

MONTHLY

FACTLY

EXCLUSIVE CURRENT AFFAIRS FOR

PRELIMS

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*Polity***1. UNLAWFUL ACTIVITIES (PREVENTION) ACT, 1967**

News: The Government of India has constituted the Unlawful Activities (Prevention) Tribunal to adjudicate whether or not there is sufficient reason to continue the ban on the Liberation Tigers of Tamil Eelam (LTTE).

Facts:

- Earlier, Central Government had extended the ban on the LTTE for another five years under Unlawful Activities (Prevention) Act, 1967. The LTTE objective to create a separate country for the tamils threatened the sovereignty and territorial integrity of India.

Salient feature of Unlawful Activities (Prevention) Act, 1967:

- It is aimed at effective prevention of certain unlawful activities of individuals and associations and for dealing with terrorist activities. Its objective is to deal with activities directed against integrity and sovereignty of India.
- The Act defines unlawful activity as any action by an individual or association which is intended to bring about cession/secession or such action as to disrupt or question the sovereignty and territorial integrity of India.
- The Unlawful Activities (Prevention) Act, 1967 was amended in 2004 to criminalise the raising of funds for a terrorist act, holding of the proceeds of terrorism, membership of a terrorist organisation, support to a terrorist organisation, and the raising of funds for a terrorist organisation. Prevention of Terrorism Act (POTA) was repealed in 2004.
- It was again amended in 2012 to comply with the guidelines of the Financial Action Task Force (FATF). The definition of "terrorist act" was expanded to include offences that threaten economic security, counterfeiting Indian currency and procurement of weapons.

Criticism of UAPA, 1967

- The Act introduces a **vague definition of terrorism** to encompass a wide range of non-violent political activity, including political protest.
- It empowers the government to declare an organisation as 'terrorist' and ban it. Mere membership of a proscribed organisation itself becomes a criminal offence.
- It allows detention without a charge-sheet for up to 180 days and police custody can be up to 30 days

Other Facts:

- **Financial Action Task Force (FATF)** is an inter-governmental organisation set up in 1989 to develop policies to combat money laundering and terrorist financing. India got FATF membership in 2010 on the assurance that it would make suitable amendments in the Act by March 2012.

2. L-G role in Puducherry administration

News: The Madras High Court has ruled that the Lieutenant Governor cannot interfere in the day to day affairs of an elected government in Puducherry.

Facts:**Key observation by High Court:**

- The court observed that incessant interference from the L-G would amount to running a “parallel government”
- **Article 239A** symbolises the supremacy of the Legislature above the Administrator in case of the Union Territory of Puducherry.
- The Administrator cannot interfere in the day to day affairs of the Government. The decision taken by the Council of Ministers and the Chief Minister is binding on the Secretaries and other officials
- Government secretaries were bound to take instructions from the Ministers and the Council of Ministers, headed by the Chief Minister. Government secretaries of the Puducherry administration were required to report to the Council of Ministers headed by the Chief Minister on all official matters.
- The court also went on to point out the differences between the powers conferred on the legislatures of Puducherry and Delhi under Articles 239A and 239AA of the Constitution. The court said though Article 239AA imposes several restrictions on the legislature of Delhi but no such restrictions had been imposed explicitly in the case of Puducherry under Article 239A.

Additional Facts:

- According to Article 239AA, the elected legislature of NCT of Delhi cannot enact laws relating to entries 1,2 and 18 of the state list. It means that Delhi’s elected government cannot make laws concerning public order, police and land rights.
- However, under Articles 239A Puducherry Assembly can legislate on any issue under the Concurrent and State Lists. But, if the law is in conflict with a law passed by Parliament then the law passed by Parliament prevails.
- SC said that LG of Delhi has no independent decision making power and has to act on aid and advise of the elected government.

3. THE COLLEGIUM SYSTEM

News: The Centre had returned the proposals forwarded by the Supreme Court collegium for elevation of High Court judges to the Supreme Court.

Facts:**The Collegium System**

- Collegium system in India is a forum of judges which decides on appointments/elevations of Judges/transfers of judges of Supreme Court and High Court.
- It comprises of Chief Justice of India and four senior most judges of India.
- The collegium system is an innovation of judiciary and it is not mentioned in the constitution of India. It has its genesis in three judgements of SC collectively known as Three Judges Cases.
- The collegium system provides for greater say of judiciary than executives in the appointment/transfer of judges. The collegium sends its recommendation to the Government for approval. The government can either accept it or reject it. In the case it is rejected, the recommendation comes back to the collegium. If the collegium reiterates its recommendation to the government, then it is bound by that recommendation.

Criticism of Collegium System:

- Process is closed door, opaque and non-transparent

- It favours nepotism, favouritism.
- Provides large room for arbitrary and whimsical decisions

NJAC (National Judicial appointment commission)

- It was established by Union Govt through 99th constitutional Amendment Act.
- However, the supreme strike down the constitutional amendment Act terming it as unconstitutional. It also introduced the doctrine of judicial primacy and exclusivity in judicial appointment.

4. 'BLACK LISTS' OF INDIAN-ORIGIN PEOPLE

News: The Home Ministry has decided to discard its 'Black List' of Indian-origin people.

Facts:

- It is the list maintained by Indian missions and posts abroad.
- The list mostly comprised of the names of people belonging to the Sikh Community who had taken asylum abroad under the plea of alleged persecution in India.
- Those who were in the Blacklist were denied visa services by Indian missions and posts.
- With the decision to do away with the list, such asylum seekers along with their family will be granted visa and consular services at par with foreigners of the country in which they are living.
- The asylum seekers can also obtain Overseas Citizen of India (OCI) cards if they have held normal Indian visas for at least two years.

Additional Facts:

- The Overseas Citizen of India (OCI) is an immigration status permitting a foreign citizen of Indian origin to live and work in the Republic of India indefinitely. It was introduced by The Citizenship (Amendment) Act, 2005.

5. STICK TO DEADLINE ON FINALISATION OF ASSAM NRC: SUPREME COURT

News: The Supreme Court said that it will not extend the July 31 deadline for finalisation of the National Register of Citizens (NRC) in Assam.

Facts:

- The National Register of Citizens (NRC) is a register which contains the name of all citizens of India residing in Assam. The process of NRC update in Assam has been taken up as per a Supreme Court order in 2013.
- The apex court directed Assam NRC Co-ordinator to act with "wise discretion" while dealing with objectors who had failed to appear for scheduled hearings. The direction after the court was informed that many persons, who had objected to exclusion from the draft NRC are not coming forward before panels which are dealing with such complaints.
- The Supreme Court had questioned a proposal and feasibility by the Assam government to quickly open 1,000 foreigners' tribunals all over the state to try suspected illegal immigrants.
- The court had highlighted that there would be an influx of petitions in the foreigners' tribunals once the final NRC was published on July 31st.

Other Facts:

- **The National Register of Citizens (NRC)** is a register which contains the name of all citizens of India residing in Assam. The process of NRC update in Assam has been taken up as per a Supreme

Court order in 2013. The update is being carried out under the Citizenship Act, 1955, and according to rules framed in the Assam Accord, 1985.

- **Assam Accord is a Memorandum of Settlement (MoS)** signed between representatives of the Government of India and the leaders of the Assam Movement- a movement against illegal immigrants in Assam. As per the accord, there has to be a separate NRC for Assam.
- **Citizenship Act, 1955**- dealing with acquisition and loss of citizenship in India- was amended in 1985 to incorporate Section 6A. This section fixes March 25, 1971 as the cut-off date for granting citizenship to Bangladeshi migrants in Assam.
- **The draft Assam NRC** was published on July 30, 2018 in which the names of 2.89 crore of the 3.29 crore people were included. Over 35 lakh people excluded from the draft had filed claims for Indian citizenship.
- **Foreigners Tribunal (FT)** was set up in Assam in 1964 through the Foreigners Tribunal Order 1964. The tribunals are mandated with identifying the legal status of suspected foreigners in Assam. At present, there are 100 FTs in Assam; of these 64 were set up in 2015, to expedite the exercise of determining illegal immigrants in the state through the National Register of Citizens (NRC).
- Assam also had **Illegal Migrants Determination Tribunal** which was established in 1985 under the Illegal Migrants (Determination by Tribunal) (IMDT) Act, 1983. The tribunals only considered the cases of those who had allegedly entered India after March 25, 1971. IMDT Act was enacted to put forward the procedures to detect illegal immigrants (from Bangladesh) and expel them from Assam.
- IMDT Act had placed the onus of proving citizenship on the accuser, rather than the accused and thus had made determining illegal migrants difficult. In 2006, the Act was struck down by the Supreme Court on the grounds that it was the main impediment the identification and deportation of illegal migrants

6. APEX COURT UPHOLDS VALIDITY OF KARNATAKA SC/ST GOVT. STAFF PROMOTION LAW

News: In the Jarnail Singh v Lachmi Narain case, the Supreme Court upheld the constitutional validity of the Karnataka government's 2018 law, which provided for reservation in promotion and seniority to SC and ST employees.

Facts:

- The Karnataka governments 2018 Act provided for consequential seniority to persons belonging to the Scheduled Castes and Scheduled Tribes promoted under the reservation policy of the State of Karnataka.
- Earlier, the Karnataka Determination of Seniority of the Government Servants Promoted on the Basis of the Reservation Act 2002 was held to be unconstitutional in BK Pavitra case on the ground that an exercise for determining 'inadequacy of representation', 'backwardness' and the impact on 'overall efficiency' had not preceded the enactment of the law.

Additional Facts:

- In Indra Sawhney vs Union of India, the Supreme Court had held that reservations under Article 16(4) could only be provided at the time of entry into government service but not in matters of promotion.
- In 1995, Parliament had brought the **77th amendment** by which clause (4A) was inserted into Article 16 to enable reservation to be made in promotion for SCs and STs.

- The validity of the 77th amendment to the Constitution and of the legislation enacted in pursuance of those amendments was challenged before the Supreme Court in the **Nagaraj case (2006)**. The SC upheld the constitutional validity of these amendments.
- It ruled that if the state wished to exercise their discretion and make provision (for reservation in promotions for SCs/STs), the State has to collect quantifiable data showing backwardness of the class and inadequacy of representation and compliance to Article 335. It will have to see that its reservation provision does not breach the ceiling-limit of 50%.
- Article 335 recognizes the requirement of special measures without compromising the efficiency in the administration.

7. PROJECT 'SPARROW-CBIC'

News: Government of India has launched Project SPARROW-CBIC.

Facts:

- It is a project for online writing of Annual Performance Appraisal Report (APAR) for Group 'B' and 'C' Officers of Central Board of Indirect Taxes and Customs (CBIC). SPARROW stands for Smart Performance Appraisal Report Recording Online Window (SPARROW).
- The Directorate General of Human Resource Management (DGHRM), the HR arm of CBIC is the implementing agency for this project.
- SPARROW-CBIC brings a complete change in APAR management of such a large number of Group B & C officers of CBIC which would in turn lead to better HR Management. It is an important milestone in the journey towards digitisation and paperless working.

Other Facts:

- Earlier, online writing of APARs in SPARROW for IRS(C&CE) Officers had already been implemented. Now, online writing of APARs in SPARROW has been launched for Group B & C officers of CBIC.
- In Performance Appraisal, assessment of performance of employees is undertaken periodically for determining their output and their abilities. Performance appraisal is carried out to serve many purposes such as promotion, compensation, training and so on.

8. KERALA ASSEMBLY PROCEEDINGS TO BE DIGITIZED: SPEAKER

News: Kerala state assembly has decided to become paperless with total digitization of the records and proceedings. This initiative is part of an ambitious project called E-Vidhan.

Facts:

- Once the project is completed, all the Assembly proceedings like submission of notice by a member, question and answers, and all the other business concerning the Assembly will go paperless.

Other Facts:

E-Vidhan:

- E-Vidhan is a Mission Mode Project to digitize and make the functioning of State Legislatures paperless. This is part of the Digital India programme. The nodal ministry is the Ministry of Parliamentary Affairs (MoPA).
- The mission aims to bring all the legislatures of the country together, in one platform thereby creating a massive data depository without having the complexity of multiple applications.

- The funding for e-Vidhan is provided by the MoPA and technical support by Ministry of Electronics and Information Technology (MietY).
- Himachal Pradesh is already the first Digital Legislature of the country.

9. AFSPA

News: The Armed Forces (Special Powers) Act is set to be withdrawn from Assam in August, 2019.

Facts:

- In 1990, the entire state of Assam was declared a “disturbed area” and AFSPA was imposed when the United Liberation Front of Assam (ULFA) militancy was at peak. ULFA sought to establish an independent state of Assam with an armed struggle in the Assam conflict.
- In September 2018, the Centre had delegated to Assam the power to extend or withdraw AFSPA. The state government had twice extended the Act, citing the upcoming publication of the final National Register of Citizens (NRC). The deadline for submitting the complete and final NRC is July 31st.

Other Facts:

AFSPA, 1958

- The Armed Forces (Special Powers) Act was enacted in 1958 to bring under control what the government of India considered ‘disturbed’ areas.
- **Disturbed Area**
 - A disturbed area is one which is declared by notification under Section 3 of the AFSPA. It can be invoked in places where the use of armed forces in aid of the civil power is necessary.
 - An area can be disturbed due to differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
 - The Central Government, or the Governor of the State or administrator of the Union Territory can declare the whole or part of the State or Union Territory as a disturbed area.
 - The Ministry of Home Affairs would usually enforce this Act where necessary, but there have been exceptions where the Centre decided to forego its power and leave the decision to the State governments.
 - Once declared ‘disturbed’, the region is maintained as disturbed for a period of three months straight, according to The Disturbed Areas (Special Courts) Act, 1976. The government of the state can suggest whether the Act is required in the state or not.
- **Powers of Army in Disturbed Area**
 - Under Section 4 of the AFSPA, an authorised officer in a disturbed area enjoys certain powers. The authorised officer has the power to open fire at any individual even if it results in death if the individual violates laws which prohibit (a) the assembly of five or more persons; or (b) carrying of weapons. However, the officer has to give a warning before opening fire.
 - The authorised officer has also been given the power to (a) arrest without a warrant; and (b) seize and search without warrant any premises in order to make an arrest or recovery of hostages, arms and ammunitions.
 - Individuals who have been taken into custody have to be handed over to the nearest police station as soon as possible.
 - Prosecution of an authorised officer requires prior permission of the Central government.

- AFSPA is effective in the whole of Nagaland, Assam, Manipur (excluding seven assembly constituencies of Imphal) and parts of Jammu Kashmir and Arunachal Pradesh. The Centre had revoked it in Meghalaya on April 1, 2018.

10. WOMEN'S REPRESENTATION IN 17TH LOK SABHA RISES TO A RECORD AT 14.4%

News: During the recent 17th Lok Sabha, 78 elected women MPs have got elected. This is the highest number of women representatives since independence.

Facts:

- Women will account for 14.39% of the entire strength of the 17th Lok Sabha. However, the regional parties have a higher ratio of women MPs.
- Women candidates also displayed a higher winnability factor or strike rate. A higher success rate or winnability factor shown by women candidates is consistent with the past record.

Other Facts:

- The Constitution (One Hundred and Eighth Amendment) Bill, 2008 (commonly known as Women Reservation Bill) seeks to reserve one-third of all seats for women in the Lok Sabha and the state legislative assemblies. The bill was passed in the Rajya Sabha in 2010 but is still pending in Lok Sabha.

11. Armed Force Tribunal (AFT)

News: Armed forces tribunal (AFT) has directed the government to produce before it all records and documents relating to selection of the new Navy Chief.

Facts:

- This direction by the AFT came in response to a petition filed by Vice Admiral challenging the government's decision to ignore him for the Navy chief's post despite him being the senior most officer.

Armed Force Tribunal (AFT):

- Armed Forces Tribunal (AFT) is an Indian military tribunal established in 2009 under the Armed Forces Tribunal Act, 2007. Its Principal Bench is in New Delhi.
- It's objective is to adjudicate complaints w.r.t appointments and conditions of service in respect of persons subject to the (a) Army Act, 1950 (b) The Navy Act, 1957 and (c) the Air Force Act, 1950. It can further provide for appeals arising out of the orders of courts martial held under the above-mentioned Acts.
- The Tribunal comprises of Judicial Members and Administrative Members. Judicial Members are retired High Court Judges. Administrative Members are retired Members of the Armed Forces who have held the rank of Major General/ equivalent or above for a period of three years or more.
- Proceedings are conducted as per the Armed Forces Tribunal (Procedure) rules, 2008. The Tribunal normally follows the procedure as practiced by High Courts of India. Paramilitary forces including the Assam Rifles and Coast Guard are outside the tribunal's purview.

12. HC: UNITED NATIONS NOT A STATE UNDER ARTICLE 12

News: The Delhi High Court has ruled that United Nations (UN) is not a State within the meaning of Article 12 of the Constitution of India and is not amenable to the jurisdiction of the Court under Article 226 of the Constitution of India.

Facts:

- The HC has held that UN is an international body and cannot be treated as agency of the government.
- The judgment was passed on a petition concerning the immunity enjoyed by the UN under the United Nations (Privileges and Immunities) Act, 1947.
- The petitioner was a former UN employee who was found guilty of misconduct and was sentenced to 97 months of imprisonment. After serving his sentence, the petitioner was deported to India.
- The petitioner then filed a plea before the High Court. The petitioner claimed that due process was not followed in his case.
- In November 2018, he had also written a letter to the Ministry of External Affairs seeking a grant of permission to initiate legal action against the UN under section 86 of Civil Procedure Code, 1908. The provision provides that a foreign State may be sued in any Court with the consent of the Central government.
- The Ministry had replied that the consent of the Government of India is not required to initiate a legal suit against UN as it is not a foreign state and is only an Internal Organization. However, it said that the UN and its officials enjoy immunity under the United Nations (Privileges and Immunities) Act, 1947.

Additional Facts:

- **Article 12 of Indian Constitution**
- Art 12 defines the meaning of 'State' for purpose of Part III and Part IV.
- According to Article 12, the term 'State' includes:
 - The Government and Parliament of India: the term "State" includes Government of India (Union Executive) and the Parliament of India (Union Legislature)
 - The Government and the Legislature of a State i.e., the State Executive and the legislature of each state.
 - All local authorities; and
 - Other authorities within the territory of India; or under the control of the Central Government.
 - The term 'other authorities' in Article 12 has nowhere been defined.
- Judiciary is not mentioned in Art 12
- **Article 226** empowers the high courts to issue writs to a person or authority, including the government. The writs which can be issued are (a) habeas corpus (b) mandamus (c) prohibition (d) quo warranto and (e) certiorari.

13. PEPSICO AGREES TO WITHDRAW CASES AGAINST GUJARAT FARMERS

News: PepsiCo India Holdings Ltd. (PIH) had decided to withdraw cases against potato growers in Gujarat, whom it had accused of infringing its patents.

Facts:

- PepsiCo uses its proprietary FC5 variety of potato for making chips. For this, PepsiCo had also entered into an exclusive buyback arrangements with farmers in India. It had also engaged with the farmers in Gujarat for sowing and producing the FC-5 variety potatoes for its snacks division.
- However, PepsiCo had found potato farmers not under such an arrangement with the company buying seeds and selling the FC5 variety of potatoes, following which it had filed suit against them.

- Under the suit, PepsiCo had claimed exclusive rights over the said variety under the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001 seeking damages worth Rs. 1 crore from at least four farmers.
- However, farmer groups have cited Section 39 of the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001 which specifically says that a farmer is allowed to grow and sell any variety of crop or even seed as long as they don't sell branded seed of registered varieties.

Other Facts:

- The Protection of Plant Variety and Farmers Right Act, 2001 (PPVFR Act) is an Act of the Parliament of India that was enacted to provide for the establishment of an effective system for the protection of plant varieties, the rights of farmers and plant breeders, and to encourage the development and cultivation of new varieties of plants.

*Policy***1. GOVERNMENT TO LAUNCH PROJECT EQUIP**

News: Ministry of Human Resource Development plans to launch ₹1.5 lakh crore action plan to improve the quality and accessibility of higher education over the next five years under project EQUIP.

Facts

- EQUIP stands for Education Quality Upgradation and Inclusion Programme to bring transformational change to the education system and bridge the gap between policy and implementation. It aims at improving the quality and boost access to education in India.
- Key Focus of the EQUIP includes 1) to improve access to higher education, especially for underserved communities; 2) improve the gross enrolment ratio; 3) improve teaching and learning processes; 4) build educational infrastructure; 5) improve the quality of research and innovation; 6) use technology and online learning tools; and 7) work on accreditation systems, governance structures and financing.
- EQUIP is one of the administrative interventions mentioned in the new draft Education Policy
- It would be funded through extra-budgetary resources and by mobilising money from the marketplace through the Higher Education Financing Agency (HEFA).

Other Facts

- Draft National Education Policy (NEP): The new draft NEP document is based on recommendations of Kasturirangan Committee set up in 2017. The last NEP was released in 1986, with a revision in 1992.
- Higher Education Financing Authority (HEFA): It is a joint venture between the HRD Ministry and Canara Bank, set up as an SPV in 2017, with an aim to raise ₹1 lakh crore to finance infrastructure improvements in higher education by 2022

2. PRADHAN MANTRI FASAL BIMA YOJANA

News: Government has decided to use technology under PradhanMantriFasalBimaYojana(PMFBY) to determine yield estimates at the village/panchayat level.

Facts:

- The Technological tools to be used by Govt in estimating crop yields include high spatio-temporal remote sensing data, Unmanned Aerial Vehicle, machine learning, advanced intelligent crop simulation models, and artificial intelligence.
- The use of innovative technology will help in quickly arriving at an accurate yield estimation figure. It will speed up settling claims of insured farmers.
- Currently, the PMFBY uses 'crop cutting experiments'(CCE's) to determine the yield loss suffered by farmers due to natural calamities. But, the CCE's are time consuming methods which results in delay in payment to insured farmers.
- The difficulty to conduct CCEs(crop-cutting experiments) for many horticulture crops was one of the factors for muted response of PMFBY in NE states
- According to the Agriculture Ministry officials, Out of ₹1,400 crore earmarked annually for the north-eastern States under the PradhanMantriFasalBimaYojana, only ₹8 crore was actually spent last year.

- The reason was that Insurance companies have been reluctant to bid for these States as (a)administrative costs are high (b)no proper land records (c)historic yield data is not available for these States particularly at the gram panchayat and block level and (d)difficult to conduct CCEs(crop-cutting experiments) needed for many horticulture crops.
- Four north-eastern States namely Arunachal Pradesh, Nagaland, Manipur and Mizoram are not covered under the scheme at all.

Other Facts

- The Pradhan Mantri Fasal Bima Yojana (PMFBY) was launched in 2016 by the Ministry of Agriculture and Farmers welfare. The scheme has replaced the two schemes National Agricultural Insurance Scheme (NAIS) as well as the Modified NAIS.
- It envisages a uniform premium of 2% to be paid by farmers for Kharif crops and 1.5% for Rabi crops and 5% for annual commercial and horticultural crops.
- There is no upper limit on Govt subsidy. The balance of actuarial/bidder premium to be shared by the Central and State Government on 50 : 50 basis.
- The Scheme covers post-harvest losses and delayed sowing.

3. MID-DAY MEAL SCHEME

News: A Controversy has erupted over missing onion & garlic in Mid-Day Meal served by AkshayaPatra foundation in Karnataka

Facts:

- The NGO is under criticism for not serving onion and garlic in mid-day meals to the children despite these ingredients featuring on the menu recommended by the state government. It was reported that children rejected the food as it was bland.
- This issue came to limelight when an article was published in TheHindu newspaper.

Other Facts:

- Mid-Day Meal Scheme is a centrally-sponsored Scheme that provides children studying in Classes I-VIII of government and government aided schools with cooked mid-day meal.
- The key objectives of the MDMS is to a) improve the nutritional status of children and b) improve enrollment, attendance and retention rates in schools and EGS/AIE centres (Alternative and Innovative Education Centres)
- The Mid-day Meal scheme is implemented by the Ministry of Human Resources and Development. Both the Centre and the state governments contribute funds for the scheme, with the menu differing in each state according to local factors.
- In some places, the supply of meals is outsourced to contractors appointed by the state governments; example: AkshayaPatra.

Economy

1. SOCIAL AND LABOR CONVERGENCE PROGRAMME (SLCP)

News: The chairman of the Cotton Textiles and Export Promotion Council (Texprocil) has said that ‘**Social and Labor Convergence Programme (SLCP)**’ will be launched in India shortly.

Facts:

- SLCP is an initiative to have a **standard-neutral, converged assessment framework for the textile and clothing industry**. The initiative is led by the world’s leading manufacturers, brands, retailers, industry groups, non-governmental organisations and service providers.
- The objective of the initiative is to improve the working conditions in textile units by allowing resources that were previously designated for compliance audits to be redirected towards the improvement of social and labour conditions.
- The initiative is the voluntary adoption by the textile and clothing makers. It is not code of conduct or compliance program.
- The converged assessment framework developed by the SLCP provides a data set with no value judgment or scoring. However, it will be compatible with existing audit systems and codes of conduct. This means that the same data set can be used by a wide-range of stakeholders. It eliminates the need for repetitive audits to be carried out on the same facility.
- The benefits of SLCP for facilities are that it addresses audit fatigue by reducing the number of social audits and facilitates measuring of employment practices, thus improving working conditions & employee relations.

Additional Information:

- Texprocil was incorporated in 1954 as an autonomous, nonprofit body dedicated to the export promotion of cotton textiles. It makes suggestions for strengthening the export efforts and also to provide data for monitoring exports.

2. OPEN MARKET OPERATIONS (OMO)

News: The Reserve Bank has said it will inject Rs 15,000 crore into the financial system through the purchase of government bonds via the auction route. The government securities will be bought under Open Market Operations (OMO).

Facts:

- Open Market Operation (OMO)
 - Open market operation is the sale and purchase of government securities and treasury bills by the Reserve Bank of India (RBI).
 - The objective of OMO is to regulate the money supply in the economy.
 - When the RBI wants to increase the money supply in the economy, it purchases the government securities from the market. It sells government securities to suck out liquidity from the system.
 - RBI carries out the OMO through commercial banks and does not directly deal with the public.

- OMO is one of the tools (others are – repo rate, Cash Reserve Ratio, Statutory Liquidity Ratio) that RBI uses to smoothen the liquidity conditions through the year and minimise its impact on the interest rate and inflation rate levels.

3. COMPETITION COMMISSION OF INDIA(CCI)

News: The Competition Commission of India (CCI) ordered an investigation into Google for allegedly abusing the dominant position of its popular Android mobile operating system to block rivals.

Facts:

- **Competition Commission of India**
 - Competition Commission of India is a **statutory body** of the Government of India established in 2003. It is responsible for enforcing the Competition Act, 2002 throughout India and to prevent activities that have an appreciable adverse effect on competition in India.
 - CCI consists of a Chairperson and 6 Members appointed by the Central Government. The Competition Act, 2002 was amended in 2007. It follows the philosophy of modern competition laws.
 - The act prohibits
 - anti-competitive agreements
 - abuse of dominant position by enterprises and
 - regulates combinations (acquisition, acquiring of control and mergers and acquisitions) which causes or likely to cause an appreciable adverse effect on competition within India.
 - It is the duty of the Commission to eliminate practices having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade in the markets of India.
 - The Headquarter of the Commission is located at New Delhi

4. SECURITIES APPELLATE TRIBUNAL (SAT)

News: The National Stock Exchange of India (NSE) has challenged **co-location orders** of the Securities and Exchange Board of India (SEBI) before Securities Appellate Tribunal (SAT).

Facts:

- Co-location refers to a system where traders are allowed to place servers in close proximity to those of an exchange, helping faster execution of trades
- **Securities Appellate Tribunal**
 - Securities Appellate Tribunal (SAT) is a statutory body established under the provisions of Section 15K of the Securities and Exchange Board of India Act, 1992.
 - It's headquarter is in Mumbai.
 - The mandate of SAT is to hear and dispose of appeals against the orders passed by the
 - Securities and Exchange Board of India (SEBI)
 - Pension Fund Regulatory and Development Authority (PFRDA) and
 - Insurance Regulatory Development Authority of India (IRDAI).

Additional Information:

- The National Stock Exchange of India Limited (NSE) is the leading stock exchange of India, located in Mumbai. The NSE was established in 1992 as the first demutualized electronic exchange in the country.

5. MCA21 PORTAL

News: The government has decided to introduce artificial intelligence system in the MCA21 portal-an e-Governance initiative of Ministry of Company Affairs (MCA)

Facts:

- MCA21 is an e-Governance initiative of Ministry of Company Affairs (MCA), Government of India. It enables an easy and secure access of the MCA services to the corporate entities, professionals and citizens of India.
- The MCA21 application is designed to fully automate all processes related to the proactive enforcement and compliance of the legal requirements under the Companies Act, 1956, New Companies Act, 2013 and Limited Liability Partnership Act, 2008. This will help the business community to meet their statutory obligations.
- The MCA21 application offers the following
 - Enables the business community to register a company and file statutory documents quickly and easily
 - Provides easy access of public documents
 - Helps faster and effective resolution of public grievances
 - Helps registration and verification of charges easily and
 - Ensures proactive and effective compliance with relevant laws and corporate governance.

Additional Information:

- Artificial Intelligence is the simulation of human intelligence processes by machines. It refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision making.
- Recently MCA21 was included in calculating the GDP of India.

6. DRAFT NOTIFICATION ON THIRD PARTY MOTOR INSURANCE BY IRDAI

News: Insurance Regulatory and Development Authority of India (IRDAI) released a draft notification on third-party motor insurance.

Facts:

- IRDAI come out with draft of new rates for Third Party insurance premium for cars, two wheelers and transport vehicles.
- Third-party insurance is the portion of an insurance policy that protects you if you're held legally responsible for a physical injury or damage to someone else's property.

Additional Information:

- **IRDAI**
 - The IRDAI is an autonomous, statutory body created by IRDA Act, 1999. It was created based on the recommendations of the Malhotra Committee (1994). It's headquarters is in Hyderabad.

- The functions of IRDA includes (a)regulating the insurance industry and protects the customers (b)promotion of competition to enhance customer satisfaction and (c)lowering premiums for ensuring the financial security of the insurance sector.

7. NON-BANKING FINANCE COMPANIES (NBFC)

News: The Reserve Bank of India has directed non-banking finance companies (NBFC) with assets size of over Rs 5000 crore to appoint a chief risk officer (CRO) to improve standards of their risk management.

Facts:

- The CRO will be a senior official in the hierarchy of an NBFC and shall possess adequate professional qualification/ experience in the area of risk management. He will be appointed for a fixed tenure. He is required to function independently so as to ensure the highest standards of risk management

NBFC

- An NBFC is a company registered under the Companies Act, 1956.
- These are the companies which provide banking services without meeting the legal definition of a bank.
- It engages in the business of (a)loans and advances (b)acquisition of shares /stocks/ bonds/ debentures/securities issued by Government or local authority or other marketable securities of a like nature leasing and (c) hire-purchase, insurance business, chit business.
- However, it does not include any institution whose principal business is that of (a)agriculture activity (b)industrial activity (c)purchase or sale of any goods (other than securities) and (d)providing any services and sale/purchase/construction of immovable property.
- Non-Banking Financial Companies are regulated by different regulators in India such as RBI, IRDA, SEBI, National Housing Bank and Department of Company Affairs. RBI regulates the companies which deal in lending, accepting deposits, financial leasing, hire purchase and acquisition of shares / stocks etc. The companies that take up activities like stock broking, merchant banking etc. are regulated by SEBI while the Nidhi and Chit Fund companies are regulated by the Department of Company Affairs. Housing finance companies are regulated by National Housing Bank.
- The difference between NBFC and Bank are as under:
 - The NBFC cannot accept Demand Deposits. However, they can accept term deposit.
 - NBFC cannot issue cheques drawn on themselves.
 - Deposits in NBFC are not covered under the Deposit Insurance and Credit Guarantee Corporation Act 1961.
 - NBFC do not form part of payment and settlement system.

8. SANDBOX INITIATIVE

News: Securities and Exchange Board of India (SEBI) and the Insurance Regulatory and Development Authority of India (IRDAI) has announced sandbox initiative to encourage start-ups in their segments by making data and systems available to them.

Facts:

- A sandbox is an enabling infrastructure or interface which is made available to an outside innovator or fin-tech by a bank so that they can test their product and services in real time. This live testing

reduces the time to go to the market and also allows room for failure without actually going for a commercial launch.

- SEBI has named the sandbox initiative as Innovation Sandbox. Innovation sandbox is a shared workspace to ideate, explore new subjects, develop technologies and share knowledge.
- It aims to create an ecosystem which promotes innovation in the securities market. This space allows fin-tech firms which are not registered with SEBI to be a part of the sandbox to test new digital and tech based innovation.
- IRDAI has also come up with a similar sandbox to ensure flexibility in the insurtech market. But for the IRDAI sandbox, the applicant (an insurance company/broker or individual) should have a net worth of Rs 10 lakhs and a proven financial record of at least one year.

Additional Information:

- FinTech or financial technology is an industry comprising companies that use technology to offer financial services. These companies operate in insurance, asset management and payment and numerous other industries.

9. E-PAYMENTS PANEL HEADED BY NANDAN NILEKANI

News: The Reserve Bank of India (RBI) appointed a committee headed by Nandan Nilekani has submitted its suggestions on promoting digital payments in India.

Facts:

- In January, 2019, RBI had set up the five-member panel (headed by Nandan Nilekani) on deepening digital payments with a view to encourage digitisation of payments and enhance financial inclusion through digitisation.
- The major recommendations of the Committee are as under
 - No user charges for digital transactions.
 - Round the clock (24*7) RTGS and NEFT facility.
 - Duty free import of point of sale (POS) machine.
 - No convenience fee on payments made by customers to government agencies.
 - Customer complaints regarding payments system should use machine – driven, online dispute resolution systems.
 - The proposed Computer Emergency Response Team for finance (FIN- CERT) must be operationalised to monitor the security of digital payment systems.

10. PAYMENT AND SETTLEMENT SYSTEMS IN INDIA: VISION 2019–2021

News: The Reserve Bank of India (RBI) has released its document on ‘Payment and Settlement Systems in India: Vision 2019–2021’.

Facts:

- The core theme of the document is ‘**Empowering Exceptional E-payment Experience**’.
- The vision is to empower every Indian with access to a bouquet of e- payment options that is safe, secure, convenient, quick and affordable
- Vision 2021 concentrates on a two-pronged approach of,
 - exceptional customer experience; and
 - enabling an ecosystem which will result in this customer experience.

- The Vision aims towards a) enhancing the experience of Customers; b) empowering payment System Operators and Service Providers; c) enabling the Eco-system and Infrastructure; d) putting in place a Forward-looking Regulation; e) supported by a Risk-focussed Supervision.
- To achieve the aims, the Vision envisages four goal-posts (4 Cs) – Competition, Cost, Convenience and Confidence.
- This document expects the number of digital transactions to increase more than four times from 20.69 billion in December 2018 to 87.07 billion in December 2021.
- The RBI also expects accelerated growth in individual retail electronic payment systems both in terms of number of transactions and increased availability.
- The document also talks about creating customer awareness, setting up a 24X7 helpline and self-regulatory organisation for system operators and service providers. The 'no-compromise' approach towards safety and security of payment systems remains a hallmark of the vision.
- The approach of the RBI will continue to be of minimal intervention in the pricing of charges to customers for digital payments. Also, no specific target has been considered for reducing cash in circulation.

EXPECTED OUTCOMES OF VISION 2021

- Payment systems like UPI / IMPS are likely to register average annualised growth of over 100% and NEFT at 40% over the vision period.
- Volume of cheque-based payments would be less than 2.0% of the retail electronic transactions by 2021.
- the digital payment transaction turnover vis-à-vis GDP (at market prices-current price) is expected to further increase to 10.37 in 2019, 12.29 in 2020 and 14.80 in 2021
- Increase in use of digital modes of payment for purchase of goods and services through increase in debit card transactions at PoS (35% increase during the vision period)

II. 7TH ECONOMIC CENSUS

News: Ministry of Statistics and Program Implementation (MoSPI) is conducting 7th Economic Census – 2019.

Facts:

- It is being conducted to provide disaggregated information on various operational and structural aspects of all establishments in the country.
- MoSPI has partnered with Common Service Centres, CSC e-Governance Services India Limited (which is a Special Purpose Vehicle (SPV) under the Ministry of Electronics and Information Technology (MeitY) as the implementing agency for 7th Economic Census.
- **Economic Census**
 - Economic Census is a complete count of all entrepreneurial units located within the geographical boundaries of India. It involves economic activities of either agricultural (excluding crop production and plantation) or non-agricultural sector of the Economy engaged in production or distribution of goods or services not for the sole purpose of own consumption
 - The economic census provides detailed information on operational and other characteristics such as number of establishments, number of persons employed, source of finance, type of ownership among others. It is the only source of information on the significantly large unorganised sector in the country.

- This information is used for micro level/ decentralized planning and to assess the contribution of various sectors of the economy in the gross domestic product (GDP).
- Six Economic Censuses (EC) have been conducted till date. The first Economic Census was undertaken in 1977 by CSO.

12. QUICK RESPONSE CODE (QR CODE)

News: The Central government is looking to mandate a QR code-based payment option using Unified Payments Interface (UPI) at all shops.

Facts:

- QR code or Quick Response code is a two-dimensional machine readable code that is made up of black and white squares and is used for storing URLs or other information. These can be read by the camera of a smartphone.
- The QR code system was invented in 1994 by the Japanese company Denso Wave. Its purpose was to track vehicles during manufacturing. It was designed to allow high-speed component scanning.
- QR codes are now used in a much broader context, including both commercial tracking applications and convenience-oriented applications aimed at mobile-phone users (termed mobile tagging).

13. NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT (NABARD)

News: The National Bank for Agriculture and Rural Development (NABARD) has announced a Rs 700-crore venture capital fund for equity investments in agriculture and rural-focused startups through its subsidiary Nabventures.

Facts:

- It is the first time that a rural development bank has launched a funds of its own.
- **NABARD**
 - The National Bank for Agriculture and Rural Development (NABARD) is an apex development and specialized financial institution in India. NABARD was established in 1982 by an act of Parliament.
 - NABARD was entrusted with matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas in India. Its main focus is to uplift rural India by increasing the credit flow for elevation of agriculture & rural non-farm sector.
 - NABARD was set up based on the recommendation of B Shivaraman committee. It replaced the Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of Reserve Bank of India, and Agricultural Refinance and Development Corporation (ARDC)
 - At present, NABARD is fully owned by government.

Other facts:

- Venture capital funds are investment funds that manage the money of investors who seek private equity stakes in startups and small- to medium-sized enterprises with strong growth potential. These investments are generally characterized as high-risk/high-return opportunities.

14. WORLD CUSTOMS ORGANISATION (WCO)

News: Central Board of Indirect Taxes and Customs (CBIC) is organising a meeting of the Regional Heads of Customs Administration of Asia Pacific Region of the World Customs Organisation (WCO) in Kochi, Kerala.

Facts:

- India is holding the meeting in capacity of vice chair of Asia Pacific region (2018 for a 2-year period)
- **The World Customs Organization (WCO)**
 - It was established in 1952 as the Customs Co-operation Council (CCC).
 - It is an independent inter-governmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations.
 - WCO headquarters is located at Brussels, Belgium
 - WCO represents 182 Customs administrations across the globe that collectively process approximately 98% of world trade. The WCO has divided its Membership into six Regions. Each of the six Regions is represented by a regionally elected Vice-Chairperson to the WCO Council.
 - WCO offers its members a range of Conventions and other international instruments, as well as technical assistance and training services provided either directly by the Secretariat or with its participation.
 - WCO has also been responsible for administering the World Trade Organization's agreement on Customs Valuation which provide a system for placing values on imported goods, and the Rules of Origin, which are used to determine the origin of a given commodity.

15. SBI RULES LINK SAVINGS BANK INTEREST TO REPO RATE

News: State Bank of India (SBI) has linked its interest rate on savings account with balance above ₹1 lakh and short-term loans to Reserve Bank of India's (RBI) repo rate.

Facts:

- At present, Banks use internal benchmark like **marginal cost of fund based lending rate (MCLR)** to price their loans.
- MCLR is an internal benchmark rate that depends on various factors such as fixed deposit rates, source of funds and savings rate. The price of loan comprises the MCLR and the spread or the bank's profit margin. Spread refers to the difference in borrowing rates and lending rates of financial institutions.
- The biggest problem with the MCLR system was lack of required transmission of policy rates to the borrowers.
- Thus, RBI has advocated that banks will now have to link the interest rates charged by them on different categories of loans to the external benchmark like Repo rate or Treasury Bill rate instead of the used internal benchmark like marginal cost of fund-based lending rate (MCLR).
- The new system of linking interest rate to repo rate is expected to bring in more transparency in fixing rates and faster transmission rates.

16. SERVICES TRADE RESTRICTIVENESS INDEX (STRI)

News: India has demanded a new method of measuring Services Trade Restrictiveness Index (STRI).

Facts:

- Following concerns associated with OECD STRI index has been raised by India:
 - Significant design issues that render it impractical for use. (eg - the index seems to show the Indian services sector as one of the most restrictive, particularly in policy areas like foreign entry).
 - Data seems to have been generated by rather arbitrary procedures and reflects a developed country bias.
 - Theoretical and empirical inconsistencies in the OECD methodology. For eg- change in regulatory measures in one policy area can lead to dramatic changes in the STRI in another policy area.

Additional Facts

- STRI
 - It is a unique, evidence-based tool that provides information on regulations affecting trade in services in 22 sectors across OECD member countries and non-OECD.
 - STRI is computed by the Organisation for Economic Cooperation and Development (OECD). It was launched in 2014.
 - STRI indices take the value from 0 to 1. Zero signifies completely closed and 1 completely open economy.

International Relations

1. ASIAN DEVELOPMENT BANK STEPS UP METRO RAIL FUNDING

News: Asian Development Bank (ADB) has decided to finance metro rail projects and a rapid rail corridor between Delhi and Meerut as part of its effort to improve urban transport system in India.

Facts:

- **Asian Development Bank (ADB)**
- It is a regional development bank established on 19 December 1966
- It is headquartered in Manila, Philippines.
- It has 67 members of which 48 are from within Asia and the Pacific and 19 outside.
- Japan and US holds the largest proportion of shares in ADB followed by the China, India and Australia.
- ADB is also an official United Nations Observer.

2. UNESCO CREATIVE CITIES NETWORK (UCCN)

News: A workshop was held at Srinagar's Institute of Hotel Management for promoting the city's art and craft.

Facts:

- The workshop was held to prepare a dossier for the inclusion of Srinagar in the UNESCO Creative Cities Network (UCCN) as a city of Crafts and Folk Art.
- If the nomination comes through, Srinagar will become the fourth Indian city after (a) Varanasi (Music) (b) Jaipur (Crafts and Folk Art) and (c) Chennai (Music) to become part of the network of 180 cities.
- Jammu and Kashmir does not have any site or monument with the UNESCO inscription of a World Heritage site.

Additional Information:

- **UCCN**
 - The UNESCO Creative Cities Network (UCCN) was launched in 2004 to promote cooperation among cities which recognized creativity as a major factor in their urban development.
 - The network aims to foster mutual international cooperation with and between member cities committed to investing in creativity as a driver for sustainable urban development, social inclusion and cultural vibrancy.
 - Currently, UNESCO Creative Cities Network (UCCN) includes 180 cities in 72 countries.
 - The Network covers seven creative fields: Crafts and Folk Arts, Media Arts, Film, Design, Gastronomy, Literature and Music.

3. SHANGHAI COOPERATION ORGANISATION (SCO)

News: Indian Defence Minister attended the Shanghai Cooperation Organisation (SCO) Defence Ministers conclave at Bishkek in Kyrgyzstan in May 2019. Also, Indian delegation participated in second SCO Mass Media Forum in May 2019.

Facts:

- During the Defence Ministers conclave, participating members discussed ways to boost defence and security cooperation among the member countries in the wake of evolving security challenges in the region.
- Mass Media Forum at Bishkek in Kyrgyzstan aims to strengthen the exchange and cooperation in the field of mass media amongst SCO countries. The first SCO Media Summit was held in Beijing on 1 June 2018 under the motto “Development of the Shanghai Spirit” and opening of a new era in the mass media cooperation”

Additional Information:

- **SCO**
 - The Shanghai Cooperation Organisation, also known as the Shanghai Pact, is a Eurasian political, economic and military organisation. It was founded in 2001 by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.
 - Apart from Uzbekistan, the other five countries have been a part of the Shanghai 5 since 1996. The cooperation was renamed to Shanghai Cooperation Organisation after Uzbekistan joined the organisation in 2001. India and Pakistan joined SCO as full members in 2017.
 - Four observer states of the SCO are – Afghanistan, Belarus, Iran, Mongolia.
 - The SCO’s main goals are:
 - strengthening mutual trust and neighbourliness among the member states
 - promoting their effective cooperation in politics, trade, the economy, research, technology and culture, as well as in education, energy, transport, tourism, environmental protection, and other areas
 - making joint efforts to maintain and ensure peace, security and stability in the region and
 - moving towards the establishment of a democratic, fair and rational new international political and economic order.

4. FIRST UN-HABITAT ASSEMBLY

News: India has been elected to the Executive Board of the first UN-Habitat Assembly.

Facts

- This decision was taken at Plenary Session of the UN Habitat Assembly held in Nairobi, Kenya.
- The special **theme** for the UN-Habitat Assembly was “**Innovation for Better Quality of Life in Cities and Communities**”.

Major outcome of the Assembly:

- **Contribution:** More than \$152 million contribution towards making cities more inclusive safe, resilient and sustainable, by the member countries.
- **‘Waste – Wise Cities’** - Communities, cities or towns that improve their solid waste management and reduce their waste management expenditure will be publicly recognised as **‘Waste-Wise Cities’**.
- The strategic plan of the UN human settlements programme for the period 2020–2025 was presented.

Additional Information:**United Nations Human Settlements Programme (UN-Habitat)**

- It is the United Nations agency for human settlements and sustainable urban development. It was established in 1978 and is headquartered at Nairobi, Kenya.
- It was established as an outcome of the First UN Conference on Human Settlements and Sustainable Urban Development (Habitat I) held in Vancouver, Canada in 1976.
- The mandate of UN-Habitat derives from the Habitat Agenda, adopted by the United Nations Conference on Human Settlements (Habitat II) in Istanbul, Turkey, in 1996
- The twin goals of the Habitat Agenda are (a) adequate shelter for all and (b) development of sustainable human settlements in an urbanizing world.
- UN Habitat reports directly to the UN General Assembly. It is also a member of the United Nations Development Group (UNDP).

5. BIMSTEC

News: India has invited leaders of BIMSTEC member countries to attend the swearing-in of Prime Minister Narendra Modi and his council of ministers.

Facts:**Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)**

- It is an international organization involving a group of countries in South Asia and Southeast Asia. It was founded in 1997 through Bangkok Declaration.
- Its member states are Bangladesh, India, Myanmar, Sri Lanka, Thailand, Nepal and Bhutan.
- Initially, it was formed with four Member States with the acronym 'BIST-EC' (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation) in 1997 in Bangkok. Myanmar was admitted in Dec 1997 and the organization was renamed as BIMST-EC (Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation). With the admission of Nepal and Bhutan (February 2004, Thailand), the name of the grouping was changed to 'Bay of Bengal Initiative for Multi - Sectoral Technical and Economic Cooperation (BIMSTEC).
- It is headquartered in Dhaka, Bangladesh.
- It accounts for 22% of the World's population, and combined GDP of \$2.7 trillion.
- First Summit was held in Thailand.
- It has 6 focus areas – trade, technology, energy, transport, tourism and fisheries.
- The main objective of BIMSTEC is technological and economic co-operation among south Asian and southeast Asian countries along the coast of the Bay of Bengal.
- The fourth summit of (BIMSTEC) was held in Kathmandu, Nepal in 2018.

6. U20 MAYORS SUMMIT

News: Tokyo has hosted the **second U20 Mayors Summit**.

Facts:

- The U20 mayors summit took place one month ahead of the G20 Osaka Summit. This will allow invited Mayors to discuss and approve a communiqué which will be formally presented to the G20.
- The themes of Mayoral sessions include: 1) Climate Action 2) Circular Economy 3) Social Inclusion and Integration 4) Sustainable Economic Growth 5) Gender Equality

- Mayors of 30 major cities from across the world has urged the Global leaders to act fast on climate change, social inclusion and sustainable economic growth.
- The mayors have also urged the G20 leaders to ensure (a) greenhouse gas emissions reduce substantially by 2030 and reach net zero by 2050 (b) access to adequate housing to all populations.

Additional Information:

Urban 20 (U20)

- Urban 20 (U20) is an initiative developed in 2017 under the leadership of the Mayor of Buenos Aires and Mayor of Paris, and convened by the C40 Cities Climate Leadership Group (C40) in collaboration with United Cities and Local Governments (UCLG).
- The current U20 Chair is Governor Yuriko Koike of Tokyo.
- U20 seeks to develop a joint position and collective messages to inform and enrich the discussions of national leaders at the G20 Summit through unique urban perspectives.
- Urban 20 is composed of 25 global cities: Beijing, Berlin, City of Buenos Aires, Chicago, Durban, Hamburg, Jakarta, Johannesburg, London, Los Angeles, Madrid, Melbourne, Mexico City, Milan, Montreal, Moscow, New York, Paris, Rio de Janeiro, Rome, São Paulo, Seoul, Sydney, Tokyo, and Tshwane.

7. UN PANEL ON J&K

News: India has informed the United Nations Human Rights Council (UNHRC) that it has decided to cut off any communication with the UNHRC Special Rapporteurs.

Facts:

- A Special Rapporteurs on Extrajudicial Executions, Torture and Right to health, had asked the Indian government about steps taken to address the alleged human rights violations in Jammu and Kashmir listed in a June 2018 report titled 'Situations of Human Rights in Kashmir' of the Office of the High Commissioner for Human Rights (OHCHR).
- India has informed the UNHRC that it will no longer entertain any communication with the HRC's Special Rapporteurs.

Additional Facts:

- **UNHRC**
 - It is an inter-governmental body within the United Nations system.
 - It was created by UNGA on 15 March 2006. It had replaced the former UN Commission on Human Rights. It is headquartered in Geneva, Switzerland.
 - It is responsible for strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them.
 - It comprises of 47 UN members state and each member serve 3 years term and can serve two terms in a row.

8. UN CHEMICAL WEAPONS WATCHDOG OPCW

News: Russia alleged politicisation of the work of the Organisation for the Prohibition of Chemical Weapons (OPCW).

Facts:

- Russia put forward a draft resolution to the United Nations Security Council (UNSC) on the Organisation for the Prohibition of Chemical Weapons (OPCW). It states that the UNSC (where Russia holds veto power) should be the only international body that can impose measures on countries that violate the Chemical Weapons Convention (CWC).
- Russia has charged that the UN's chemical weapons watchdog had been hijacked by politics and its mandate derailed after Moscow put forward a draft Politicization of work of the OPCW has significantly reduced the efficiency of an organisation's activities.
- However, Western diplomats fear that the proposed Russian draft is aimed at weakening the OPCW which has been at the forefront of efforts to shed light on chemical attacks in Syria.

Additional Facts:

- **OPCW**
 - OPCW is an intergovernmental organization and the implementing body for the Chemical Weapons Convention (CWC), which entered into force on 29 April 1997. It oversees the global endeavour to permanently and verifiably eliminate chemical weapons. It is headquartered in The Hague, Netherlands.
 - It consists of 193 members. All states party to the CWC are automatically members of OPCW. But 4 UN Member States are non-members namely Egypt, Israel, North Korea and South Sudan. Of these Israel has signed CWC but didn't ratified it, rest 3 are non-signatories.
 - The Convention contains four key provisions:
 - Destroying all existing chemical weapons under international verification by the OPC
 - Monitoring chemical industry to prevent chemical weapons from re-emerging
 - Providing assistance and protection to States Parties against chemical threats and
 - Fostering international cooperation to strengthen implementation of the Convention and promote the peaceful use of chemistry.
 - The organization was awarded the 2013 Nobel Peace Prize for its extensive efforts to eliminate chemical weapons with the most recent being in Syria civil war.
- **Chemical Weapon Convention (CWC)**
 - It is a multilateral treaty that bans chemical weapons and requires their destruction within a specified period of time.
 - The Chemical Weapons Convention Act was enacted in 2000 to give effect to the **Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons** and on their Destruction

9. ARCTIC COUNCIL

News: India has been re-elected as an observer to the Arctic Council at 11th Arctic Council ministerial meeting held at Rovaniemi in Finland.

Facts:**Arctic Council**

- It was formally established in 1996 by The Ottawa Declaration.
- It is an intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic States.

Arctic Council	
Member States	Permanent Participants
Canada	Aleut International Assoc
Denmark	Arctic Athabaskan Council
Finland	Gwich'in Council International
Iceland	Inuit Circumpolar Council
Norway	Russian Assoc of Indigenous Peoples
Russia	Saami Council
Sweden	
US	
Approved Observers	
France	Poland
Germany	India
Italy	South Korea
Japan	Singapore
Netherlands	Spain
China	Switzerland
	UK

- It comprises of eight member states.
- Observer status in the Arctic Council is open to non-Arctic states. Besides India, 12 other nations, including China, France, Germany, Japan, UK, Switzerland and the Netherlands have the observer status.
- India and China were given observer status in 2013 at Kiruna Declaration.

Additional Information:

- India has shown keen interest in the evolving climate change induced developments in the Arctic region. It has established a scientific research station 'Himadri' at NyAlesund in the Spitsbergen Island of Norway.
- Further, India led by its National Centre for Polar and Ocean Research (NCPOR) has also been regularly sending scientific teams for carrying out studies in the Arctic primarily in the fields of glaciology, hydrochemistry, microbiology and atmospheric sciences.

10. COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANISATION (CTBTO)

News: Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) has offered India an observer status and access to state-of-art International Monitoring System (IMS) data.

Facts:

- **CTBT**
 - It is a multilateral treaty that bans all nuclear explosions for both civilian and military purposes in all environments.
 - It was adopted by the United Nations General Assembly on 10 September 1996. It can only enter into force after it is ratified by eight countries with nuclear technology capacity, namely China, Egypt, India, Iran, Israel, North Korea, Pakistan and the United States.
 - China, Egypt, Iran, Israel and the United States have signed but not ratified the Treaty. India, North Korea and Pakistan have not signed it. **The treaty has still not come into force.**
 - According to CTBT, each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
 - India has refused to sign the Treaty on the grounds that the CTBT like the Nuclear Non-Proliferation Treaty (NPT) is discriminatory. While endorsing the spirit of test-ban and self-

imposed moratorium on tests, India has said it would join the treaty only if there was no discrimination in favour of the five 'nuclear weapon states' in fulfilling the obligations for complete elimination of nuclear weapons.

Additional Information:

- The Preparatory Commission for the Comprehensive Test Ban Treaty Organization (CTBTO) is an international organization headquartered in Vienna, Austria. It promotes the Treaty so that it can enter into force. It has also established a verification regime to monitor adherence to the Treaty
- The International Monitoring System (IMS) is a worldwide network of monitoring stations that will help to verify compliance with the Comprehensive Nuclear Test-Ban Treaty (CTBT) by detecting events that might indicate violations of the Treaty.

II. EAST CONTAINER TERMINAL

News: Sri Lanka has signed a deal with India and Japan to jointly develop the East Container Terminal at the Port of Colombo.

Facts:

- As per the agreement signed, the Sri Lanka Ports Authority (SLPA) retains 100% ownership of the East Container Terminal (ECT), while the Terminal Operations Company is jointly owned.
- Sri Lanka will hold a 51% stake in the project and the joint venture partners will retain 49%.
- This terminal would be beneficial for India as around 70% of Colombo Port shipment is related to India.
- The ECT is located some three km away from the China-backed Port of Colombo.
- India's role in developing the terminal had been opposed by Sri Lankan President as involving foreign countries for developing national assets remains a politically sensitive issue in the island. But the agreement was reached after Japan stepped into the project.
- The project is aimed at neutralising the growing influence of China, which has poured money into the Sri Lanka under its ambitious Belt and Road Initiative (BRI) infrastructure plan. Also, Sri Lanka has handed over the strategic Hambantota port to China.
- India and the US have been highlighting the concerns over the BRI projects which may leave a number of smaller countries in debt traps.

Other Facts:

- China's Belt and Road Initiative (BRI) is an ambitious programme to connect Asia with Africa and Europe via land and maritime networks along six corridors. It aims at improving (a) regional integration, (b) increasing trade and (c) stimulating economic growth.

12. CHAGOS ARCHIPELAGO

News: India has voted in favour of UNGA resolution demanding UK withdrawal from Chagos Archipelago

Facts:

- India has voted in favour of UN General Assembly resolution that demanded the **UK to withdraw** its colonial administration from Chagos Archipelago unconditionally within 6 months, enabling Mauritius to complete the decolonization of its territory.

- The resolution has also welcomed the advisory opinion of the International Court of Justice (ICJ). The ICJ has ruled that the UK should hand over the administration of the Chagos Islands in the Indian Ocean to Mauritius in order to legally complete its decolonisation.
- The British government had ruled Mauritius from 1810 to 1968. But, under an agreement struck in 1965, in return for compensation to Mauritius and fishing rights, Britain has maintained control of the Chagos islands. It has continued to do so despite efforts by Mauritius to regain control and UN resolutions requiring it to complete the decolonisation of Mauritius.

Other Facts:

- The UN General Assembly in 2017 had adopted a resolution presented by Mauritius and backed by African countries asking the ICJ to offer legal advice on the island fate and the legality of the deportations.
- The Chagos Islands are home to the U.S. military base of Diego Garcia, under lease from the United Kingdom since the 1960s.



13. INDIAN COUNCIL OF WORLD AFFAIRS (ICWA)

News: Addressing a gathering at the Indian Council of World Affairs (ICWA), Chief Executive of the Afghan High Peace Council has said that Afghanistan would not compromise on fundamental issues with the Taliban.

Facts:

- He also said that the US-Taliban talks has given the Taliban a higher political profile even though they are not the real representative of the people of Afghanistan.
- He also acknowledged that Pakistan had played the role of facilitator for talks between the Taliban and the U.S.

Additional Information:

- ICWA was established in 1943 by a group of Indian intellectuals as think tank. ICWA is devoted exclusively for the study of international relations and foreign affairs.
- It was established as a non-official, non-political and non-profit organisation under Registration of Societies Act 1860.
- It was declared as an institution of national importance by Indian Council of World Affairs (ICWA), 2001 enacted by Parliament.
- The Vice President of India is the ex-officio President of ICWA. Minister of external Affairs is the Vice President of ICWA.

14. USA'S CURRENCY MONITORING LIST

News: United States has removed India from its currency monitoring list of major trading partners.

Facts:

- In 2018, India along with China, Japan, Germany, Switzerland and South Korea was placed in the bi-annual currency watch list.
- The Currency Monitoring list contains the names of countries that have potentially questionable foreign exchange policies and are suspected to be manipulating their currencies to gain trade advantages over the US.
- While the designation of a country as a currency manipulator does not immediately attract any penalties but it tends to dent the confidence about a country in the global financial markets.
- The US had decided to continue to keep China on its watch list while urging China to take necessary steps to avoid a persistently weak currency.

15. USTR PUTS INDIA ON 'PRIORITY WATCH LIST'

News: The office of the US Trade Representative (USTR) has decided to continue to keep India on its Priority Watch List.

Facts:

- The USTR has identified 11 countries on its Priority Watch List' which includes India, China, Indonesia, Russia, Saudi Arabia and Venezuela among others.
- USTR in its report has also said that it had kept India under the watch list because of
 - (a) Intellectual property (IP) challenges faced by US companies in India
 - (b) insufficient enforcement actions
 - (c) copyright policies that do not properly incentivise the creation and
 - (d) an outdated and insufficient trade secrets legal framework.

Additional Information:

- Under Section 301 of the US Trade Act, the office of the US Trade Representative (USTR) prepares a list of countries whose Intellectual Property right regime (IPR) has a negative impact on American products.
- Among such countries, special attention given to two groups which are
 - (a) **Priority watch list countries** in which US uses carrot policy to incentivize IPR reforms such as funding, training, capacity building, bilateral exchanges and conferences and
 - (b) **Priority foreign countries** in which US sticks to the policy to force IPR reforms such as putting trade sanctions, approaching WTO dispute resolution.
- Intellectual Property Rights (IPR) provide certain exclusive rights to the inventors or creators of that property in order to enable them to reap commercial benefits from their creative efforts or reputation. There are several types of intellectual property protection such as patent, copyright, trademark among others.
- USA calls India's market restrictive because of these issues:
 - High tariffs on US Goods
 - Data localisation rules which forced foreign companies to store their data locally
 - Price controls on medical devices (eg. Cardiac stents)
 - Multiple processes and discriminatory regulation towards US Companies
 - Intellectual Property rights violations
 - Trade imbalance between India and the US and

- India's rules on e-commerce that affected firms such as Amazon and Walmart.

16. NUCLEAR ICE-BREAKER

News: Russia has launched a nuclear-powered icebreaker called **Ural**.

Facts:

- It is part of an ambitious programme to renew and expand its fleet of vessels in order to improve its ability to tap the Arctic's commercial potential.
- Ural is one of a trio which when it will be completed will be the largest and most powerful icebreakers in the world.
- The Ural is due to be handed over to Russia's state-owned nuclear energy corporation Rosatom in 2022 after the two other icebreakers in the same series, Arktika (Arctic) and Sibir (Siberia) enters service.

Additional Information:

- Russia is looking for dominance over the Arctic's commercial potential with traditional rivals Canada, the United States and Norway, as well as newcomers like China.
- Russia is building new infrastructure and overhauling its ports as amid warmer climate cycles, it readies for more traffic through what it calls the Northern Sea Route (NSR) which it envisages being navigable year-round.
- Russia hopes the route which runs from Murmansk to the Bering Strait near Alaska could take off as it cuts sea transport times from Asia to Europe.
- China is also aiming to increase its influence in the Arctic by declaring its Arctic route of Belt and Road Initiative
- The Arctic holds oil and gas reserves equivalent to 412 billion barrels of oil, about 22 percent of the world's undiscovered oil and gas, the U.S. Geological Survey estimates.

17. UAE LAUNCHES 'GOLDEN CARD' SCHEME

News: The United Arab Emirates (UAE) has launched a permanent residency scheme called Golden Card programme.

Facts:

- This scheme has been introduced to attract wealthy individuals and exceptional talents such as doctors, engineers, scientists, students and artists.
- The Golden card visa categories include:
 - real estate investors who can get a visa for 5 years
 - general investors who will be allowed visa for 10 years and
 - Other entrepreneurs and talented professionals such as doctors, researchers and innovators for 10 years.
- Further, the outstanding students will also be permitted residency visas for 5 years. All categories of visas can be renewed upon expiry.
- The benefits of permanent residency also includes the spouse and children of the cardholder to ensure cohesive social ties.
- The initiative is expected to attract greater foreign investment and stimulate the local economy, making it more efficient and attractive to investors. It will also increase the UAE's competitiveness and reaffirms the country's position as a global incubator.

18. INDIAN PEACEKEEPER TO BE HONOURED POSTHUMOUSLY WITH UN MEDAL

News: The United Nations has announced that it has decided to honour the Indian peacekeeper Jitendra Kumar with a prestigious **UN Dag Hammarskjold Medal** for courage and sacrifice in the line of duty.

Facts:

- Indian UN Peacekeeper had made the sacrifice while serving in the UN Organisation Stabilisation Mission in the Democratic Republic of the Congo (MONUSCO). This award was honoured on International Day of United Nations Peacekeepers, celebrated on 29th May.

Additional Information:**UN Peacekeeping**

- United Nations Peacekeeping was created in 1948.
- UN Peacekeeping helps countries navigate the difficult path from conflict to peace.
- It maintains three basic principles which are
 - Consent of the parties
 - impartiality and non-use of Force except in self-defense
 - defense of the mandate.
- The UN Peacekeepers are led by the Department of Peacekeeping Operations (DKPO). UN Peacekeepers are from diverse backgrounds and from areas all around the world. UN peacekeepers are often referred as **Blue Berets** or **Blue Helmets**.
- In 2014, India is the third largest troop contributor [TCC] with 7,860 personnel deployed with ten UN Peacekeeping Missions of which 995 are police personnel, including the first Female Formed Police Unit under the UN.
- India has consistently contributed over the past seven decades of United Nations peacekeeping operations. More than 2,30,000 Indian troops have participated in 50 of the 71 United Nations peacekeeping operations mandated by the United Nations Security Council so far. India has also aided in capacity building of many countries, training 114 prospective peacekeepers from 35 countries this year itself; with a special course each for African countries and for female peacekeepers.
- Recently Indian Peacekeepers were lauded by the UN for their efforts in preventing a carnage in the South Sudan conflict which resulted in the death of two of its soldiers.

Environment & Disaster Management

1. “NOT ALL ANIMALS MIGRATE BY CHOICE” CAMPAIGN

News: UN Environment India and Wildlife Crime Control Bureau (WCCB) in collaboration with the Airports Authority of India and GMR Group, launched an awareness campaign ‘Not all animals migrate by choice’ to be displayed at major airports across India.

Facts:

- **Aim:** Create awareness and gather public support for the protection and conservation of wildlife, prevention of smuggling and reduction in demand for wildlife products.
- **First Phase:** Tiger, Pangolin, Star Tortoise and Tokay Gecko have been chosen as they are vulnerable to illegal trading in International markets.
- The campaign complements worldwide action on illegal trade in wildlife through UN Environment’s global campaign, **Wild for Life**.
- It is also in line with **Sustainable Development Goal 15** which calls to *protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*.

Additional Information:

1. UN Environment:

- The United Nations Environment Programme (UN Environment) is the leading global environmental authority.
- It was established in 1972. It is headquartered in Nairobi, Kenya.
- It sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system.

2. Wild for Life Campaign

- Wild for Life is UN Environment’s campaign against illegal trade in wildlife. It was launched in 2016.
- **Aim:** Creating collaboration, policy implementation, and grassroots participation to sensitise communities in source and destination countries in war on illicit trade in wildlife.

3. Wildlife Crime Control Bureau (WCCB)

- It is a **statutory multi-disciplinary body** established by the Government of India under the Ministry of Environment, Forests and Climate Change. It aims to combat organized wildlife crime in the country. It was established in 2007 and became operational in the year 2008.

4. Convention on International Trade in Endangered Species of Wildlife Fauna and Flora (CITES):

- It is an international treaty to prevent species from becoming endangered or extinct because of international trade. It was signed in 1973 and came into force in 1975. CITES is legally binding on the Parties, but it does not take the place of national laws.

5. Tiger, Pangolin, Star Tortoise and Tokay Gecko

Species	IUCN Status	Status under Wildlife Protection Act, 1972
1. Tiger	Endangered	Schedule I

2. Indian Pangolin	Endangered	Schedule I
3. Indian star tortoise	Vulnerable	Schedule IV
4. Tokay Gecko (kind of a lizard)	Least Concern	Schedule III

2. BRS CONVENTION

News: The 14th Conferences of the Parties (CoP) to the Basel Convention (BC COP-14), the 9th meeting of the Conference of the Parties to the Rotterdam Convention (RC COP-9) and the 9th meeting of the Conference of the Parties to the Stockholm Convention (SC COP-9) was held in Geneva.

Facts:

Keys takeaways from the RC-COP-9:

- A compliance mechanism under the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade has been established.

Keys takeaways from the SC-COP-9

- Dicotol and perfluorooctanoic acid (PFOA), its salts, and PFOA-related compounds has been listed under Stockholm Convention on Persistent Organic Pollutants.

Keys takeaways from the BC-COP-14

- An amendment has been adopted to address certain plastic wastes under the Basel Convention (BC) on the Control of Trans boundary Movement of Hazardous Wastes and their Disposal.
 - **Rationale behind the amendment:** To make global trade in plastic waste more transparent and better regulated. It also seeks to ensure that its management is safer for human health and the environment.
 - The new amendment empowers developing countries to refuse plastic waste dumping. After the amendment, Malaysia sent 450 tonnes of contaminated plastic waste to the countries that shipped it, in a refusal to become a dumping ground for the world's trash.
- Parties to the Convention also adopted technical guidelines on environmentally sound management of electric and electronic waste.

Additional Information:

Basel Convention:

- It was signed in 1989 and came into force in 1992. It aims to reduce Trans boundary movements of hazardous waste from developed to less developed countries (LDCs) and ensure their safe disposal as closely as possible to the source of generation. India is a party to the convention. According to the convention Hazardous waste is one which must both be listed and possess a characteristic such as being explosive, flammable, toxic, or corrosive.

Stockholm Convention on Persistent Organic Pollutants (POP):

- It was signed in 2001 and came into force in 2004. It aims to eliminate or restrict the production and use of persistent organic pollutants. India is a party to the convention.
- In 2001, 12 POPs were covered under the convention, called the dirty dozen. In 2017, 16 additional POPs were listed under the convention.

Persistent organic pollutants (POPs):

- These are organic compounds that are resistant to environmental degradation through chemical, biological, and photolytic processes. They bio accumulate and have adverse effects on human health and environment.

Rotterdam Convention:

- It was signed in 1998 and came into force in 2004. It aims to promote shared responsibilities in relation to import of hazardous chemicals. India is a party to the convention.

3. ONE MILLION SPECIES AT RISK OF EXTINCTION: UN'S GLOBAL ASSESSMENT

News: A UN's report called the **Global Assessment Report on Biodiversity and Ecosystem Services** has warned that up to 1 million of Earth's estimated eight million plant, insect and animal species are at risk of extinction.

Facts:

- The report has been compiled by the UN's **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)**.

- Key takeaways from the report,

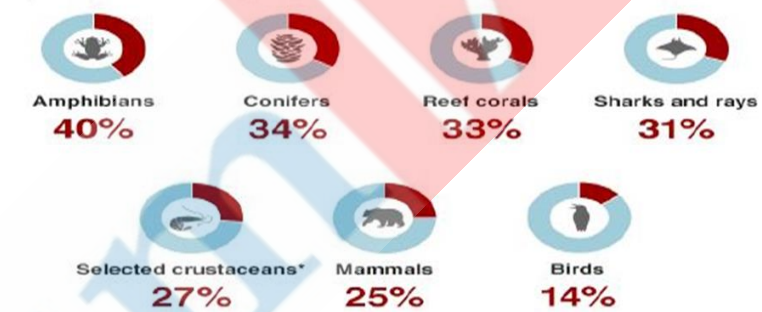
- Natural ecosystems have declined by 47% on average, relative to their earliest estimated states.
- More than 40% of amphibians, 33% of coral reefs and over a third of all marine mammals are at risk of extinction.
- 75% of land environment and some 66% of the marine environment "have been significantly altered by human actions".
- World's population has more than doubled (from 3.7 to 7.6 billion) in the last 50 years, and gross domestic product per person is four times higher.

- **Global Threats listed by the report**

- changes in land and sea use;
- direct exploitation of organisms;
- climate change;
- pollution and
- Invasive alien species.

One in four species are at risk of extinction

Species assessed by the IUCN Red List



*Assessed species include lobsters, freshwater crabs, freshwater crayfishes and freshwater shrimps

Source: IUCN Red List of Threatened Species

Courtesy: BBC

BBC

Additional Information:

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES):

- It is an intergovernmental body which assesses the state of biodiversity and of the ecosystem services it provides to society, in response to requests from decision makers.
- IPBES was established in 2012 by United Nations Environment Programme (UNEP).

4. UNITED NATIONS OCEAN CONFERENCE

News: United Nations General Assembly has decided to hold second UN Ocean Conference in June 2020 in Lisbon, Portugal.

Facts:

- **Theme:** “Scaling up Ocean Action Based on Science and Innovation for the Implementation of Goal 14: Stocktaking, Partnerships and Solutions”.
- **Objective:** To support the implementation of **Sustainable Development Goal 14 (SDG 14)** which states to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Additional Information:

1st UN Ocean Conference:

- It was held in New York, USA in 2017. It coincided with the World Ocean Day (8th June).
- The conference adopted a declaration called “**Our Ocean, Our Future: Call for Action**”

5. UNEP REPORT: SAND AND SUSTAINABILITY: FINDING NEW SOLUTIONS FOR ENVIRONMENTAL GOVERNANCE OF GLOBAL SAND RESOURCES

News: United Nations Environment Programme (UNEP) released a report called “*Sand and Sustainability: Finding new solutions for environmental governance of global sand resources*”

Facts

Key takeaways from the report:

- Sand and gravel are the **2nd largest natural resources** extracted and traded by volume after water; however, it is the **least regulated natural resource**.
- 40-50 billion tonnes of crushed rock, sand and gravel is extracted from quarries, pits, rivers, coastlines and the marine environment each year.
- 85% to 90% of global sand demand is met from quarries, and sand and gravel pits
- 10% to 15% extracted from rivers and sea shores which is a major concern
- Most large rivers of the world have lost between half and 95% of their natural sand and gravel delivery to ocean
- International trade in sand and gravel is growing due to high demand in regions without local sand and gravel resources and is forecast to rise 5.5% per year.
- **Consequences of Unsustainable sand extraction:**
 - **Environmental implications:**
 - River and coastal erosion, threats to freshwater and marine fisheries and aquatic ecosystem, instability of river banks, increased flooding, lowering of groundwater levels
 - Damming of rivers reduces the amount of sediment flowing downstream in delta areas
 - Increases pressure on beaches
 - Social implications: Threat to local tourism industry, decrease of crab population negatively affecting people whose livelihood depends on the collection of crabs.
- **Recommendations put forward:**
 - Better spatial planning and reducing unnecessary construction
 - Alternative design and construction methods that reduces sand consumption

- Promoting Green infrastructure
- investing in sand production and consumption measurement,
- Establishing dialogue between key players and stakeholders in the sand value chain based on transparency and accountability.

Additional Information:

- In India, sand is a **minor mineral**, as defined under the Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act). State Governments have complete powers for making Rules for grant of concessions in respect of extraction of minor minerals and levy and collection of royalty on minor minerals.
- Ministry of Environment, Forest and Climate Change has put forward **Sustainable Sand Mining Management Guidelines, 2016**. The guidelines provide for a detailed programme for ensuring that mining of river sand is done in a sustainable manner.
- Ministry of Mining put forward **Draft Sand Mining Regulations** in 2018 to address concerns of sand mining and ensure availability of sand while maintaining the sustainability in sand mining.

6. INACTION ON CLIMATE CHANGE- A VIOLATION OF HUMAN RIGHTS

News: A group of Torres Strait Islanders have decided to lodge a complaint with the United Nations Human Rights Committee against the Australian government, alleging climate inaction.

Facts:

Allegation:

- Australian government has violated article 27 (the right to culture); article 17 (the right to be free from arbitrary interference with privacy, family and home); and article 6 (the right to life) of the International Covenant on Civil and Political Rights.

Additional Information:

Torres Strait Islands:

- The Torres Strait Islands are a group of small islands which lie in Torres Strait.
- Torres Strait is the waterway separating northern continental Australia's Cape York Peninsula and the island of New Guinea.
- Strait: It is a narrow passage of water connecting two seas or two other large areas of water



The United Nations Human Rights Committee (UNHRC):

- It is a United Nations body of 18 experts established by the International Covenant on Civil and Political Rights in 2006. The committee monitors compliance with the International Covenant on Civil and Political Rights

The International Covenant on Civil and Political Rights (ICCPR):

- It is an international human rights treaty adopted by the United Nations (UN) in 1966. It is one of the two treaties that give legal force to the Universal Declaration of Human Rights of the UN (the other being the International Covenant on Economic, Social and Cultural Rights, ICESCR).

7. CO₂ LEVEL HITS HISTORIC HIGH

News: The Mauna Loa Observatory in Hawaii recorded CO₂ levels at 415.26 parts per million (ppm) baseline.

Facts:

- It is the **first time on record** that the observatory measured a daily baseline above 415ppm.
- The last time Earth's atmosphere contained this much CO₂ was 3 million years ago.
- Concentration of CO₂ in Earth's atmosphere is represented by the **Keeling Curve**- named after its creator, Dr. Charles David Keeling.

Additional Information:

Mauna Loa Observatory (MLO)

- The Mauna Loa Observatory (MLO) is an atmospheric research facility on Mauna Loa, on the island of Hawaii, U.S. state of Hawaii. MLO has been monitoring and collecting data related to atmospheric change since the 1950's.
- The observatory is part of the National Oceanic and Atmospheric Administration (NOAA) – Earth System Research Laboratory (ESRL) – Global Monitoring Division (GMD) of the US government.
- There are certain factors that make MLO ideal for monitoring constituents in the atmosphere that can cause climate change such as- a) undisturbed air, b) remote location, and c) minimal influences of vegetation and human activity.

8. DECLARATION OF CLIMATE EMERGENCY:

News: The United Kingdom parliament declared an environment and climate emergency.

Facts:

- The **UK is the first** national government to declare such an emergency. **Ireland** became the second country to declare climate emergency.
- Climate emergency is a call for governments across the world to change their behaviour towards the climate and biodiversity.
- Declaration of the climate emergency was one of the prime demands of the Extinction Rebellion

Additional Information:

Extinction Rebellion

- Extinction Rebellion is a protest group that has been using non-violent civil disobedience to campaign on environmental issues in the UK.
- It has 3 demands-
 - the government should “tell the truth” by declaring a climate and ecological emergency;
 - it should act to reduce greenhouse gas emissions to zero by 2025; and
 - It should create a “citizens assembly” to find solutions to the ecological crisis

9. INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY

News: The International day for Biological Diversity was celebrated on 22nd May.

Facts:

- **Aim:** IBD is celebrated every year to increase understanding and awareness of biodiversity issues.
- **2019 Theme:** “Our Biodiversity, Our Food, Our Health”. It aimed to spread awareness of the dependency of food systems, nutrition, and health on biodiversity and healthy ecosystems.

- **Background:** In 2000, the UN General Assembly adopted 22 May as International Biological Diversity, to commemorate the adoption of the text of the Convention on Biological Diversity.

Additional Information:

UN Convention on Biological Diversity:

- The UN Convention on Biological Diversity was signed in 1992 and entered into force in 1993.
- It has 3 main objectives:
 - The conservation of biological diversity
 - The sustainable use of the components of biological diversity
 - The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

Sustainable Development Goals and Biodiversity:

- **Sustainable Development Goal 15** calls for halting biodiversity loss and promoting the sustainable use of terrestrial and inland freshwater ecosystems.

India enacted **Biological Diversity Act in 2002** for giving effect to the provisions of the CBD. Objective of this act is to regulate the access to genetic resources and protection of biodiversity. This act provides for establishment of statutory bodies such as the National Biodiversity Authority, State Biodiversity Boards, National and State Biodiversity funds etc

10. WORLD MIGRATORY BIRD DAY

News: The World Migratory Bird Day was celebrated on 11th May.

Facts:

- **Aim:** to highlight the need for the conservation of migratory birds and their habitats.
- The Day is celebrated **twice a year**- on the second Saturday in May and October. In 2019, it will be celebrated on 12th October.
- It is organised by the Secretariats of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the African-Eurasian Migratory Water bird Agreement (AEWA) in cooperation with Environment for the Americas (EFTA).
- **2019 Theme:** “**Protect Birds: Be the Solution to Plastic Pollution!**” The theme seeks to highlight the negative impact of plastic pollution on migratory birds and their habitats.

Additional Information:

Convention on the Conservation of Migratory Species of Wild Animals (CMS)

- It is an environmental treaty under the aegis of the United Nations Environment Programme (UNEP). Also known as the Bonn Convention, CMS was signed in 1979 and came into force in 1983.
- It is the **only global convention specializing in the conservation of migratory species**, their habitats and migration routes
- India has been a Party to the CMS since 1983. The 13th Conference of Parties (COP) of the CMS will be hosted by India during 15th to 22nd February, 2020 at Gandhinagar in Gujarat.

African-Eurasian Migratory Waterbird Agreement (AEWA)

- It is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian Archipelago. India is not a party to the treaty.

- It has been developed under the framework of CMS and administered by the UNEP.

Environment for the Americas (EFTA)

- It is a Non-profit organization that provides information and education materials about birds, bird conservation, and bird education from Canada to South America.

II. NATIONAL CLEAN AIR PROGRAMME (NCAP)

News: 84 out of 102 non-attainment cities, included in the National Clean Air Programme (NCAP) have submitted city-specific plans to reduce air pollution.

Facts:

- National Clean Air Programme (NCAP) has been launched in 2019 by Ministry of Environment, Forest and Climate Change.
- **Aim:** Prevention, control and abatement of air pollution in India. It aims at 20%–30% reduction of PM_{2.5} and PM₁₀ concentration by 2024, taking 2017 as the base year for the comparison of concentration. It is a five-year action plan with 2019 as the first year.
- **Target:** **102 non-attainment cities** which were identified by Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.
- **Features**
 - It requires cities to come up with city-specific plans that include increasing the number of monitoring stations, providing technology support, conducting source apportionment studies, and strengthening enforcement.
 - The cities are required to implement specific measures in a time-bound manner. Example: ensuring roads are pothole-free to improve traffic flow and thereby reduce dust” (within 60 days). However, it doesn't specify an exact date for when these obligations should start.
- Recently the Union Environment Ministry has constituted a committee to implement the NCAP which will be chaired by the Secretary of the Environment Ministry.

Additional Information:

- **Non-attainment cities:** These are cities which have been consistently showing poorer air quality than the National Ambient Air Quality Standards (NAAQS). Example: Delhi, Varanasi, Bhopal, Noida etc.
- **NAAQS** are the standards for ambient air quality set by CPCB. Ambient air quality refers to the condition or quality of outdoor air.
- **12 Pollutants covered under NAAQS are:** Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Ozone, Lead, Carbon monoxide, Ammonia, Benzene, Benzo (a) Pyrene (BaP) - particulate phase only, Arsenic, and Nickel.
- **Air Quality Index (AQI):** The AQI classifies air quality of a day considering criteria pollutants through colour codes and air quality descriptor. Further, it also links air quality with likely human health impacts. The index measures eight major pollutants, namely, particulate matter (PM₁₀ and PM_{2.5}), nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide, ammonia and lead.

Central Pollution Control Board (CPCB):

- It is a statutory organisation constituted in 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB has been entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

- It serves as a field formation and also provides technical services to the Ministry of Environment, Forests and Climate Change of the provisions of the Environment (Protection) Act, 1986.

12. NATIONAL RHINO CONSERVATION STRATEGY FOR INDIA

News: Ministry of Environment, Forest and Climate Change has started a project to create DNA profiles of all Rhinos in India.

Facts:

- The project is a subset of the recently launched **National Rhino Conservation Strategy for India** of Ministry of Environment, Forest and Climate Change.
- National Rhino Conservation Strategy for India focuses on:
 - strengthening protection,
 - expanding present distribution range by at least 5%, research on rhinos in India,
 - active Indo- Nepal and Indo- Bhutan trans-boundary engagement, and
 - Use of wildlife forensics for controlling poaching and illegal trade in rhino parts and products.

Additional Information:

The Great one horned Rhinoceros (Indian rhinoceros):

- It is found in the Indian subcontinent. It is listed as **Vulnerable** in the IUCN Red List.
- There are about 2,600 rhinos in India, with more than 90% of the population concentrated in Assam's Kaziranga National Park. Outside Kaziranga, rhinos are found in West Bengal, Uttar Pradesh and Bihar.

Indian Rhino Vision (IRV) 2020 programme

- It was launched in 2005 to protect and increase the population of the one-horned rhinoceros.
- The programme was launched by Assam Forest Department in partnership with WWF-India, the International Rhino Foundation and US Fish & Wildlife Service.
- It aims to attain a **wild population of at least 3,000 greater one-horned rhinos spread over seven protected areas in Assam by the year 2020.**

New Delhi Declaration on Asian Rhinos 2019

- At the recent Second Asian Rhino Range Countries Meeting in New Delhi, India has signed the New Delhi Declaration on Asian Rhinos 2019.
- Under the declaration India will collaborate with Bhutan, Nepal, Indonesia and Malaysia for conservation and protection of three Asian rhino species- Greater one-horned rhinoceros, Javan rhinoceros (listed as Critically Endangered in the IUCN Red List) and Sumatran rhinoceros (listed as Critically Endangered in the IUCN Red List).

13. GRIHA FOR EXISTING DAY SCHOOLS

News: Green Rating for Integrated Habitat Assessment (GRIHA) Council has recently released a rating tool called 'GRIHA for Existing Day Schools'.

Facts:**About GRIHA for Existing Day Schools:**

- **Objectives:**
 - To evaluate the environmental performance of existing schools across India.
 - To develop a proactive attitude amongst the students and teachers to reduce their environmental footprint and adopt a greener lifestyle.
- The evaluation would be done using calculators with pre-fed data and the students and teachers will be working collaboratively to meet the requirements of the rating.

Additional Information:**GRIHA Rating**

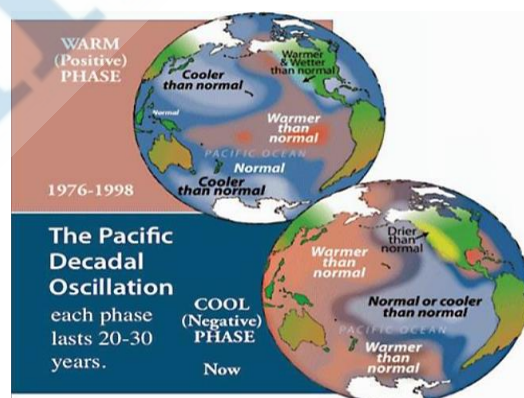
- GRIHA Rating has been developed by TERI (The Energy and Resources Institute) - a non-profit policy research organization. It has been adopted by the Ministry of New and Renewable Energy (MNRE) as the national rating system for green buildings in India.
- It is a rating tool that helps people to assess the performance of the buildings against certain nationally acceptable benchmarks.
- The Government of India, in its Intended Nationally Determined Contributions (INDCs), has mentioned GRIHA as a national tool to evaluate greenhouse gas reduction from habitats

14. PACIFIC DECADAL OSCILLATION

News: A recent study published in *JGR-Atmospheres*, has associated the decreasing monsoon rainfall in Northeast India with Pacific Decadal Oscillation.

Facts:**About Pacific Decadal Oscillation (PDO)**

- The Pacific Decadal Oscillation (PDO) refers to cyclical variations in sea surface temperatures in the mid-latitude Pacific Ocean.
- It is detected as warm or cool surface waters in the North Pacific (poleward of 20°N).
- During the positive (warm) phase, the west Pacific cools and East Pacific warms. Vice-e versa happens in the negative (cool) phase.
- The warm and cool phases further alters upper level atmospheric winds.
- It is similar to El Niño-Southern Oscillation (ENSO) in character. However, it varies over a much longer time scale. It can remain in the same phase for **20 to 30 years** while ENSO cycles typically only last **6 to 18 months**.
- It can intensify or diminish the impacts of ENSO according to its phase. If both ENSO and the PDO are in the same phase, it is believed that El Niño/La Nina impacts may be magnified.

**Additional Information:****ENSO:**

- It is a periodic fluctuation in sea surface temperature (El Niño) and the air pressure of the overlying atmosphere (Southern Oscillation) across the equatorial Pacific Ocean.
- **El Niño:** It refers to the large-scale ocean-atmosphere climate interaction linked to a periodic warming in sea surface temperatures across the central and east-central Equatorial Pacific.

- **Southern Oscillation:** It describes a bimodal variation in sea level barometric pressure between observation stations at Darwin, Australia and Tahiti.

La Nina: It is a climate pattern that describes the cooling of surface ocean waters along the tropical west coast of South America.

15. NAMAMI GANGE

News: According to a report on the National Mission for Clean Ganga (NMCG) website, only 10 of the 100 sewage infrastructure projects commissioned after 2015 under the Namami Gange mission have been finished.

Facts:

- Launched in 2014, the Namami Gange programme is an Integrated Conservation Mission under Ministry of Water Resources, River Development and Ganga Rejuvenation
- Aim: achieve effective abatement of pollution, conservation and rejuvenation of National River Ganga.
- **Main Pillars:**
 - Sewerage Treatment Infrastructure,
 - River-Surface Cleaning,
 - Afforestation,
 - Industrial Effluent Monitoring,
 - River-Front Development,
 - Biodiversity protection,
 - Ganga Gram and
 - Public Awareness

Institutional structure for policy and implementation: A 5 tier structure was put forward by National Council for River Ganga (Rejuvenation, Protection and Management) Act, 2016

- **National Ganga Council:**
 - It has been established as an Authority under National Council for River Ganga (Rejuvenation, Protection and Management) Act, 2016
 - It functions under **chairmanship of Prime Minister of India**
 - It is responsible for superintendence, direction, development and control of River Ganga and the river basin, for prevention, control and abatement of environmental pollution in river Ganga and to ensure continuous adequate flow of water.
- **Empowered Task Force (ETF) on river Ganga:**
 - It functions under the chairmanship of Union Minister of Water Resources, River Development and Ganga Rejuvenation.
 - It ensures that states, ministries, departments have an action plan with specific activities, milestones, and timeliness for implementing the programme.
- **National Mission for Clean Ganga (NMCG)**
 - It has been established as an Authority under National Council for River Ganga (Rejuvenation, Protection and Management) Act, 2016.
 - It is the implementing agency of the Namami Gange Programme at the national level.
- **State Ganga Committees** oversee the implementation of the programme in respective states.
- **District Ganga Committees** in every specified districts through which river Ganga and its tributaries pass

1. RISAT 2-B

News: The Indian Space Research Organization (ISRO) has successfully placed RISAT-2B (Radar Imaging Satellite-2B) into orbit 556 km above earth.

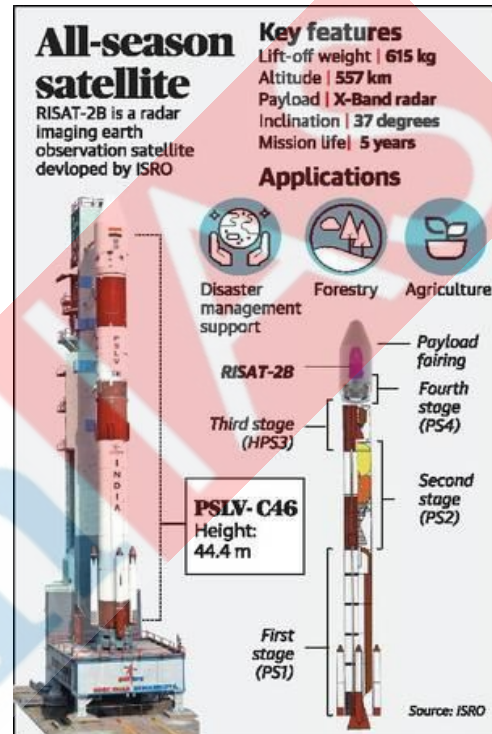
Facts:

About RISAT 2B:

- It is a Radar imaging earth observation satellite. It uses synthetic aperture radar to provide all-weather surveillance. It has a mission life of 5 years.
- The PSLV-C46 launcher carried the RISAT-2B.
- It is a part of the RISAT or Radar Imaging Satellite series of Indian radar imaging reconnaissance satellites built by ISRO.
- **Significance:**
 - It will enhance India's defence capabilities to monitor the cross-border activities.
 - It will also provide services in the fields of agriculture, forestry and disaster management support.

About PSLV-C46

- PSLV-C46 is the 14th flight of PSLV in 'core-alone' configuration i.e. without the use of solid strap-on motors.



Additional Information:

Polar Satellite Launch Vehicle (PSLV)

- It is an expendable medium-lift launch vehicle designed and operated by the ISRO.
- It is the first Indian launch vehicle to be equipped with liquid stages.
- It can reach up to orbits such as the GeoSynchronous Transfer Orbit, Lower Earth Orbit, and Polar Sun Synchronous Orbit.

2. NEW STANDARDS FOR MEASURING UNITS KILOGRAM, KELVIN, MOLE & AMPERE

News: India has adopted a global resolution to redefine four of the seven base units – kilogram, kelvin, mole and ampere. The changes came into effect from May 20, 2019- World Metrology Day.

Facts:

- The kilogram will be defined by the Planck constant (h)
 - Until now the kilogram has been defined as the mass of a cylinder of platinum-iridium, called **Le Grand K**, or **International Prototype Kilogram (IPK)** which is kept at BIPM in Sèvres, near Paris.
 - In India, National Physical Laboratory (NPL), New Delhi, maintains the National Prototype Kilogram (NPK-57), which is calibrated with IPK.

- The IPK was the last physical artefact used to define any of the fundamental units.
- The ampere will be defined by the elementary electric charge (e).
 - Previously one ampere was defined as the amount of constant current that will produce an attractive force of 2×10^{-7} newton per metre of length between two straight parallel conductors of infinite length and negligible circular cross section placed one metre apart in a vacuum.
- The kelvin will be defined by the Boltzmann constant (k)
 - Kelvin was previously defined as equal to $1/273.16$ fraction of thermodynamic temperature of the triple point of water at 13th General conference of weights and measures. Temperature of triple point simply means the temperature at which a substance exists in its all three states i.e. solid, liquid and water.
- The mole will be defined by the Avogadro constant (NA)
 - Mole was previously defined as the number of atoms in 12 grams of Carbon-12 (^{12}C) isotope of Carbon.

THE SEVEN FUNDAMENTAL UNITS

UNIT	QUANTITY	HOW IT IS/WILL BE DEFINED
Meter*	Distance	Based on speed of light
Kilogram**	Mass	To be based on Planck constant
Second*	Time	Based on radiation of caesium-133 atom
Ampere**	Current	To be based on an electron's charge
Kelvin**	Temperature	To be based on Boltzmann constant
Mole**	Amount of substance	To be based on Avogadro constant
Candela*	Luminous intensity	From efficacy of light of specific frequency

*Current definition stands **Being redefined

Significance:

- The change in definition of kilogram will ensure its reliability, and enable far more accurate mass measurements.
- The new SI System will be helpful in bringing in accuracy while dealing with international trade, biotechnology, high-tech manufacturing and human health and safety.

Additional Information:

General Conference on Weights and Measures, 2018

- Representatives from 60 countries had voted to redefine SI, or the International System of Units at the General Conference on Weights and Measures in Versailles, France in November 2018.
- The conference was organised by the International Bureau of Weights and Measures (BIPM). BIPM sets the global standards for measurement. India is a member of BPIM since 1957.

National Physical Laboratory of India

- The CSIR- National Physical Laboratory of India is the measurement standards laboratory of India. It maintains standards of SI units in India and calibrates the national standards of weights and measures.
- It was founded in 1947. It is situated in New Delhi.

3. YOUNG SCIENTIST PROGRAMME

News: Indian Space Research Organization (ISRO) has hosted the first batch of students under the Young Scientists Programme, also known as **Yuva VAIgyanik KArayakram (YUVIKA)**.

Facts:

- Young Scientist Programme is a **special programme for school children** launched by ISRO in 2019.

- **Aim:** imparting basic knowledge on Space Technology, Space Science and Space Applications to children. The intent is to arouse their interest in the emerging areas of Space activities.
- The programme has a duration of about 2 weeks during the summer holidays.
- Those who have finished 8th standard and currently studying in 9th standard are eligible for the programme.
- 3 students from each State/ Union Territory are selected to participate in this programme.
- The programme includes:
 - invited talks
 - experience sharing by the eminent scientists,
 - facility and lab visits,
 - exclusive sessions for discussions with experts,
 - Practical and feedback sessions.

4. 'MANAV: Human Atlas Initiative'

News: Department of Biotechnology (DBT) has launched 'MANAV: Human Atlas Initiative' towards improving knowledge on human physiology.

Facts:

- It is a project for **mapping every tissue of the human body**. The project aims to help better understand the roles of tissues and cells linked to various diseases.
- The project will create a database network of all tissues in the human body from the available scientific literature.
- The student community will be the backbone on assimilating the information. They will be trained and imparted with skills to perform annotation and curation of information that will ultimately form the online network.
- The programme will involve:
 - Gaining better biological insights through physiological and molecular mapping
 - Developing disease models through predictive computing
 - A holistic analysis and finally drug discovery.

Significance:

- The collected data will be useful for future researchers and clinicians and drug developers who handle human bodies in disease conditions.
- The database will also help in tracing causes of a disease, understanding specific pathways and ultimately decoding how the body's disease stage is linked to tissues and cells.

Additional Information:

Department of Biotechnology:

- It functions under the Ministry of Science and Technology. It was set up in 1986.



- It is responsible for administrating development and commercialisation in the field of modern biology and biotechnology in India.

5. GAGANYAAN MISSION

News: ISRO and Indian Air Force have signed a Memorandum of Understanding for crew selection and training for the Gaganyaan mission.

Facts:

- Gaganyaan is **India's first Human Space Flight Programme** to be launched by Indian Space Research Organisation (ISRO) by 2022. It will carry 3 crew members to low earth orbit.
- The Gaganyaan mission was accepted and formally announced by the Indian Prime Minister on 15 August 2018.
- The programme aims to provide a **micro-gravity platform in space to test future technologies and conducting experiments**.
- It is planned to be launched on ISRO GSLV Mk III launch vehicle.
- Recently, ISRO has opened Human Space Flight Centre (HSFC) in Bengaluru for implementation of Gaganyaan project. The responsibilities will include:
 - end-to-end mission planning,
 - development of engineering systems for crew survival in space,
 - crew selection and training and
 - Pursue activities for sustained human space flight missions.

Additional Information:

GSLV Mk III:

- The GSLV Mk-III is a geosynchronous satellite launch vehicle developed by ISRO. It is the heaviest rocket ever made by India.
- It has 3 stages with two solid motor strap-on, a liquid propellant core stage, and a cryogenic stage.
- A Cryogenic rocket stage is more efficient and provides more thrust for every kilogram of propellant it burns compared to solid and earth-storable liquid propellant rocket stages.
- It is India's first fully functional rocket to be tested with a cryogenic engine that uses liquid propellants (liquid oxygen and liquid hydrogen).
- It has been designed to carry 4-tonne class satellites into Geosynchronous Transfer Orbit (GTO) or about 10 tons to Low Earth Orbit (LEO).

GSLV and PSLV:

GSLV (Geosynchronous Satellite Launch Vehicle) and PSLV (Polar Satellite Launch Vehicle) are satellite launch vehicles developed by ISRO. Launch Vehicles are used to carry spacecraft to space.

Key Differences between GSLV and PSLV

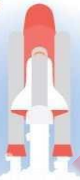

#	PSLV	GSLV
1	Used to launch Low Earth Orbit (LEO) satellites into Polar and Sun Synchronous Orbits	Used to launch satellites and other space objects into Geosynchronous Transfer Orbits.
2	It has a four-stage system comprising a combination of solid and liquid-fuelled rocket stages.	It has a three-stage launch system with strap-on motors

3	Does not use cryogenic fuel	Uses cryogenic engine in the third stage. The engine uses liquefied oxygen and hydrogen as fuel.
4	Lower load capacity than GSLV- can put 1,750 kg of payload to Sun-Synchronous Polar Orbits of 600 km altitude and 1,425 kg in sub GTO	Has greater load capacity than PSLV- can put a payload of up to 2500 in GTO and 5 tonnes in LEO

History of Human Space Flight Missions:

- So far, only the USA, Russia and China have launched human spaceflight missions. Gaganyaan will make India the fourth nation in the world to launch a Human Spaceflight Mission.

MANNED MISSIONS

VOSTOK 1 MISSION (USSR, 1961) Launched on April 12, 1961, Vostok 1 spacecraft took Yuri Gagarin, a cosmonaut from Soviet Union, into space, making him the world's first human in space	 MERCURY MISSION (US, 1961) Alan Shepard was the first American in space when Freedom-7 spacecraft took off from Florida on May 5, 1961
SHENZHOU 5 PROGRAMME (CHINA, 2003) Shenzhou mission put first Chinese citizen Yang Liwei into orbit on October 15, 2003	INDIAN'S TRYST WITH SPACE Rakesh Sharma (in pic) , a former IAF pilot, who flew aboard Russian Soyuz T-11 on April 2, 1984. Sharma is the only Indian citizen to travel in space 

6. ADITYA L1 MISSION

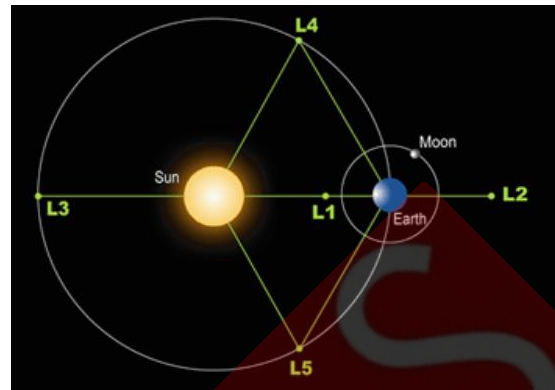
News: ISRO has announced that Aditya L-1 mission will be launched in 2021 aboard a **Polar Satellite Launch Vehicle (PSLV-XL)** from Sriharikota, Andhra Pradesh. The mission is similar to NASA's Parker Solar Probe.

Facts:

- ISRO's Aditya-L1 mission, originally named as the Aditya-1 mission, will be **India's first satellite** to study the sun.
- The mission is aimed at studying the Sun from a **halo orbit around the Sun-Earth Lagrangian point 1**, henceforth the name Aditya-L1.
- Previously, it was planned to be launched in an 800 km low earth orbit. But, later, it was realised that a satellite placed in the halo orbit around the L1 point of the Sun-Earth orbit has the advantage of continuously viewing the Sun without any obstructions.
- The **major objectives** of the mission are:
 - Realization and launch of a satellite in a Halo orbit around L1.
 - Understanding solar upper atmospheric (chromosphere and corona) dynamics.
 - Study of chromospheric and coronal heating, physics of the partially ionized plasma and initiation of Coronal Mass Ejections (CMEs) and flares.
 - Observe the in-situ particle and plasma environment providing data for the study of particle dynamics from the Sun.

Additional Information:**Lagrangian Points:**

- Lagrangian points are the positions are the points near two large bodies in orbit where a smaller object will maintain its position relative to the large orbiting bodies.
- At the Lagrangian points the gravitational forces of the two large bodies, the centripetal force of orbital motion, and (for certain points) the Coriolis acceleration all match up in a way that cause the small object to maintain a stable or nearly stable position.
- There are 5 Lagrangian points as shown in the diagram.
- The path followed by an artificial satellite around a Lagrange point is known as Halo orbit.



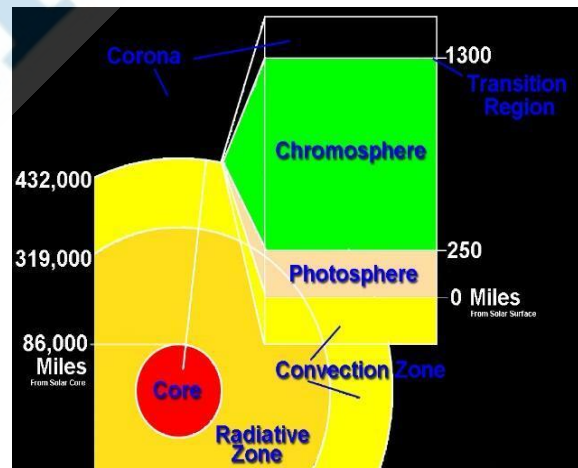
Coronal Mass Ejections: It is a significant release of plasma and accompanying magnetic field from the solar corona.

Solar Flare: It is a sudden flash of increased brightness on the Sun, usually observed near its surface and in close proximity to a sunspot group.

Parker Solar Probe: Launched in 2018, NASA's Parker solar probe seeks to probe and make observations of the outer corona of the Sun. It has been closer to the sun's surface than any spacecraft before it.

Outer Layers of Sun:

- **Photosphere:** It is the deepest layer of the Sun that we can observe directly. It reaches from the surface visible at the centre of the solar disk to about 400 km above that.
- **Chromosphere:** The chromosphere is a layer in the Sun between about 400 km and 2100 km above the solar surface (the photosphere).
- **Transition Region** - The transition region is a very narrow (100 km) layer between the chromosphere and the corona where the temperature rises abruptly from 7700 to 500,000 degrees C
- **Corona** - The corona is the outermost layer of the Sun, starting at about 2100 km above the solar surface (the photosphere). The corona does not have an upper limit. It cannot be seen with the naked eye except during a total solar eclipse, or with the use of a coronagraph.

**7. CHANG-E 4**

News: China's Chang'e-4 has conducted a detailed survey of the far side of the moon and provided insights on the formation of the moon.

Facts:

- In 2019, China's spacecraft Chang'e-4 (named after the moon goddess in Chinese mythology) made first-ever soft landing on the far side of the moon.

- **Major objectives** of the Chang'e-4 mission:
 - surveying the terrain and landforms,
 - detecting the mineral composition, shallow lunar surface structure and
 - measuring the neutron radiation and neutral atoms to study the environment
- Chang'e 4 lander deployed the rover **Yutu-2** in **Von Karmen Crater** in the **Aitken Basin** at the moon's South Pole. **Aitken basin is the Moon's largest and oldest impact crater.**

Additional Information:

Far Side:

- The far side of the Moon is the hemisphere of the Moon that always faces away from Earth. The far side's terrain is rugged with a multitude of impact craters. The near side of the moon is the one which face the Earth.
- The tidal forces from Earth have slowed down the Moon's rotation to the point where the same side is always facing the Earth. This phenomenon is called tidal locking.

Moon's Formation- The Lunar magma Ocean theory:

- According to the lunar magma ocean theory, the moon was covered with an ocean of magma up to hundreds of miles deep when it was newly formed and still hot from its creation.
- As this magma ocean cooled and solidified, denser minerals rich in iron and magnesium, such as olivine, sank to the bottom of the magma-ocean.
- On the other hand, lighter minerals rich in silicon and aluminium, such as plagioclase gathered near the surface.

8. GENOME SEQUENCING OF ASIATIC LION

News: Scientists from CSIR-Centre for Cellular and Molecular Biology has for the first time sequenced the entire genome of Asiatic lion.

Facts:

Significance:

- better understanding the evolution of Asiatic lions
- to develop specific markers to study population genetics (the differences at the gene level within a population)
- get newer insights into its population status and subsequent management
- The genome sequencing will also help in comparative studies of Asiatic lion with the genome of royal Bengal tiger, African Cheetah and Jaguar.

Additional Information:

Genome Sequencing:

- Genome sequencing means determining the order of the four chemical building blocks – called “bases” – that make up the DNA molecule.
- Genome sequencing helps to understand how genes work together to direct the growth, development and maintenance of an organism.
- It also helps to determine unique genetic traits, susceptibility and resilience to diseases.

Asiatic Lion:

- Asiatic Lion is a pantherine cat, listed as ‘**Endangered**’ under the IUCN Red List. Its range is restricted to the Gir National Park and environs in Gujarat, India.
- **India is the only country where both lions and tigers are found in the wild.**

9. DOUBLE ASTEROID REDIRECTION TEST (DART):

News: NASA has announced that SpaceX will fly its Double Asteroid Redirection Test (DART) planetary-defence mission.

Facts:

- Double Asteroid Redirection Test (DART) is a planned space probe that will demonstrate the kinetic effects of crashing an impactor spacecraft into an asteroid moon for planetary defence purposes.
- The mission is intended to test whether a spacecraft impact could successfully deflect an asteroid on a collision course with Earth.
- The kinetic impact technique works by changing the speed of a threatening asteroid by a small fraction of its total velocity
- The spacecraft will crash into “**Didymoon**,” the satellite of the near-Earth asteroid Didymos.

10. NATIONAL TECHNOLOGY DAY

News: The 20th National Technology Day was celebrated on 11th May

Facts:

- The National Technology Day was coined by late Prime Minister AtalBihari Vajpayee.
- It is celebrated to mark the anniversary of Operation Shakti- the Pokhran nuclear test (successful test-fire of the Shakti-1 nuclear missile) which was conducted on 11th of May, 1998.
- On 11th May, 1998, the Defense Research and Development Organization (DRDO) also accomplished the last test-fire of the **Trishul missile**- a short range surface-to-air missile.
- Further, on the same day in 1998, Hansa-3, India’s first all-composite light aircraft designed and developed by CSIR-NAL was flown in Bengaluru.
- Every year, the **Technology Development Board of India** commemorates the day by awarding individuals with National Award for their contribution to science and technology.
- **2019 Theme:** “Science for People and People for Science”.

Additional Information:**Technology Development Board of India**

- It is a statutory body established under the Technology Development Board Act, 1995. It functions under the Ministry of Science and Technology.
- It provides financial assistance to Indian industries and other agencies attempting development and commercial application of indigenous technology, or adapting imported technology to wider domestic applications.

11. NEWSPACE INDIA LTD

News: Union Cabinet has cleared a new business arm for the Department of Space (DoS) called NewSpace India Ltd. (NSIL).

Facts:

- The government has registered NewSpace India Ltd. (NSIL) as a commercial entity under the **Department of Space (DoS)**.
- Functions of NSIL:
 - Transfer technology to industry for producing the commercially successful PSLV spacecraft launchers
 - Outsource assembly of small satellites and the upcoming Small Satellite Launch Vehicle (SSLV)
 - commercially exploit the R&D work done by ISRO centres and DoS constituents
- NSIL is the second commercial entity of the Department of Space (DoS) after **Antrix Corporation Limited** which was set up in 1992. Antrix is mandated with marketing the products and services of the Indian Space Research Organisation (ISRO).

12. ARTEMIS

News: NASA has planned to send first woman to the moon in 2024 in its ambitious moon mission named Artemis.

Facts:

- ARTEMIS stands for **Acceleration, Reconnection, Turbulence and Electrodynamics of the Moon's Interaction with the Sun**. Artemis is named after the Greek goddess of the Moon and twin sister of the god Apollo.
- Neil Armstrong, one of the astronauts aboard the Apollo 11, made history by becoming the first person to walk on the Moon in 1969.
- The Artemis mission includes
 - establishing of lunar outpost,
 - investigating the Moon's resources and how they might be exploited and
 - Using Moon as a base to explore Mars and further into deep space.

13. ULTIMA THULE

News: NASA published results from the first sets of data gathered during the New Horizons spacecraft's flyby (close enough to record scientific data) of Ultima Thule.

Facts:

- Ultima Thule is a **Kuiper Belt object** and the **farthest object** ever explored. The object is officially named **2014 MU69**.
- It is a **contact binary** that is single object with two lobes attached gently. NASA dubbed the larger lobe as **Ultima** and three times smaller lobe as **Thule**.
- In colour, Ultima Thule has a **reddish hue** which is believed to be caused by modification of the organic materials on its surface.
- NASA has found evidence for a unique mixture of methanol, water ice, and organic molecules on Ultima Thule's surface.
- Further, a range of surface features on Ultima Thule, such as bright spots and patches, hills and troughs, and craters and pits have been observed. The largest depression is an 8-kilometre-wide feature, which researchers have named **Maryland crater**. It was likely formed from an impact.

Additional Information:**Kuiper Belt:**

- The Kuiper belt occasionally called the **Edgeworth–Kuiper belt**, is a circumstellar disc in the outer Solar System, extending from the orbit of Neptune (at 30 AU) to approximately 50 AU from the Sun.
- It consists of icy objects, which are remnants from the formation of the solar system. **Pluto is also a part of the Kuiper Belt.**

New Horizons:

- The New Horizons spacecraft was launched in 2006 by NASA. It is the **first mission to explore the Kuiper belt.**

14. ATHENA AND LISA MISSIONS

News: Scientists have proposed to combine ATHENA and LISA Missions to study the merging of two supermassive black holes and their aftermath. Currently, under study, both missions are scheduled for launch in the early 2030s.

Facts:**ATHENA:**

- The Advanced Telescope for High Energy Astrophysics (ATHENA) is a future X-ray telescope of the European Space Agency (ESA). It is a part of ESA's Cosmic Vision Programme.
- It will be the largest X-ray space observatory ever built.
- The main objectives of ATHENA will be to map hot gas structures, determining their physical properties, and search for supermassive black holes.

LISA:

- The Laser Interferometer Space Antenna (LISA) is a mission led by the European Space Agency (ESA)
- The mission's objective is to detect and accurately measure gravitational waves by using laser interferometry.

Additional Information:

Gravitational waves: These are fluctuations in the fabric of space-time produced by the acceleration of cosmic objects with very strong gravity fields for e.g. pairs of merging black holes

Laser Interferometer Gravitational-Wave Observatory (LIGO):

- It is a large-scale physics experiment and observatory by USA. It seeks to detect cosmic gravitational waves and develop gravitational-wave observations as an astronomical tool. USA has set up two LIGO observatories.
- In 2015, LIGO's US detectors made the first discovery of gravitational waves.
- India has decided to construct Laser Interferometer Gravitational Wave Laboratory – India (LIGO) in the Hingoli District of Maharashtra in collaboration with LIGO Laboratory, USA. This will be the third observatory identical to the two LIGO observatories in USA.

Great Observatories:

- NASA's series of Great Observatories satellites are four large, powerful space-based astronomical telescopes.

- The telescopes include Hubble Space Telescope (1990-present), Compton Gamma Ray Observatory (1991-2000), the Chandra X-ray Observatory (1999- present), and the Spitzer Space Telescope (2003-present)

15. ANTHROPOCENE

News: A 34-member panel of the Anthropocene Working Group (AWG) has voted in favour of designating a new geological epoch — the Anthropocene.

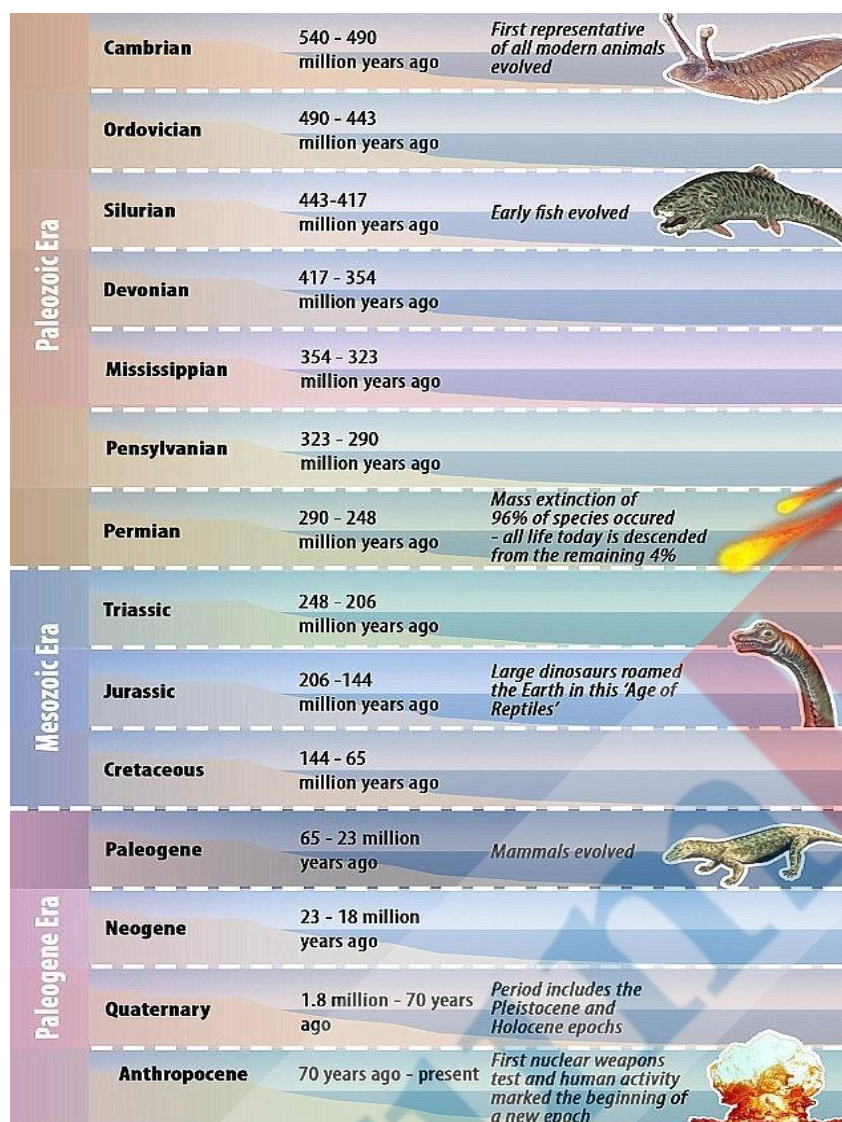
Facts

- The current epoch is the **Holocene Epoch of the Quaternary Period**. The Holocene epoch began 11,700 years ago. The proposed Anthropocene epoch would mark the end of the Holocene epoch.
- The term ‘Anthropocene’ was coined in 2000 by Nobel Laureate **Paul Crutzen and Eugene Stoermer**.
- Anthropocene describes the present geological time interval in which human activity has profoundly altered many conditions and processes on Earth.
- Characteristics of the Anthropocene epoch:
 - unprecedented increase in erosion and sediment transport associated with urbanisation and agriculture,
 - marked and abrupt anthropogenic perturbations of the cycles of elements such as carbon, environmental changes generated by these perturbations, including global warming, sea-level rise, and ocean acidification,
 - rapid changes in the biosphere and
 - proliferation and global dispersion of many new ‘minerals’ and ‘rocks’ including concrete, fly ash and plastics, and ‘technofossils’ produced from these and other materials.
- In the future course of action, scientists would have to find **Global boundary Stratotype Section and Point** for the Anthropocene epoch.

Additional Information:

Epoch

- An epoch is a subdivision of the geologic timescale. The geologic time scale is a system of chronological dating that relates geological strata to time.
- It is subdivided (descending order of duration) into: eons, eras, periods, epochs, and ages.



Eon Era Period → Epoch
→ Age

Example: Phanerozoic →
Cenozoic → Quaternary
→ Holocene →
Meghalayan

Global boundary Stratotype Section and Point: It is a definitive geologic marker or golden spike which marks the beginning of an epoch. It must be present globally and should be a part of deposits for geological record.

16. STARLINK PROJECT

News: Space X launched its first 60 of nearly 12,000 internet providing satellites under the Starlink Project.

Facts:

- It seeks to build a low-cost, satellite based broadband network capable of delivering internet access to the entire globe

Additional Information:

Loon:

- It is a project by Loon LLC, a subsidiary of Alphabet Inc. (the parent company of Google). It seeks to provide Internet access to rural and remote areas.
- It uses high-altitude balloons placed in the stratosphere (a layer of atmosphere that lies above the troposphere) at an altitude of 18 km to 25 km to create an aerial wireless network with up to 4G-LTE speeds.

Whitespace Internet:

- Microsoft is providing whitespace internet to unserved areas of Jamaica, Namibia, Tanzania, Philippines etc.
- White Space Internet uses a part of the radio spectrum known as White spaces. White Space refers to the unused broadcasting frequencies in the wireless spectrum. These spaces can provide broadband internet access that is similar to that of 4G mobile.

17. DISEASES IN NEWS:**A) Monkeypox Virus:**

News: Singapore has reported its first ever case of monkeypox virus

Facts:

- It is an orthopoxvirus that causes a viral disease with symptoms in humans similar but milder to those seen in smallpox patients.
- It is a zoonotic disease- it is transmitted from animals to humans through contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals.
- Human monkeypox is endemic in villages of Central and West Africa.
- There are no specific treatments or vaccines available for monkeypox virus infection

B) African Swine Fever:

News: The outbreak of African swine fever in China has led to massive mass cullings and a subsequent increase in the price of the pork meat.

Facts:

- It is a highly contagious hemorrhagic viral disease of domestic and wild pigs.
- It is caused by a large DNA virus of the Asfarviridae family. The biological vector of the virus is ticks of the genus Ornithodoros.
- It is not transmissible to humans.
- There is no approved vaccine against African Swine fever

Security & Defence

1. INS Vela

News: Indian Navy has launched Scorpene class submarine-INS Vela.

Facts:

- Vela is the fourth of six planned Scorpene-class submarines being built under Project 75
- It features **diesel-electric propulsion** and an additional **air-independent propulsion (AIP) system**.
- With AIP systems, submarines can stay submerged for much longer periods unlike the Conventional diesel-electric submarines which have to surface every few days to get oxygen to recharge their batteries
- It will have the capacity of engaging in both anti-surface and anti-submarine warfare.

Additional Information:

Scorpene Class Submarines:

- Scorpene class submarines is a class of diesel-electric submarine being built under Project-75 by Mazgaon Docks Limited (MDL), Mumbai, with technology transfer from France.

Project 75:

- In 1999, the Cabinet Committee on Security had approved a '**30-Year Plan for Indigenous Submarine Construction**', which was to develop two production lines on which six submarines each viz. a) Project 75 and b) Project 75 (I).
- Submarines under Project 75 include: INS Kalvari, INS Khanderi, INS Karanj, INS Vagir, INS Vagsheer, and INS Vela. INS Kalvari has already been commissioned into the Navy in 2017. Others are in the advanced stages of joining the Navy.
- Project 75 (I) seeks to open a second production line for diesel-electric submarines in India.

2. INS Vishal

News: India and the United Kingdom are in talks to build a new state-of-the-art aircraft carrier along the lines of the UK's HMS Queen Elizabeth as a part of India's 'Make in India' programme. The warship will be called INS Vishal

Facts:

- INS Vishal would serve alongside India's 45,000-tonne carrier INS Vikramaditya which was bought from Russia in 2004 and the under construction 40,000-tonne INS Vikrant.
- The HMS Queen Elizabeth is in service with the UK's Royal Navy and is touted as being the most potent aircraft carrier after the US Navy's nuclear powered carriers.
- The Queen Elizabeth class is significantly larger than INS Vikramaditya and INS Vikrant. It has a maximum displacement of over 65,000 tonnes and can deploy up to 40 F-35B fighters.

3. ABHYAS

News: The Defence Research and Development Organisation (DRDO) has conducted successful flight test of ABHYAS – High-speed Expendable Aerial Target (HEAT), from Integrated Test Range (ITR) in Chandipur, Odisha.

Facts:

- ABHYAS is a **drone** involving designed for autonomous flight with the help of an autopilot.
- The configuration of ABHYAS is designed on an in-line small gas turbine engine. It uses indigenously developed **Micro-Electro-Mechanical Systems (MEMS)** based navigation system for its navigation and guidance.
- The design of the fuselage is based on **Lakshya**. Lakshya is a high speed target drone system developed by the Aeronautical Development Establishment (ADE) of DRDO.

Additional Information:

Drones: Drone or remotely piloted aircraft (RPA) is an unmanned aircraft piloted from a remote pilot station.

Classification of drones: Directorate General of Civil Aviation (DGCA) has classified drones into:

- Nano: Less than or equal to 250 grams.
- Micro: From 250 grams to 2kg.
- Small: From 2kg to 25kg.
- Medium: From 25kg to 150kg.
- Large: Greater than 150kg.

Regulation: The Directorate General of Civil Aviation (DGCA), Ministry of Civil Aviation, is the designated authority in India to regulate the civil use of drones. However, military drones do not come under its ambit.

4. Border Roads Organization

News: The Border Roads Organisation (BRO) celebrated its 59th Raising Day (foundation day) on 7th May, 2019.

Facts:

- The BRO was formed on 7 May 1960. It functions entirely under the **Ministry of Defence**. Earlier, BRO was functioning under the administrative control of Ministry of Defence but funds were received from the Ministry of Road Transport and Highways.
- Engineering Service and personnel from the General Reserve Engineer Force (GREF) form the parent cadre of the Border Roads Organisation.
- Further, BRO is staffed by officers and troops drawn from the Indian Army's Corps of Engineers, Electrical and Mechanical Engineers, Army Service Corps, Military Police and army personnel on extra regimental employment.
- **Responsibilities:**
 - The BRO is mandated with road construction and maintenance works along the northern and western frontiers primarily to meet the strategic requirements of the army. It also contributes to the Socio-Economic Development of the Border States.
 - During war, the BRO develop & maintain roads to keep Line of Control through in Original Sectors and Re-Deployed Sectors. Further, it executes additional tasks as laid down by the Govt contributing to the war effort.

5. SIMBEX-19

News: The Indian Navy and the Republic of Singapore Navy took part in SIMBEX-19 in the South China Sea.

Facts:

- Singapore India Maritime Bilateral Exercise (SIMBEX) is an **annual bilateral naval exercise** conducted by the Indian Navy and the Republic of Singapore Navy.
- SIMBEX was first conducted in 1993. SIMBEX 2018 took place in the Indian Ocean, off India's Andaman and Nicobar Islands.

6. ADMM-plus MS FTX

News: ADMM-Plus Maritime Security Field Training Exercise (MS FTX) in the South China Sea was held from 30 April to 13 May 2019. The exercise started in Busan, South Korea and concluded in Changi Naval Base in Singapore.

Facts:

- This is the fourth Maritime Security Field Training Exercise conducted under the ambit of the ADMM-Plus. 18 ADMM-Plus countries including India participated in the exercise.
- The MS FTX was co-hosted by Singapore and South Korea. Both the countries currently hold co-chairmanship of ADMM-Plus Experts' Working Group on Maritime Security.

About ADMM-Plus

- The ADMM-Plus is a platform for ASEAN and its eight Dialogue Partners to strengthen security and defence cooperation for peace, stability, and development in the ASEAN region. The dialogue partners include Australia, China, Japan, India, the Republic of Korea, New Zealand, Russia and the United States.
- There are five areas of practical cooperation: maritime security, counter-terrorism, humanitarian assistance and disaster relief, peacekeeping operations and military medicine.
- The first ADMM-Plus was convened in Ha Noi, VietNam in 2010.

Additional Information:**Association of Southeast Asian Nations (ASEAN):**

- It is a regional intergovernmental organization. It was established in 1967 in Bangkok, Thailand with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand.
- At present, it has 10 members- Thailand, Brunei, Laos, Indonesia, Myanmar, Vietnam, Singapore, Cambodia, Malaysia, and the Philippines.
- It is headquartered in Jakarta, Indonesia.

7. VARUNA-19

News: Indo-French joint naval exercise Varuna-19 was held in May

Facts:

- The bilateral naval exercise between India and France was initiated in 1983. It was named as 'Varuna' in 2001.
- The objective of the exercise is to **develop interoperability between the two navies** and foster mutual cooperation by learning from each other's best practices to conduct joint operations.
- Varuna-19 was held in two phases: Harbour and Sea.
 - The harbour part comprised of visits, skilled interactions and discussions, and sports events.
 - The sea part comprised exercises across the spectrum of maritime operations.

8. GROUP SAIL EXERCISE

News: IN Ships Kolkata and Shakti carried out Group Sail exercise with naval ships of Japan, Philippines and the United States of America in the South China Sea

Facts:

- The Group Sail was aimed at deepening existing partnerships and foster mutual understanding among participating navies.
- The naval ships undertook various exercises enroute, including formation manoeuvring, underway replenishment runs, cross-deck flying and exchange of sea riders.

9. IMDEX Asia 2019

News: India participated in the 13th International Maritime Defence Expo (IMDEX) 2019 held in Singapore.

Facts:

- IMDEX Asia is Asia Pacific's premier international maritime defence show. It is a biennial event.
- **Theme: Safe and Secure Seas: Promoting Mutual Security in our Maritime Commons**
- The next IMDEX Asia is scheduled to take place from 18 – 20 May 2021 at the Changi Exhibition Centre in Singapore.

10. CHRISTCHURCH CALL INITIATIVE

News: French President Emmanuel Macron and New Zealand's Prime Minister Jacinda Ardern launched a new initiative called "Christchurch Call".

Facts:

- The initiative is aimed at curbing extremism online. It comes in the backdrop of attack on mosques in Christchurch in New Zealand where a gunman had killed people while live-streaming the massacre on Facebook.
- Under the initiative, signatory nations and tech companies need to adopt measures to ban objectionable material online and create a framework for media to report on atrocities without amplifying them.
- The initiative consists of a non-binding set of agreements. It does not contain any definition of violent extremist content and enforcement or regulatory measures. It would be up to each individual country and company to decide how it would honour its voluntary commitments.
- It is believed to be the first document of its type signed by both private companies and major governments.
- India is a signatory to the "Christchurch Call" initiative.

11. AKASH MISSILE

News:

The Defence Research and Development Organisation (DRDO) successfully test fired the Akash-MK-1S surface to air defence missile system

Facts:

- Akash-MK-1S a new version of the Akash missile fitted with an indigenous seeker.
- The Akash missile is a **medium range Surface-to-air missile with multi-target engagement capability.**

- It has the capability to neutralize aerial targets such as fighter jets, cruise missiles and air-to-surface missiles as well as ballistic missiles.
- It has a **range** of around **25 km** and up to the altitude of 18,000m. The missile uses high-energy solid propellant for the booster and ramjet-rocket propulsion for the sustainer phase. The missile system is highly mobile.
- The missile was developed as part of the **Integrated Guided-Missile Development Programme (IGMDP)**
- The Akash missile system was formally inducted into the IAF and in the Army in 2015.
- Several variants of the missile — Akash MK1, Akash-MK2 (intercept range of 30–35 km) — with improved accuracy and higher ranges are under development by the DRDO.

Additional Information:

Integrated Guided-Missile Development Programme (IGMDP)

- The IGMDP was conceived by Dr. APJ. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology. It was approved by the government in 1983. DRDO announced completion of IGMDP in 2008.
- The other missiles developed under this programme:
 - Intermediate Range surface to surface ballistic Missile **Agni**
 - Short range surface to surface ballistic missile **Prithvi**
 - Short range low level surface to air missile **Trishul**
 - Third Generation Anti-tank missile **Nag**

12. INERTIAL GUIDED BOMB

News: Defence Research and Development Organisation (DRDO) successfully test fired an indigenously-made 500-kg class inertial guided bomb from a Sukhoi jet at the Pokhran test range in Rajasthan.

Facts:

- Inertial guided bomb is a **precision guided bomb**. It is guided to its target through the **inertial guidance system**.
- Inertial guidance system is an electronic system that continuously monitors the position, velocity and acceleration of a vehicle (submarine, missile, or aeroplane) and provides navigational data or control without the need for communicating with a base station.
- Inertial guidance system in a bomb helps in precision targeting from long distances without depending on external inputs such as ground-based navigation aids or GPS.

Additional Information:

- Israeli SPICE-2000 smart bombs that were used by the Indian Air Force in the Balakot attack in Pakistan is an example of bombs installed with inertial navigation system.

13. BrahMos AIR LAUNCHED MISSILE

News: The Indian Air force (IAF) has successfully test-fired the air-launched version of supersonic BrahMos cruise missile from fighter jet Sukhoi-30 MKI.

Facts:

- The air launched BrahMos missile is a **2.5 ton supersonic air to surface cruise missile**. It has a **range** of close to **300 km**. It has a speed of Mach 3. One Mach is equal to the speed of sound.

- The missile was designed and developed by **BrahMos Aerospace Pvt. Ltd. (BAPL)**, New Delhi.
- This was the second successful test of the missile from an aircraft. The first test was carried out in November 2017 against a sea-based target in the Bay of Bengal. It had made IAF the **first Air Force in the world** to have successfully fired an air launched 2.8 Mach surface attack missile of this category on a sea target.

Additional Information:**BAPL:**

- The BAPL is a joint venture between the Russian Federation's NPO Mashinostroyeniya and Defence Research and Development Organisation (DRDO)
- It is named after Brahmaputra and Moscow rivers.
- It is responsible for designing, developing, producing and marketing BrahMos supersonic cruise missiles.

Supersonic Cruise Missiles:

- A cruise missile is an unmanned self-propelled (till the time of impact) guided vehicle that sustains flight through aerodynamic lift for most of its flight path.
- Supersonic cruise missile travels at a speed of around 2-3 Mach i.e.; it travels a kilometre approximately in a second

Social Issues

1. FEMALE FETICIDE

News: In a significant judgment, the Supreme Court has upheld the **Sections 23(1) and 23(2)** of the **Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) (PCN-PNDT) Act, 1994**.

Facts:

- The PC-PNDT Act was enacted in **1994**. It aims to **prohibit prenatal diagnostic techniques** for determination of the sex of the foetus.
- Section 23 of the Act **criminalises non-maintenance of medical records** by obstetricians and gynaecologists and suspend their medical licence indefinitely.
- The Supreme Court has observed that any dilution of any provisions of the Act would defeat the purpose of the Act and relegate the **right to life** of the girl child under Article 21 of the Constitution, to a mere formality.

Additional Information:

- Female foeticide is the process of finding out the sex of the foetus and undergoing abortion if it is a female
- In a publication of United Nations population Fund (UNFPA), it was reported that 0.46 million girls were missing at birth on an average annually during the period 2001-2012 as a result of sex-selective abortions.

2. LEGAL RECOGNITION TO MARRIAGE BETWEEN MAN & TRANSWOMAN

News: The Madurai Bench of the Madras High Court upheld that the marriage solemnised between a man and a trans-woman is valid under the Hindu Marriage Act, 1955 and ordered its registration.

Facts:

- It is the **first time** that marriage between **man & trans woman** has been **legally recognised in India**.
- The High Court observed that self-identification was part of the trans women's autonomy and denying it violated **her right to privacy and dignity as guaranteed under Article 21**.

Additional Information:

- **NALSA Judgement, 2014:** The Supreme Court in National Legal Services Authority v. Union of India & Ors. upheld that transgenders should be treated as a third gender for the purpose of safeguarding their fundamental rights.
- **Section 377 Judgement, 2018:** SC decriminalised homosexuality by partially striking down the certain provisions of Section 377 of the Indian Penal Code (IPC). However, the LGBTQI community **are not entitled to civil rights** such as marriage, right to adopt, inheriting partner's property etc.
- **Transgender Persons (Protection of Rights) Bill, 2019:**
 - It aims at Social, economic and educational empowerment of transgender persons.
 - It states that a person would have the right to choose to be identified as a man, woman or transgender, irrespective of sex reassignment surgery and hormonal therapy.

- **State-level Initiatives:**

- **Kerala** is the **first** state to formulate a transgender policy in 2015 which is aimed at ending the discrimination and bringing the third sex to the mainstream. It has also set up a transgender justice board to deal with their complaints
- **Maharashtra** is the second state in India to set up a welfare board and the first, to set up a cultural institute dedicated to the transgender community.

- **LGBTQI:**

Who are LGBTQI?

1. **Lesbian:** A woman who is emotionally or sexually attracted to other women.
2. **Gay:** A man who is emotionally or sexually attracted to other
3. **Bisexual:** A person who is emotionally or sexually attracted to more than one sex or gender.
4. **Transgender:** A person whose gender identity differs from the sex they were assigned at birth.
5. **Queer:** People who embrace identities and sexual orientations outside of mainstream heterosexual and gender norms.
6. **Intersex:** Born with sex characteristics such as genitals or chromosomes that do not fit the typical definitions of male or female.

What is the difference between sex and gender?

1. **Sex** is the biological difference between male and female
2. **Gender:** Societal constructions assigned to male and female

3. WORLD NO TOBACCO DAY

News: Rajasthan's medical and health department was awarded by WHO on World No Tobacco day for its contribution in the field of tobacco control.

Facts:

About World No Tobacco Day:

- The World No Tobacco Day is celebrated every year on **31st May**.
- **Aim:** To raise awareness on the harmful and deadly effects of tobacco use and second-hand smoke exposure, and to discourage the use of tobacco in any form.
- The focus of World No Tobacco Day 2019 was on "**tobacco and lung health**"

Additional Information:

Tobacco Control in India:

Cigarettes and Other Tobacco Products Act, 2003 (COTPA)

- COTPA was enacted to **prohibit advertisement** of, and to provide for the regulation of trade and commerce in, and production, supply and distribution of cigarettes and other tobacco products in India.
- Under COTPA, smoking in public places (including indoor workplaces) is prohibited. This has been implemented from 2nd October 2008 in the whole of India.

Pictorial warnings:

- Pictorial warnings on both sides of packages of cigarettes, bidis and all forms of chewing tobacco products is compulsory and currently covers 85% of the packet.

Global Initiative:**WHO Framework Convention on Tobacco Control (FCTC), 2003**

- Objective: To provide a framework for supply and demand reduction measures for tobacco control at the national, regional and global levels
- Important Provisions:
 - Promote, as appropriate, economically viable alternative to tobacco growers
 - Mitigate the health and environmental harms associated with tobacco production
 - Limitation in the interaction of lawmakers and tobacco industry.
- The WHO has also developed **MPOWER**, a package of selected demand reduction measures. It includes:
 - Monitor tobacco use and prevention policies
 - Protect people from tobacco smoke
 - Offer help to quit tobacco use
 - Warn about the dangers of tobacco
 - Enforce bans on tobacco advisement, promotion and sponsorships
 - Raise taxes on tobacco
- India is a signatory to the WHO Framework Convention on Tobacco Control (FCTC), 2003.

4. DRUG ABUSE IN INDIA

News: The Global Drug Survey (GDS) 2019 has reported that Indians lead the world seeking help to reduce their alcohol intake. This is the first time the survey has polled respondents from India.

Facts:**Magnitude of Substance Abuse in India, 2019**

- It is a report prepared by National Drug Dependence Treatment Centre (NDDTC), AIIMS, Delhi. The report is based on the National Survey on Extent and Pattern of Substance Use in India commissioned by the Ministry of Social Justice and Empowerment.

According to the report:

- Alcohol is the most common psychoactive substance used by Indians (14.6% of the population). States with the highest prevalence of alcohol use are Chhattisgarh, Tripura, Punjab, Arunachal Pradesh and Goa.
- States with the highest prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi.
- States with the highest prevalence of current Sedative use are Sikkim, Nagaland, Manipur and Mizoram.
- Uttar Pradesh, Punjab, Haryana, Delhi had the highest number of people with opioid (heroin, opium etc.) use problems.

India's Vulnerability to Drug Abuse: A major factor making India vulnerable to drug trafficking and consequent drug abuse is its geographical location- it lies in close proximity to the major opium producing regions of South West and South East Asia known as the '**Golden Crescent**' and the '**Golden Triangle**', respectively

A DEVIOUS ROUTE

- Heroin is smuggled into India from Pakistan; from Delhi, it's shipped to Europe and the US
- Methaqualone is mostly carried by concealing it in cavities in registered baggage
- Golden Triangle is an opium producing zone that includes Myanmar, Thailand and Laos
- Golden Crescent is used to describe an area of opium trade that covers Afghanistan, Iran and Pakistan

**Steps Taken:**

- **Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985:** It envisages stringent provisions for the control and regulation of operations relating to narcotic drugs and psychotropic substances.
 - **Narcotics Control Bureau:** It is the nodal drug law enforcement and intelligence agency of India. It functions under the Ministry of Home Affairs. It was established in 1986 under the NDPS Act, 1985. It is headquartered in New Delhi.
- **National Policy on Narcotic Drugs and Psychotropic Substances (NDPS), 2012:** It seeks to combat drug abuse in a holistic manner. It was drafted by Ministry of Finance, Department of Revenue.
- **National Action Plan for Drug Demand Reduction (2018-2025):** It aims to reduce the adverse consequences of drug abuse in India through a) education, b) de-addiction and c) rehabilitation of affected individuals and their families. It was drafted by the Ministry of Social Justice and Empowerment.
- Punjab government has a Memorandum of Understanding (MoU) with the United Nations Office on Drugs and Crime (UNODC) as part of its efforts to curb drug abuse in the state.

Additional information:**UNODC**

- It is a UN office established in 1997. It is headquartered in Vienna, Austria
- It was established as the Office for Drug Control and Crime Prevention by combining the United Nations International Drug Control Program (UNDCP) and the Crime Prevention and Criminal Justice Division. It was renamed UNODC in 2002
- It is the chief international organization which helps countries to combat illicit drugs, crime and terrorism.

5. INTERNATIONAL RELIGIOUS FREEDOM REPORT, 2019

News: The United States Commission on International Religious Freedom (USCIRF), in its 2019 report, has said that there is an overall deterioration of religious freedom conditions in 2018 in India.

Facts:**Highlights from International Religious Freedom Report, 2019**

- USCIRF has placed **India** in the **Tier 2** country category. Tier 2 countries are those in which violations engaged in or tolerated by the government during 2018 are serious and characterized by at least one of the elements of the Country of Particular Concern (CPC) standard. The elements include *tolerate systematic, ongoing, egregious violations of religious freedom*.

- On a positive note, the report highlighted that that communal attacks dropped by 12% in 2018 from their 2017 levels.
- Further, there has been a 12% increase in the budget of the Ministry of Minority Affairs.

Additional Information:

- Fundamental right to freedom of religion is guaranteed under Articles 25, 26, 27 and 28 of Part III of the Indian Constitution.
- **Article 18 of the UN Declaration of Human Rights** states that everyone has the right to freedom of thought, conscience and religion. Also, **Article 18 of the International Covenant on Civil and Political Rights** upholds the right to freedom of thought, conscience and religion.

United States Commission on International Religious Freedom (USCIRF)

- USCIRF is an independent, bipartisan U.S. federal government commission which seeks to defend the universal right to freedom of religion or belief abroad.

6. INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH (ICSSR)

News: Golden Jubilee Celebrations of the Indian Council of Social Science Research (ICSSR).

Facts:

- ICSSR is an autonomous organization funded by Ministry Of Human Resource Development (MHRD). It was established in 1969 by the Government of India on the recommendation of the then Planning Commission.
- Function: ICSSR provide grants for projects, fellowships, international collaboration, capacity building, surveys, and publications to promote research in social sciences in India.
- ICSSR has developed **ICSSR Data Service** to serve as a national data service for promoting powerful research environment through sharing and reuse of data among social science community in India.

Additional Information:

- **National Social Science Documentation Centre (NASSDOC)** was established in 1969 as a constituent unit of the Indian Council of Social Science Research (ICSSR). The objective of the NASSDOC is to provide library and information support services to social science researchers.

7. INTERNATIONAL CLASSIFICATION OF DISEASES (ICD)

News: The updated ICD list (ICD 11), drafted in 2018 was recently approved. It will take into effect from January 2022.

Facts:

About International Statistical Classification of Diseases and Related Health problems

- It is a handbook of recognized medical conditions. It defines the universe of diseases, disorders, injuries and other related health conditions.
The ICD is prepared by World Health Organization (WHO).
- **Significance:**
 - It is the foundation for the identification of health trends and statistics globally, and the international standard for reporting diseases and health conditions.
 - It is widely used as a benchmark for health insurers and critically related to health care finances.

About ICD 11

- ICD 11 contains several other additions, including classification of “compulsive sexual behaviour” as a mental disorder.
- It also recognizes video gaming as an addiction, listing it alongside gambling and drugs like cocaine.
- The updated list removes transgenderism from its list of mental disorders. However, it has listed it under the chapter on “conditions related to sexual health”.

Note: India has not yet put forward any official classification of gaming and transgenderism.

Miscellaneous

1. SASAKAWA AWARD

News: United Nations Office for Disaster Risk Reduction (UNDRR) conferred Sasakawa Award 2019 to Pramod Kumar Mishra, Additional Principal Secretary to the Prime Minister of India, for his dedication to improve the resilience of communities most exposed to disasters.

Facts:**About Sasakawa Award:**

- Sasakawa Award is jointly organized by the **United Nations Office for Disaster Risk Reduction (UNDRR) and the Nippon Foundation**. The award was founded in 1986 by Chairman of the Nippon Foundation.
- The Award recognizes individuals, organizations and initiatives that have contributed to ensure inclusive participation in Disaster Risk Reduction (DRR) activities for all sections of society, especially the poor.
- **Theme of the 2019 Sasakawa award: “Building Inclusive and Resilient Societies”.**

Additional information:**United Nations Office for Disaster Risk Reduction (UNDRR)**

- It was established in 1999 as a dedicated secretariat to facilitate the implementation of the International Strategy for Disaster Reduction (ISDR). It is headquartered in Geneva, Switzerland.
- It serves as the focal point in the United Nations system for the coordination of disaster reduction and to ensure synergies among the disaster reduction activities.

2. VANDE BHARAT EXPRESS

News: Vande Bharat Express (Train 18) completed 1 lakh running kilometres without missing a single trip. It has become the first train in India to clock average speed of over 100 Kmph between Delhi and Prayagraj.

Facts:

- Vande Bharat Express is India's **first indigenously built engineless train** capable of running at a speed of **up to 160 kmph**.
- It has been manufactured under 'Make in India' initiative by the **Integral Coach Factory (ICF)**.
- It is a **self-propelled engine-less train**. Self-propelled engine-less train means instead of being pulled by a locomotive, they are powered by traction motors fitted underneath each coach to render them self-propelled.

Additional Information:**Make in India**

- The Make in India initiative was launched in 2014.
- **Aim:** To make India a global manufacturing hub, by encouraging both multinational as well as domestic companies to manufacture their products within the country. It targets 25 sectors of the economy.
- **Target:** To raise the contribution of the manufacturing sector to 25% of the Gross Domestic Product (GDP) by the year 2025.

- The initiative is led by Department for Promotion of Industry and Internal Trade (DPIIT) (previously known as Department of Industrial Policy and Promotion (DIPP)) under the Ministry of Commerce and Industry.

3. DENISOVANS

News: Analysis of a fossil jawbone containing molars (type of tooth) recovered from Baishiya Karst cave in Xiahe, Gansu, Tibet, China revealed that Denisovans (ancient human species) lived in the Tibetan Plateau some 1,60,000 years ago.

Facts:

- The Denisovans or Denisova Hominins are an **extinct species or subspecies of archaic humans** in the genus Homo.
- It was first discovered from a bone fragment in **Denisova Cave (700 metres) in Siberia**.
- It is popularly believed that that high altitude regions were inhabited only by modern humans dating back to less than 40,000 years. However, the latest fossil remains conclusively prove that Denisovans lived in the Tibetan Plateau at an altitude of 3,280 metres much earlier.
- According to the study, Denisovans evolved a genetic adaptation that helped them to cope in low-oxygen environment. This was eventually passed on to some modern Tibetans.

4. SNAKEBITE ENVENOMING: A STRATEGY FOR PREVENTION AND CONTROL

News: The World Health Organisation has unveiled “Snakebite Envenoming: A strategy for prevention and control”.

Facts:

- The strategy targets reducing disabilities and deaths due to snakebites by 50% by 2030.
- It is based on **four pillars**:
 - empower and engage communities,
 - ensure safe and effective treatment,
 - strengthen health systems and
 - Increase coordination, partnership and resources.
- The WHO strategy **seeks to reduce snakebite deaths and disabilities through-**
 - ensuring access to treatment such as anti-venoms and ancillary medical care by increasing the number of manufacturers by 25% and creating a global antivenom stockpile and
 - Encouraging research on new treatments, diagnostics and health device breakthroughs.

Additional Information:

- In 2017, WHO had formally categorised “snakebite envenoming” as a **Neglected Tropical Disease**.
- Snake bite affects 1.8–2.7 million people each year.
- Most deaths and serious consequences from snake bites are entirely preventable by making High quality snake antivenoms accessible. They are included in the WHO List of essential medicines.

Envenoming: Snakebite envenoming is a potentially life-threatening disease that typically results from the injection of a mixture of different toxins (“venom”) following the bite of a venomous snake.

Neglected tropical diseases (NTDs)– a diverse group of communicable diseases that prevail in tropical and subtropical conditions in 149 countries – affect more than one billion people and cost developing economies billions of dollars every year.

Pointly

1. **Purple Frog:** Purple frog, found in the Western Ghats could be designated as Kerala's state amphibian. It is listed as Endangered in the IUCN Red List.
2. **Grizzled Giant Squirrel:** Grizzled giant squirrel is endemic to the southern States of Kerala, Karnataka and Tamil Nadu in India and Sri Lanka. It is listed as Near Threatened in the IUCN Red List.
3. **Kudakrumia Rangnekari:** A new species of wasp from the genus Kudakrumia has been recently identified by scientists in Goa.
4. **Ourasphaira Giraldae:** Scientists have discovered the Oldest-known fossils of a fungus named Ourasphairagiraldae in Arctic region of north-western Canada.
5. **Ahaetulla Laudankia:** A new species of vine snake named Ahaetulla Laudankia has been discovered in Similipal Biosphere Reserve, Odisha.
6. **Lecanorchis Taiwaniana:** A new species of orchid known as Lecanorchis taiwaniana has been spotted in Assam's forests.
7. **POLY:** Scientists at the U.S. Department of Energy's (DOE) Lawrence Berkeley National Laboratory, has designed a recyclable plastic called poly (diketoenamine) (PDK)
8. **Operation Safed Sagar:** Operation Safed Sagar was the code name assigned to the Indian Air Force's role in acting jointly with Ground troops during the Kargil war.
9. **Man Booker International Prize:** Omani author Jokha Al Harthi won the prestigious Man Booker International Prize for her book Celestial Bodies. The awarded is presented by Man Group, United Kingdom.
10. **'Order of The Rising Sun Award:** Former Indian Foreign Secretary Shyam Saran was awarded Japan's second highest National Award called as 'The Order of the Rising Sun, Gold and Silver Star'
11. **Sri Vedanta Desikan:** Vice President of India released a postage stamp to commemorate the 750th birth anniversary of Sri Vedanta Desikan- a Vaishnava philosopher and one of the most brilliant stalwarts of Sri Vaishnavism in the post-Ramanuja period.
12. **Gangamma Jatara:** It is the most auspicious annual festival celebrated in Thathaya Gunta Gangamma Temple in Tirupati (Andhra Pradesh) in the month of May every year. During the festival prayers are offered to the goddess Gangamma who is believed to be the younger sister of Lord Venkateswara.
13. **Global Health Security Strategy:** The US government launched a Global Health Security Strategy. It seeks to prevent, detect and respond to biological threats from infectious diseases occurring naturally or accidentally in an effort to help improve the world's ability to stop deadly outbreaks before they spread between countries.
14. **Burnout:** According to the WHO, "burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed."
15. **Thrissur Pooram:** It is an annual 7day Hindu festival celebrated in Thrissur, Kerala. It is celebrated in the Malayalam month of Medam (April-May).
16. **XPOSAT:** ISRO has announced that it will launch X-ray Polarimeter Satellite (XPOSAT) in the year 2020. It is a dedicated mission for polarization studies. It will be a 5 year mission.

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