsunami and flood to people.
- The project will be implemented under the National Cyclone Risk Mitigation Project (NCRMP).
- The project, which is being implemented with **assistance from the World Bank**, will have towers in 22 blocks under six coastal districts at an estimated cost of Rs 82 crore.

9. SCIENCE AND TECHNOLOGY

Cartosat-2E

- ISRO is set to launch Cartosat – 2E along with 30 other satellites in PSLV C-38.
- It is the third Indian remote sensing (IRS) satellite that can send pictures from an orbit 500 km above the earth.
- Cartosat is a series of earth observation satellites placed in Polar Sun Synchronous Orbit (PSSO).
- PSLV is the third generation launch vehicle of India. It is the first Indian launch vehicle to be equipped with liquid stages.
- The imageries from Cartosat-2 series satellite will useful for cartographic applications, urban and rural applications, coastal land use and regulation, utility management like road network monitoring, water distribution, creation of land use maps, change detection to bring out geographical and manmade features and various other Land Information System (LIS) and Geographical Information System (GIS) applications.
- It will provide useful space-based data for decision makers in Smart City and AMRUTH projects.
- This new Earth observatory satellite will reduce imagery imports.

NIUSAT

- It is one of the nano-satellites from India sharing space in PSLV C-38 mission which carries CARTOSAT and 29 other nano-satellites from 14 countries.
- NIUSAT was designed and developed by the Noorul Islam University in Tamil Nadu.
- This nano-satellite is built for disaster management and crop monitoring, equipped with an RGB camera for multispectral imagery.

KalamSat

- KalamSat, named after former president of India APJ Abdul Kalam, is the world's smallest and lightest satellite built by students from Tamil Nadu.
- This is the first time that an Indian student's experiment has been carried out by NASA.
- It weighs about 64 grams which is lighter than a smart phone and made of reinforced carbon fibre polymer.
- It is 3D printed satellite and it is for the first time that 3-D printing technology is being used in space.
- The main role of the satellite will be to demonstrate the performance of 3D-printed carbon fibre.

GSLV Mark III

- GSLV Mk III is a **three-stage heavy lift launch vehicle** developed by ISRO. The vehicle has two solid strap-ons, a core liquid booster and a cryogenic upper stage.
- GSLV Mk III is designed to carry 4 ton class of satellites into Geosynchronous Transfer Orbit (GTO) of 36,000 km; or about 10 tons to Low Earth Orbit (LEO) of up to 800 km., which is **about twice the capability of GSLV Mk II.**
- The indigenous GSLV-Mark III will make a bid to breach a heavy-lift rocket club. The U.S., Russia, Europe, China and Japan are already there.
- The success of the first full flight of Mk III will mean that soon, Indian communication satellites can be lofted into space from within the country.
- Although **Mk III was approved in 2002** and work on it and its facilities began over the last six to eight years, the most intensive part was during 2014-16.

NISAR

- NASA-ISRO Synthetic Aperture Radar satellite (NISAR) is the world's most expensive earth imaging satellite.
- NISAR is dual frequency RADAR, it is an L-band and S-band RADAR. It is the first such satellite using dual frequency RADAR.
- The S-band is being built by ISRO and L-band by NASA.

- It is expected that the NISAR satellite will be launched in 2021 from India using the Geo-synchronous Satellite Launch Vehicle (GSLV).
- One of the main purposes of the mission is to observe Earth and establish a general pathway for future joint missions for Mars exploration.
- It will take weekly snapshots of earth that will provide time lapse images of the motion of tectonic plates, ice sheets and changes in vegetation over land in agriculture and forests.
- NISAR will provide a means of resolving highly spatial and temporally complex processes ranging from ecosystem disturbances, to ice sheet collapse and natural hazards including earthquakes, tsunamis, volcanoes, and landslides.

Hottest planet in the Universe

- Scientists have discovered the hottest known planet “KELT-9b” located 650 light years from Earth.
- The Jupiter-like planet orbits a massive star KELT-9 and is warmer than most stars in the universe.
- The ultraviolet radiation from the star it orbits is so brutal that the planet may be evaporating away under the intense glare, producing a glowing gas tail.
- It is tidally locked to its star as the moon is to Earth.
- The day side of the planet is perpetually bombarded by stellar radiation, and, as a result, the planet is so hot that molecules such as water, carbon dioxide and methane cannot form there.

Third gravitational wave detection

- The LIGO detectors in the U.S. have detected yet another merger of two black holes.
- Named GW170104, this signal marks the third confirmed detection of gravitational waves coming from a binary black hole merger.
- At LIGO, the detection has revealed not merely a black hole merger, but also the alignment of the spins of the black holes. This can shed light on the way the black holes might have formed.
- **LIGO:** The Laser Interferometer Gravitational-Wave Observatory is a large-scale physics experiment and observatory with the mission to **directly observe gravitational waves of cosmic origin.**
- These waves were first predicted by Einstein's general theory of relativity in 1916.
- Their existence was indirectly confirmed when observations of the binary pulsar PSR 1513-16 in 1974. The Nobel Prize in Physics 1993 was awarded to Hulse and Taylor for this discovery.
- Two large observatories were built in the United States with the aim of detecting gravitational waves by **laser interferometry.**

LIGO-India

- **LIGO-India**, or INDIGO, is a planned collaborative project between the LIGO Laboratory and the **Indian Initiative in Gravitational-wave Observations (IndIGO)** to create a world-class gravitational-wave detector in India.
- A site in the Hingoli district (Maharashtra) has been selected.

NASA Missions

- **NICER**: NASA will launch the world's first mission devoted to studying rapidly spinning **neutron stars**.
- Neutron stars are the **remnants of massive stars** that, after exhausting their nuclear fuel, exploded and collapsed into super-dense spheres about the size of New York City.
- Although neutron stars **emit radiation across the spectrum**, observing them in the energetic X-ray band offers the greatest insights into their structure and the high-energy phenomena that they host, including starquakes, thermonuclear explosions, and the most powerful magnetic fields known in the cosmos.
- **Sounding Rocket**: NASA is set to launch a sounding rocket which will **release blue-green and red artificial clouds**.
- The flight of a sounding rocket is short-lived, and has a parabolic trajectory.

Mazaalai

- Mazaalai, named after Mongolia's gobi bear Mazaalai, is the Mongolia's first satellite to be sent to space.
- The satellite will accompany the "SpaceX Falcon 9" rocket at the Kennedy Space Center in Florida through a project supported by UNESCO and Japan.

CHESS rocket

- NASA is launching a new CHESS sounding rocket which will study vast interstellar clouds to understand about the earliest stages of star formation.
- Deep in space between distant stars, vast clouds of neutral atoms and molecules, as well as charged plasma particles called the interstellar medium that may evolve into new stars and even planets.
- It will measure light filtering through the interstellar medium to study the atoms and molecules within, which provides crucial information for understanding the life-cycle of stars.

Magnetic field in Uranus

- Recently scientists have found that Uranus' magnetic field gets flipped on and off like a light switch everyday as the planet rotates.
- It is based on the data from **NASA's Voyager 2 Spacecraft**.

- Uranus magnetic field is lopsided and tilted 60 degrees from its axis. Thus it causes magnetic field to tumble asymmetrically to the solar winds.
- This is quite different from Earth's magnetosphere, since the alignment of Earth's magnetosphere is always toward the sun and it is one of the reason for Earth's auroras.

Second Scorpene-class submarine

- Recently, **INS Khanderi**, the second of the six Scorpene class submarines has sailed out from Mumbai harbour.
- The first Scorpene-class submarine **INS Kalvari** has already undergone various trials and is expected to be inducted into the Indian Navy later this year.
- Six Scorpene-class submarines are being built under '**Project 75**' of the Indian Navy.
- The Project 75I-class submarine is a follow-on of the Project 75 Kalvari-class submarine for the Indian navy.
- Under this project, the Indian Navy intends to acquire 6 diesel-electric submarines, which will also feature advanced **Air Independent Propulsion (AIP) systems** to enable them to stay submerged for longer duration and substantially increase their operational range.

Anti-tank Missile Nag

- DRDO Successfully Test-fires Anti-tank Missile Nag in Rajasthan.
- Nag is a third-generation, **fire-and-forget**, anti-tank guided missile developed by India's state-owned DRDO to support both mechanised infantry and airborne forces of the Indian Army.
- The missile incorporates an advanced passive homing guidance system and possesses high single-shot kill probability.
- It is designed to **destroy modern main battle tanks** and other heavily armoured targets.
- Nag can be launched from land and air-based platforms.

Prithvi II Missile

- Recently, Prithvi-II missile was successfully test fired from a test range in Odisha.
- It is an indigenously developed nuclear-capable, surface to surface missile.
- Prithvi II is the first missile to have been developed by the DRDO under the Integrated Guided Missile Development Programme.
- It was inducted into Indian armed forces in 2003.
- It has a strike range of 350 km and it is a single stage liquid fuelled engines.
- The Prithvi-II missile is capable of carrying 500 kg to 1,000 kg of warheads and is thrust by liquid propulsion twin engines.

Progress MS-06

- It's a Russian spacecraft that was launched carrying cargo to the International Space Station (ISS).
- The spaceship has around 2.7 metric tons of cargo and supplies to the ISS, according to NASA.

SCIENCE

Bright nights

- It is a phenomenon in which the night sky is bright enough to read a book even in the absence of moon light.
- A new theory says it is due to slow moving, high altitude atmospheric waves merging together and amplifying the light from the naturally occurring airglow.
- The theory says that, for every seven nights out of 100 there is a bright night somewhere on the earth.

Oxytocin

- Oxytocin is a hormone known to trigger a wide variety of physical and psychological effects and is commonly used to facilitate childbirth.
- The Government of India banned retail sale of the hormone in 2014 after it was found that indiscriminate use of Oxytocin in milch animals and by farmers was causing irreversible hormone damage.
- The drug is used by dairy owners and farmers to boost milk production and make vegetables look bigger and fresher.
- After being banned in retail markets, the Drug Controller will soon restrict manufacturing of controversial hormone drug Oxytocin to PSUs.

Oldest Homo Sapiens

- Recently, Archaeologists have unearthed the fossils of Homo Sapiens that were dated about 300,000 years old in Morocco.

EXERCISES

Indra-2017

- The eighth edition of India-Russia 'Indra' exercise between the armies of the two strategic partners had taken place in mountainous Vladivostok in Russia.
- The main focus of the joint exercise was counter-terrorism.
- The Indian Army and the Indian Navy has been having the military exercise 'Indra' with Russia separately. The Indian Air Force had participated in an exercise 'AviaIndra' with Russian air force in 2014.
- This year will see the first ever Tri-services exercise INDRA–2017.

10. INDEX AND REPORTS

City Liveability Index

- The index was launched by the Ministry of Urban Development.
- The index is for measuring the quality of life in 116 major cities including smart cities, capital cities and cities with a population of above one million each.
- It assesses cities on a comprehensive set of 79 parameters to capture the extent and quality of infrastructure including availability of roads, education and health care, mobility, employment opportunities, emergency response, grievance redressal, pollution, availability of open and green spaces, cultural and entertainment opportunities etc.

Global Peace Index 2017

- The Institute for Economics and Peace (Australia) published its Global Peace Index for the 11th year running.
- Their report found that the world became 0.28% more peaceful over the past year.
- Iceland is joined at the top of the index by New Zealand, Portugal, Austria, and Denmark, all of which were ranked highly in the 2016 Global Peace Index.
- **India has been ranked 137th** in the Global Peace Index 2017.
- The GPI investigates the extent to which countries are involved in ongoing domestic and international conflicts. It also seeks to evaluate the level of harmony or discord within a nation; ten indicators broadly assess what might be described as a safety and security in society.

QS World University Rankings 2018

- It is the annual world university rankings put out by global education analysts QS Quacquarelli Symonds.
- Indian Institute of Science (IISc), Bengaluru has achieved the highest ever ranking for an Indian university in one of the important parameters in the 2018 rankings.
- IISc has been ranked number 6 among 959 universities in the QS World University Rankings for 'Citations per Faculty'.
- Citations per Faculty is defined the number of times research papers from a university is cited in the research work of others is calculated and calibrated against its faculty strength.
- IISc has scored a perfect 100 for citations per faculty in the 2018 rankings.
- The QS rankings give highest weightage of 40% to academic reputation, followed by faculty-student ratio and citations per faculty (20% each), and employer reputation (10%).

World Investment Report

- India will remain among the top three investment destinations globally till 2019, according to a survey by the United Nations Conference on Trade and Development (**UNCTAD**).

- UNCTAD's World Investment Report 2017 also said **India ranked 10th in terms of FDI inflows in 2016**, with \$44 billion coming in, as in 2015.
- Over the next two years, India will be behind only the U.S. and China in terms of investment attractiveness, the report added.
- The World Investment Report **focuses on trends in FDI worldwide**, at the regional and country levels and emerging measures to improve its contribution to development.

AUSINDEX 17

- AUSINDEX is the **first-ever bilateral military exercise in Australian waters** involving the Indian Navy and Royal Australian Navy.
- It aims to develop “a deeper understanding and cooperation between the two navies.”
- Indian warships participating in AUSINDEX 17 include **INS Kamorta**, the first of four anti-submarine Kamorta-class stealth corvettes; the **INS Shivalik**, the lead ship of India's first class of stealth multi-role frigates; and the **INS Jyoti**, a Komandarm Fedko-class replenishment oiler.