CURRENT AFFAIRS
AUGUST 2021

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1. Freedom to Move Freely Throughout the Territory of India:
- Recently, while setting aside an externment order against a journalist, the Supreme Court (SC) ruled that a person's fundamental right to reside and to move about freely anywhere in India cannot be refused on "flimsy grounds".
- Externment orders prevent the movement of a person in certain areas.
- According to the SC, the drastic action of externment should only be taken in exceptional cases, to maintain law and order in a locality and/or prevent a breach of public tranquility and peace.

Freedom to Move Freely Throughout the Territory of India:
- **Article 19(1)(d)** of the Indian Constitution entitles every citizen to move freely throughout the territory of the country.
- This right is protected against only state action and not private individuals.
- Moreover, it is available only to the citizens and to shareholders of a company but not to foreigners or legal persons like companies or corporations, etc.
- The freedom of movement has two dimensions, viz, internal (right to move inside the country) and external (right to move out of the country and right to come back to the country).
- **Article 19** protects only the first dimension.
- The second dimension is dealt by **Article 21** (Right to life and personal liberty).
- Restrictions on this freedom can only be imposed on two grounds which are mentioned in the **Article 19(5)** of the constitution itself, namely, the interests of the general public and the protection of interests of any scheduled tribe. For example:
- The Supreme Court held that the freedom of movement of prostitutes can be restricted on the grounds of public health and in the interest of public morals.
- The entry of outsiders in tribal areas is restricted to protect the distinctive culture, language, customs and manners of scheduled tribes and to safeguard their traditional vocation and properties against exploitation.

Freedom to Reside and Settle in any part of the Territory of India:
- According to Article 19(1)(e) of the Constitution, every citizen of India has the right "to reside and settle in any part of the territory of India."
- The object of the clause is to remove internal barriers within India or any of its parts.
- This right is also subject to reasonable restrictions mentioned in clause (5) of Article 19.
- Right to reside and the right to move freely throughout the country are complementary and often go together.

2. Criterion for Deciding Creamy Layer:
- The Supreme Court of India recently held that the economic criterion cannot be the sole basis for deciding the creamy layer from among backward classes for the purpose of excluding it from the purview of providing reservation.
- The SC was hearing a petition challenging two notifications issued by the Haryana government sub-classifying backward classes solely on economic basis while fixing the criteria for creamy layer.
- Recalled the ruling in the **Indra Sawhney-II** case, reported in 2000. Haryana's notifications have violated the law declared in the Indra Sawhney judgment by identifying creamy layer only on the basis of income.
- The basis of exclusion of 'creamy layer' cannot be merely economic - the government cannot deny reservation to a person belonging to a backward community solely on the ground that he or she is rich.

- Social advancement, higher employment in government services, etc, play an equal role in deciding whether such a person belonged to the creamy layer and could be denied quota benefits.

3. Tribunals Reforms Bill, 2021:
- The Tribunals Reforms Bill, 2021 was introduced in Lok Sabha (August 2, 2021). Recently, the Supreme Court of India (SC) has challenged the government to produce material showing its reasons for introducing the **Tribunal Reforms Bill of 2021**. The Bill replaces the Tribunals Reforms (Rationalisation and Conditions of Service) Ordinance, 2021 which was quashed by the Supreme Court.

Issues Raised by SC:
Unconstitutional Legislative Overriding:
- There was lack of discussion over the bill, and the government has re-enacted the very same provisions struck down by the Court in the Madras Bar Association case (2021). It amounts to "unconstitutional legislative overriding" of the judgement passed by the SC.

Repeated Violation of SC Orders:
- The Centre is not following the repeated directions issued by the Court to ensure the proper functioning of the Tribunals.
- The provisions in the ordinance regarding conditions of service and tenure of Tribunal Members and Chairpersons were struck down by the Supreme Court.

Security of Tenure:
- The Tribunals Reforms Act, 2021 bars appointments to tribunals of persons below 50 years of age. It undermines the length/security of tenure.

Undermines the Separation of Powers:
- The bill allows the Central Government to take a decision on the recommendations made by the selection Committee, preferably within three months from the date of such recommendation.
- Section 3(7) of the bill mandates the recommendation of a panel of two names by the search-cum selection committee to the Central Government, violating the principles of separation of powers and judicial independence.
- Vacant Positions in Tribunals: India now has 16 tribunals including the National Green Tribunal, the Armed Forces Appellate Tribunal, the Debt Recovery Tribunal among others which also suffer from crippling vacancies.
- Existence of large number of vacancies of Members and Chairpersons and the inordinate delay caused in filling them up has resulted in weakening of the tribunals.

Detrimental to the Decision-making Process:
- These cases will be transferred to High Courts or commercial civil courts immediately.
- The lack of specialisation in regular courts could be detrimental to the decision-making process.
- For example, the Film Certification Appellate Tribunal (FCAT) exclusively heard decisions appealing against decisions of the censor board, which requires expertise in art and cinema.
- Further, the dissolution of certain tribunals and appellate bodies, and the transfer of their functions to High Courts can be criticized on the grounds that Indian courts are already overburdened with their existing caseload.

About the Bill:
- **Dissolution of Existing Bodies:** The Bill seeks to dissolve certain appellate bodies and transfer their functions to other existing judicial bodies. For example, the disputes heard by the Film Certification Appellate Tribunal will be addressed by the High Court.
- **Merging of Existing Bodies:** The Finance Act, 2017 merged tribunals based on domain. For example, the Competition Appellate Tribunal has been merged with the National Company Law Appellate Tribunal.

- **Search-cum-selection Committees:** The Chairperson and Members of the Tribunals will be appointed by the central government on the recommendation of a Search-cum-Selection Committee. **The Committee will consist of:**
- The Chief Justice of India, or a Supreme Court Judge nominated by him, as the Chairperson (with casting vote).
- Two Secretaries nominated by the central governments.
- The sitting or outgoing Chairperson, or a retired Supreme Court Judge, or a retired Chief Justice of a High Court, and
- The Secretary of the Ministry under which the Tribunal is constituted (with no voting right).

State Administrative Tribunals:
- It will have separate search-cum-selection committees with the Chief Justice of the High Court of the concerned state, as the Chairman (with a casting vote).
- Eligibility and Term of Office: The Bill provides for a four-year term of office (subject to the upper age limit of 70 years for the Chairperson, and 67 years for members).
- Further, it specifies a minimum age requirement of 50 years for appointment of a chairperson or a member.

Removal of Tribunal Members:
- It states that the central government shall, on the recommendation of the Search-cum-Selection Committee, remove from office any Chairperson or a Member.

4. Right to Privacy & Right to be Forgotten:
- Recently, the Delhi High Court has observed that 'right to privacy' includes the right to be forgotten and the right to be left alone while directing various online platforms, including YouTube, to take down certain objectionable video clips of a Bengali actor.
- The court observed that the right to privacy of the woman is to be protected. On the other hand, online platforms questioned their right to publish.

Judgement:
- Right to privacy includes the right to be forgotten and the right to be left alone.

About the Right to Privacy:
- In Puttaswamy v. Union of India case, 2017, the Right to Privacy was declared a fundamental right by the Supreme Court.
- Right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.
- Right to be Forgotten (RTBF): It is the right to have publicly available personal information removed from the internet, search, databases, websites or any other public platforms, once the personal information in question is no longer necessary, or relevant.
- The RTBF gained importance after the 2014 decision of the Court of Justice of the European Union ("CJEU") in the Google Spain case.
- In the Indian context, the Supreme Court in Puttaswamy v. Union of India, 2017 noted that the RTBF was a part of the broader right of privacy.
- The RTBF emerges from the right to privacy under Article 21 and partly from the right to dignity under Article 14.
- Right to be Left Alone: It doesn't mean that one is withdrawing from society. It is an expectation that society will not interfere in the choices made by the person so long as they do not cause harm to others.

Issues:
- **Privacy vs. Information:** The existence of RTBF in a given situation depends on its balancing with other conflicting rights such as the right to free expression or other publication rights.

- For example, a person may want to de-link information about his criminal records and make it difficult for people to access certain journalistic reports when they google him.
- This brings the person's right to be left alone, derived from Article 21, directly in conflict with the rights of the media to report on issues, flowing from Article 19.
- **Enforceability Against Private Individuals:** The RTBF will normally be claimed against a private party (a media or news website).
- This raises the question of whether fundamental rights can be enforced against the private individual, which is generally enforceable against the state.
- Only Article 15(2), Article 17 and Article 23 provides protection against a private act of a private party that is challenged based on its violation of the Constitution.
- **Ambiguous Judgements:** In recent years, without a data protection law to codify RTBF, there are some inconsistent and peculiar adjudications of the right by various high courts.
- Courts in India have repeatedly either accepted or rejected the application of RTBF while completely ignoring the wider constitutional questions associated with it.

5. Ayushman Bharat Yojana (AB PM-JAY):
- Under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), the Central government's health insurance scheme, approximately 20.32 lakh COVID-19 tests and 7.08 lakh treatments were authorised from April 2020 to July 2021.
- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) offers a sum insured of Rs.5 lakh per family for secondary care (which doesn't involve a super specialist) as well as tertiary care (which involves a super specialist).
- Under this scheme, cashless and paperless access to services are provided to the beneficiaries at the point of service.
- Health Benefit Packages covers surgery, medical and day care treatments, cost of medicines and diagnostics.
- Packaged rates (Rates that include everything so that each product or service is not charged for separately).
- They are flexible, but they can't charge the beneficiary once fixed by the hospitals.
- The scheme also has prescribed a daily limit for medical management.

Beneficiaries:
- It is an entitlement-based scheme that targets the beneficiaries as identified by latest Socio-Economic Caste Census (SECC) data.
- Once identified by the database, the beneficiary is considered insured and can walk into any empanelled hospital.

Funding:
- The funding for the scheme is shared – 60:40 for all states and UTs with their own legislature, 90:10 in Northeast states and Jammu and Kashmir, Himachal and Uttarakhand and 100% Central funding for UTs without legislature.
- The National Health Authority (NHA) has been constituted as an autonomous entity under the Society Registration Act, 1860 for effective implementation of PM-JAY in alliance with state governments.
- The State Health Agency (SHA) is the apex body of the State Government responsible for the implementation of AB PM-JAY in the State.

6. Jan Shikshan Sansthan:
- Recently, the Jan Shikshan Sansthan (JSS) has brought high-speed internet to some of the remotest tribal hamlets deep inside the Nilambur jungle in Kerala.

- The Scheme of JSS formerly known as Shramik Vidyapeeth was a unique creation of the Government of India and has been implemented through Non-governmental Organizations (NGOs) in the country since 1967. The scheme was renamed as JSS in 2000.
- It was transferred from the Ministry of Education (erstwhile Ministry of Human Resource Development) to the Ministry of Skill Development & Entrepreneurship in July, 2018.
- The JSSs are imparting vocational skill training programmes at the door step of the beneficiaries with a minimum cost and infrastructure.
- JSSs are unique in the sense that they do not provide only vocational skills but also include an element of life skills which can help the beneficiary in day to day life.
- They are not working in isolation but also conduct convergence programmes with different departments.
- At present, 233 JSSs in 25 States and 3 Union Territories are functional.
- The annual coverage of the beneficiaries is around 4 lakh, out of which 85% are women.

Mandate:
- To provide vocational skills in non-formal mode to non-literate, neo-literates, persons with rudimentary level of education upto 8th and school drop-outs upto 12th standard in the age group of 15-45 years.
- The priority groups are women, Scheduled Caste, Scheduled Tribe, minorities and other backward sections of the society.

7. Reservation Applicable in Either of States after Division:
- The SC has ruled that a person belonging to a reserved category is entitled to claim benefit of reservation in either of the successor States of Bihar or Jharkhand. However he/she cannot claim benefit of the quota simultaneously in both the successor States upon their reorganisation in November, 2000. As it will defeat the mandate of Articles 341(1) and 342(1) of the Constitution.
- The ruling came after a resident (Scheduled Caste) of Jharkhand, filed an appeal against the High Court order denying him appointment in state civil service examination of 2007 on the ground that his address proof showed that he was a permanent resident of Patna, Bihar.
- Under the Bihar Reorganisation Act, 2000 passed by the parliament a new state, Jharkhand was created from a portion of Bihar.
- Article 3 empowers the Parliament to make law relating to the formation of new states and alteration of existing states.

Other State Migrants:
- Members of the reserved category, who are residents of the successor State of Bihar, while participating in open selection in Jharkhand shall be treated to be migrants and they can participate in the general category without claiming the benefit of reservation and vice-versa.
- Constitutional Provisions Governing Reservation in India:
- Part XVI deals with reservation of SC and ST in Central and State legislatures.
- Article 15(4) and 16(4) of the Constitution enabled the State and Central Governments to reserve seats in government services for the members of the SC and ST.
- The Constitution was amended by the Constitution (77th Amendment) Act, 1995 and a new clause (4A) was inserted in Article 16 to enable the government to provide reservation in promotion.
- Later, clause (4A) was modified by the Constitution (85th Amendment) Act, 2001 to provide consequential seniority to SC and ST candidates promoted by giving reservation.
- Constitutional 81st Amendment Act, 2000 inserted Article 16 (4 B) which enables the state to fill the unfilled vacancies of a year which are reserved for SCs/STs in the succeeding year, thereby nullifying the ceiling of fifty percent reservation on total number of vacancies of that year.

- Article 330 and 332 provides for specific representation through reservation of seats for SCs and STs in the Parliament and in the State Legislative Assemblies respectively.
- Article 243D provides reservation of seats for SCs and STs in every Panchayat.
- Article 233T provides reservation of seats for SCs and STs in every Municipality.
- Article 335 of the constitution says that the claims of STs and STs shall be taken into consideration constituently with the maintenance of efficacy of the administration.
- The 103rd Constitution Amendment Act, 2019, empowered both Centre and the states to provide 10% reservation to the EWS (Economically Weaker Section) category of society in government jobs and education institutions.

8. New Geospatial Planning Portal: Yuktdhara:
- Recently, the Ministry of Rural development has launched a new geospatial planning portal, 'Yuktdhara' to help in facilitating the new MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) assets with the use of remote sensing and GIS (Geographic Information System) based information. This will be a new portal under 'Bhuvan'.
- ISRO's Geo-portal, Bhuvan is providing visualisation services and Earth observation data to users in public domain. Besides, the portal also services several users for their remote sensing application needs.
- Bhuvan made a modest beginning in 2009 with simple display of satellite data and basic GIS functionality with many thematic maps on display.
- It shows the true borders of the country as per the information available from the Government of India.
- By using MapmyIndia maps and applications instead of the foreign map apps, users can better protect their privacy.
- It is well aligned with the government's Mission of Atmanirbhar Bharat.

About Yuktdhara:
- Yuktdhara is a culmination of joint efforts of the Indian Space Research Organisation (ISRO) and the Ministry of Rural development made towards realising a G2G (Government-to-Government) service for rural planning in support of decentralised decision making.
- Previously launched, ISRO's Geoportal Bhuvan is presently a de-facto geospatial platform for several developmental planning activities across India.
- It will serve as a repository of assets (geotags) created under the various National Rural Development Programmes, such as **MGNREGA**, Per Drop More Crop Programmes, Integrated Watershed Management Programme, and Rashtriya Krishi Vikas Yojana, along with the field photographs.
- It will integrate a wide variety of thematic layers, multi-temporal high-resolution earth observation data with the analysis tool.
- Planners will be able to analyse previous assets under various schemes and facilitate the identification of new works using online tools. Prepared plans will be then evaluated by appropriate authorities under State Departments.
- Recently, it was announced that the second United Nations World Geospatial Information Congress (UNWGIC) will be held in Hyderabad, India, in 2022. The event would show a glimpse of India's evolving geospatial ecosystem.

9. Impact of delay in Census 2021:
- Recently, the Ministry of Home Affairs has said in the Lok Sabha that owing to the outbreak of Covid-19 pandemic, Census 2021 and other Census-related field activities have been postponed until further orders.

- It was also said that the Census 2021 will be carried out using a mobile phone app. It will be used to collect data by school teachers who will double up as enumerators during the Census exercise.

How will the delay affect PDS and other schemes?
- The National Food Security Act, 2013, says that 75% of the rural population and 50% of the rural population — adding up to 67% of the country's total population — are entitled to receive subsidised food grains from the government under the targeted public distribution system (PDS).
- Under the 2011 Census, India's population was about 121 crore, hence PDS covered approximately 80 crore people. However, some economists have pointed out that population growth over the last decade means that if the 67% ratio is applied to 2020's projected population of 137 crore, PDS coverage should have increased to around 92 crore people.
- Although Census data may have been initially used to estimate the coverage of the National Social Assistance Programme, which provides basic pension to 3.09 crore widows, disabled and elderly people below the poverty line, the Centre had announced its intent to shift to the Socio-Economic Caste Census data of 2011 instead to determine beneficiaries of the scheme.
- Most other Central schemes, from health insurance to housing entitlements, use **SECC** data to estimate their beneficiary coverage, although it is also outdated by almost a decade.
- The Census measures migration by counting those whose current residence is different from their place of birth, which would give the overall number of migrants, as well as by asking for the last place of residence and the reasons for moving, which allows an understanding of movements and trends over the last decade when compared with previous Census data. Hence, the delay will mean that we will continue to have no answers on how many migrants are likely to be stranded in each city or State and in need of food relief or transport support.

About Census:
- The Indian Census is one of the largest administrative exercises undertaken in the world.
- Population Census is the total process of collecting, compiling, analyzing and disseminating demographic, economic and social data pertaining, at a specific time, of all persons in a country or a well-defined part of a country.
- It also provides the trends in population characteristics.
- The decennial Census is conducted by the **Office of the Registrar General** and Census Commissioner, **Ministry of Home Affairs**.
- Until 1951, the Census Organisation was set up on an ad-hoc basis for each Census.

Legal/Constitutional Backing:
- Census is conducted under the provisions of the Census Act, 1948.
- The bill for this Act was piloted by Sardar Vallabhbhai Patel, the then Home Minister of India.
- The population census is a Union subject under Article 246 of India Constitution.
- It is listed at serial number 69 of the seventh schedule of the constitution.

10. PM-KUSUM and Rooftop Solar Programme Phase-II:
- Recently, the Ministry of New and Renewable (MNRE) has conducted a review of implementation of Prime Minister's Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM-KUSUM) scheme and Rooftop Solar Programme Phase-II and suggested measures for expansion of the schemes.
- The PM-KUSUM scheme was launched by the MNRE in 2019, to support installation of off-grid solar pumps in rural areas and reduce dependence on grid, in grid-connected areas.
- The objective of the scheme is to enable farmers to set up solar power generation capacity on their barren lands and to sell it to the grid.

- The government's Budget for 2020-21 expanded the scope for the scheme with 20 lakh farmers to be provided assistance to install standalone solar pumps; another 15 lakh farmers to be given help to solarise their grid-connected pump sets.

About PM- KUSUM Scheme:
- The PM- KUSUM Scheme ensures water-security to farmers by providing a day-time reliable source of power for irrigation activities.
- It also incentivises the farmers to sell surplus solar energy to the states, which in turn will augment their income.
- If farmers are able to sell surplus power, they will be incentivised to save power and, in turn, it will mean the reasonable and efficient use of groundwater.
- Also, expansion of the irrigation cover by providing decentralized solar-based irrigation and moving away from polluting diesel.
- As farmers will be less dependent on subsidized electricity, the PM KUSUM scheme will support the financial health of electricity distribution companies (discoms) by reducing the burden of subsidy to the agriculture sector.
- Help them meet the RPO (Renewable Purchase Obligation) targets.
- Renewable Purchase Obligation (RPO): mandates that all electricity distribution licensees should purchase or produce a minimum specified quantity of their requirements from Renewable Energy Sources. This is as per the Indian Electricity Act, 2003.

11. National Monetisation Pipeline:
- Recently, the government of India has launched the National Monetisation Pipeline (NMP). The NMP estimates aggregate monetisation potential of Rs 6 lakh crores through core assets of the Central Government, over a four-year period, from FY 2022 to FY 2025.
- The plan is in line with Prime Minister's strategic divestment policy, under which the government will retain presence in only a few identified areas with the rest tapping the private sector.
- National Monetisation Pipeline (NMP) aims to unlock value in brownfield projects by engaging the private sector, transferring to them revenue rights and not ownership in the projects, and using the funds generated for infrastructure creation across the country.
- Union Budget 2021-22 has identified monetisation of operating public infrastructure assets as a key means for sustainable infrastructure financing.
- In a monetisation transaction, the government is basically transferring revenue rights to private parties for a specified transaction period in return for upfront money, a revenue share, and commitment of investments in the assets.
- Currently, only assets of central government line ministries and Central Public Sector Enterprises (CPSEs) in infrastructure sectors have been included.
- The government has stressed that these are brown-field assets, which have been "de-risked" from execution risks, and therefore should encourage private investment.
- Roads, railways and power sector assets will comprise over 66% of the total estimated value of the assets to be monetised, with the remaining upcoming sectors including telecom, mining, aviation, ports, natural gas and petroleum product pipelines, warehouses and stadiums.
- In terms of annual phasing by value, 15% of assets with an indicative value of Rs 0.88 lakh crore are envisaged for rollout in the current financial year.
- The NMP will run co-terminus with the Rs 100 lakh crore National Infrastructure Pipeline (NIP) announced in December 2019.
- The estimated amount to be raised through monetisation is around 14% of the proposed outlay for the Centre of Rs 43 lakh crore under NIP.

- NIP will enable a forward outlook on infrastructure projects which will create jobs, improve ease of living, and provide equitable access to infrastructure for all, thereby making growth more inclusive. NIP includes economic and social infrastructure projects.
- Other monetisation models on PPP (Public Private Partnership) basis include:
1. Operate Maintain Transfer (OMT),
2. Toll Operate Transfer (TOT), and
3. Operations, Maintenance & Development (OMD).

Associated Challenges:
- Lack of identifiable revenue streams in various assets.
- The slow pace of privatisation in government companies including Air India and BPCL.
- Further, less-than-encouraging bids in the recently launched PPP initiative in trains indicate that attracting private investors' interest is not that easy.
- Asset-specific Challenges such as low Level of capacity utilisation in gas and petroleum pipeline networks; regulated tariffs in power sector assets; Low interest among investors in national highways below four lanes etc.

12. Hindustan-228 Civil Aircraft:
- Recently, Hindustan Aeronautics Limited (HAL) carried out a successful ground run and low speed taxi trials of a commercial aircraft "**Hindustan-228**" (Do-228).
- This 19-seater Do-228 is the first major attempt in India to develop a small civil transport aircraft after the 14-seater Saras Aircraft development program at the National Aeronautics Laboratory (NAL) was shelved in 2009 on account of multiple problems in its development.
- Hindustan Aeronautics Limited is building civil aircrafts to promote the **UDAN** (Ude Desh Ka Aam Nagrik) Scheme. The central government aims to set up 1,000 new air routes and establish 100 new airports, under the UDAN scheme.
- HAL is a public sector aircraft manufacturing company. It has also produced the Light Combat Aircraft (LCA) for the Indian Air Force (IAF).
- HAL is a public sector aircraft manufacturing company. It has also produced the Light Combat Aircraft (LCA) for the Indian Air Force (IAF).
- It is conceived to be a multirole utility aircraft capable of being used for VIP transport, passenger transport, air ambulance, flight inspection roles, cloud seeding, recreational activities like para jumping, aerial surveillance, photography, remote sensing and cargo transport.
- With a maximum cruise speed of 428 kmph and a range of 700 kmph the aircraft is capable of night flying.

13. National Mission on Edible Oil-Oil Palm:
- National Mission on Edible Oils – Oil Palm (NMEO-OP) is a new Centrally Sponsored Scheme with a special focus on the North east region and the Andaman and Nicobar Islands with a focus on increasing area and productivity of oilseeds and Oil Palm.
- A financial outlay of Rs.11,040 crore has been made for the scheme, out of which Rs.8,844 crore is the Government of India share and Rs.2,196 crore is State share and this includes the viability gap funding also.
- The proposed scheme will subsume the current National Food Security Mission-Oil Palm programme.
- It is proposed to have an additional 6.5 lakh hectares for palm oil by 2025-26.
- It will involve raising the area under oil palm cultivation to 10 lakh hectares by 2025-26 and 16.7 lakh hectares by 2029-30.
- Oil palm farmers will be provided financial assistance and will get remuneration under a price and viability formula.

- The Viability Formula is a Minimum Support Price-type mechanism and the government will fix this at 14.3% of Crude Palm Oil (CPO) price.
- It will eventually go up to 15.3%.
- Another focus area of the scheme is to substantially increase the support of inputs/interventions.
- Special assistance will be given to replant old gardens for their rejuvenation.
- The special emphasis of the scheme will be in India's **North-Eastern (NE)** states and the Andaman and Nicobar Islands due to the conducive weather conditions in the regions.
- To attract industry to the NE and Andaman regions, a provision of Rs 5 crore of 5 mt/hr (million tonne per hectare) with pro-rata increase for higher capacity will be given.
- India is the largest consumer of vegetable oil in the world. Of this, palm oil imports are almost 55% of its total vegetable oil imports.
- It imports the rest, buying palm oil from Indonesia and Malaysia, soyoil from Brazil and Argentina, and sunflower oil, mainly from Russia and Ukraine.
- In India, 94.1% of its palm oil is used in food products, especially for cooking purposes. This makes palm oil extremely critical to India's edible oils economy.

Concerns:

- The oil palm is a **water-guzzling**, monoculture crop with a long gestation period unsuitable for small farmers and the land productivity for palm oil is higher than for oilseeds, which create apprehension for more land to be given for oil palm cultivation.
- In **Southeast Asia**, the plantation of **palm oil trees** has replaced massive tracts of **rainforests**.
- It could also detach tribal people from their identity linked with the community ownership of land and "wreak havoc on the social fabric".
- Oil palm plantations would denude forest cover and destroy the habitat of endangered wildlife.
- The palm is an introduced or invasive species that is not a natural forest product of northeastern India and its impact on the biodiversity as well as on soil conditions has to be analysed even if it is grown in non-forest areas.
- Oil palm requires 300 litres of water per tree per day, as well as high Pesticide use in areas where it is not a native crop, leading to consumer health concerns as well.
- FFBs (Fresh Fruit Bunches) of oil palm are highly perishable and need to be processed within twenty-four hours of harvest.

14. Pradhan Mantri Jan Dhan Yojana Completes Seven Years:

- Recently, the National Mission for Financial Inclusion has completed seven years of successful implementation.
- The Pradhan Mantri Jan-Dhan Yojana (PMJDY) was launched by Narendra Modi on 28th August 2014.
- It is a national mission with an aim to provide access to various financial services including:
1. Remittance
2. Credit
3. Insurance
4. Pension
5. Banking Savings
6. Deposit Accounts in an affordable manner

Objectives:

- To ensure access of financial products & services at an affordable cost.
- Use of technology to lower cost & widen reach
- Benefits provided under this scheme:

- The scheme covers both the urban as well as rural areas and provides an indigenous Debit Card (RuPay card) to each of its account holders.
- No minimum balance is required for opening an account under this scheme. The beneficiary can open his/her account in any bank branch or Business Correspondent outlet at zero balance.
- It provides a Core Banking System (CBS) along with mobile banking using USSD facilities. A facility of call center and a toll-free number is available nationwide.
- Pradhan Mantri Jan Dhan Yojana provides each beneficiary with basic banking accounts with a debit card with inbuilt accident insurance.

Six Pillars of PMJDY:

1. **Universal Access to Banking Services- Branch and Banking Correspondents**:
- Accounts opened are online accounts in the core banking system of banks.
- Focus has shifted from 'Every Household' to Every Unbanked Adult'.
2. **Basic Savings Bank Accounts with OverDraft (OD) Facility of Rs. 10,000/- to every household**.
3. **Financial Literacy Program**: Promoting savings, use of ATMs, using basic mobile phones for banking, etc. Interoperability through RuPay debit card or Aadhaar enabled Payment System (AePS).
4. **Creation of Credit Guarantee Fund**:
- To provide banks some guarantee against defaults.
5. **Micro Insurance:** Free accidental insurance cover on RuPay cards increased from Rs. 1 lakh to Rs. 2 lakh for PMJDY accounts opened after August 2018.
6. **Pension Scheme for the unorganized sector.**

Current status of the Scheme:

- 5 crore PMJDY account holders receive direct benefit transfer (DBT) from the Government under various schemes.
- Total deposit balances under PMJDY Accounts stand at Rs 1,46,230 crore.
- PMJDY Accounts have grown three-fold from 14.72 Crore in March 2015 to 43.04 Crore as on August 18, 2021.

15. **Price Determination of Sugarcane:**
- Recently, the **Cabinet Committee on Economic Affairs** has approved the hike in the Fair and Remunerative Price (FRP) of sugarcane for sugar season 2021-22.
- The cost of production of sugarcane for the sugar season 2021-22 is Rs. 155 per quintal. This FRP of Rs. 290 per quintal at a recovery rate of 10% is higher by 87.1% over production cost, thereby giving the farmers a return of much more than 50% over their cost.

Sugarcane Pricing: Sugarcane prices are determined by:
- Central Government: Fair and Remunerative Price (FRP)-FRP is the minimum price at which sugarcane is to be purchased by sugar mills from farmers.

- The Central Government announces Fair and Remunerative Prices which are determined on the recommendation of the Commission for Agricultural Costs and Prices (CACP) and announced by the Cabinet Committee on Economic Affairs (CCEA).
- CCEA is chaired by the **Prime Minister** of India.
- The FRP is based on the Rangarajan Committee report on reorganizing the sugarcane industry.
- State Government: State Advised Prices (SAP)
- The SAP are announced by the Governments of key sugarcane producing states.
- SAP is generally **higher** than FRP.

Factors Considered:
- Cost of production of sugarcane;
- Return to the growers from alternative crops and the general trend of prices of agricultural commodities;
- Availability of sugar to consumers at a fair price;
- Price at which sugar produced from sugarcane is sold by sugar producers;
- Recovery of sugar from sugarcane;
- The realization made from the sale of by-products viz. molasses, bagasse and press mud or their imputed value;
- Reasonable margins for the growers of sugarcane on account of risk and profits

Sugarcane Cultivation:
- In general January to march is the period of planting and December to March is the period of harvesting. In some states sugarcane is grown round the year. After harvest, generally a ratoon crop is cultivated from the regrowth.
- Temperature: Between 21-27°C with hot and humid climate.
- Rainfall: Around 75-100 cm.
- Soil Type: Deep rich loamy soil.

Top Sugarcane Producing States: Uttar Pradesh > Maharashtra > Karnataka > Tamil Nadu > Bihar.
- India is the second largest producer of sugarcane after Brazil.
- It can be grown on all varieties of soils ranging from sandy loam to clay loam given these soils should be well drained.
- It needs manual labour from sowing to harvesting.
- It is the main source of sugar, gur (jaggery), khandsari and molasses.
- Scheme for Extending Financial Assistance to Sugar Undertakings (SEFASU) and National Policy on Biofuels are two of the government initiatives to support sugarcane production and the sugar industry.

16. e-Shram Portal:
- Recently, the Ministry of Labour and Employment launched the e-Shram portal.
- The e-SHRAM portal has been launched for better execution of various social security schemes for the unorganised sector workers.

Key facts about e-SHRAM:
- The government will provide e-SHRAM cards to workers with the help of which they can register on the e-SHRAM portal.
- All the e-SHRAM cards will have a unique Universal Account Number (UAN) and the workers can avail various benefits of the social security schemes via this card anytime, anywhere.
- The 12-digit UAN number in the e-SHRAM card is valid throughout the country.
- There are approximately 40 crore workers in the informal sector, including 2-3 crore migrant workers.

- e-SHRAM scheme covers almost all unorganised workers of the country, comprising construction workers, migrant workers, domestic workers, street vendors, truck drivers, fishermen, agricultural workers.
- All the unorganised workers registered under the scheme will be given accidental Insurance Coverage under Pradhan Mantri Suraksha Bima Yojana (PMSBY) for 365 days.
- It will build a comprehensive database of the unorganised workforce.
- It will also help in delivering social security schemes implemented by the Central and state governments.

17. EASE 40:
- Recently, the Union Finance Minister undertook the annual performance review of the public sector banks (PSBs) and launched the EASE 4.0 or Enhanced Access and Service Excellence Reform Agenda.
- EASE 4.0 is a common reform agenda for PSBs aimed at institutionalising clean and smart banking.
- EASE 4.0 commits PSBs to tech-enabled, simplified and collaborative banking to further the agenda of customer-centric digital transformation.

Following major themes were proposed under this:
- **24x7 Banking:** Under EASE 4.0, the theme of new-age 24x7 banking with resilient technology has been introduced to ensure uninterrupted availability of banking services.
- **Focus on North-East:** Banks have also been asked to come up with specific schemes for the North-East.
- **Bad Bank:** The proposed bad bank is very close to getting a licence.
- A bad bank is a bank set up to buy the bad loans and other illiquid holdings of another financial institution.
- **Raising Funds Outside the Banking Sector:** With changed times, now industries have the option of raising funds even from outside the banking sector.
- Banks themselves are raising funds through various avenues.
- These new aspects need to be studied to target credit where it is needed.
- **Leveraging Fintech Sector:** Fintech (Financial Technology), one such sector that can provide technological help to banks as well as can benefit from help from the banking sector.
- **Export Promotion:** Banks will be urged to work with state governments to push the 'one district, one export' agenda.

Reforms under EASE:
- It was launched in January 2018 jointly by the government and PSBs.
- It was commissioned through Indian Banks' Association and authored by Boston Consulting Group.
- EASE 1.0: The EASE 1.0 report showed significant improvement in PSB performance in resolution of Non Performing Assets (NPAs) transparently.
- EASE 2.0: EASE 2.0 was built on the foundation of EASE 1.0 and introduced new reform Action Points across six themes to make reforms journey irreversible, strengthen processes and systems, and drive outcomes. **The six themes of EASE 2.0 are:**
1. Responsible Banking;
2. Customer Responsiveness;
3. Credit Off-take,
4. PSBs as UdyamiMitra (SIDBI portal for credit management of MSMEs);
5. Financial Inclusion & Digitalisation;
6. Governance and Human Resource (HR).

Ease 3.0: It seeks to enhance ease of banking in all customer experiences, using technology viz.

1. Dial-a-loan and PSBloansin59 minutes.com.
2. Partnerships with FinTechs and E-commerce companies,
3. Credit@click,
4. Tech-enabled agriculture lending,
5. EASE Banking Outlets etc.

18. Sweat Equity:
- Recently, the Securities and Exchange Board of India has brought into effect the SEBI (Share Based Employee Benefits and Sweat Equity) Regulations, 2021. The regulations have widened the scope of employees who can be offered stock (equity) options.
- A sweat equity share is an equity share issued by the company to employees or directors at a discount or for consideration other than cash for providing know-how or making available rights in the nature of intellectual property rights or value additions.
- Sweat equity is a non-monetary contribution that the individuals or founders of a company make towards the company. Cash-strapped startups and business owners typically use sweat equity to fund their companies.
- SEBI has merged the SEBI (Share Based Employee Benefits) Regulations, 2014 (SBEB Regulations) and the SEBI (Issue of Sweat Equity) Regulations, 2002 (Sweat Equity Regulations).
- As per Section 2(88) of the Companies Act, 2013 sweat equity shares means such equity shares as are issued by a company to its directors or employees at a discount or for consideration, other than cash.
- SEBI is a statutory body established in accordance with the provisions of the SEBI Act, 1992. Its basic function is to protect the interests of investors in securities and to regulate the securities market.

19. Ubharte Sitaare Fund:
- Recently, the Finance minister has launched Rs 250 crore worth Alternative Investment Fund for export-oriented micro, small and medium enterprises (MSMEs).
- It aims to Identify Indian enterprises with potential advantages by way of technology, products or processes along with export potential, but which are currently underperforming or unable to tap their latent potential to grow.
- The main purpose is to encourage MSMEs as they are vital to the economy in terms of creating jobs, fostering innovations and reviving the economy.

Key features of the Scheme:
- The Fund has been set up by Exim Bank and SIDBI (Small Industries Development Bank of India).
- The fund is a mix of structured support, both financial and advisory services.
- It will also have a Greenshoe Option of Rs 250 crore.
- The Fund covers potential companies, across various sectors such as pharma, auto components, engineering solutions, agriculture, and software etc.

Significance of this programme:
- It identifies Indian companies that have the potential to be future champions in the domestic arena while catering to global demands.
- Enabling MSME to expand their ventures will drive the overall economy, as they make up for about 45 per cent of the country's total manufacturing output, 40 percent of exports, and almost 30 per cent of the national GDP.
- This will also give a boost to sector specific growth like 'ONE DISTRICT ONE PRODUCT' in Uttar Pradesh.
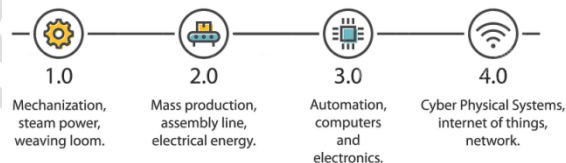- What is an Alternative Investment Fund (AIF)?

- Alternative Investment Fund comprises pooled investment funds which invest in venture capital, private equity, hedge funds, managed futures etc.
- In simpler terms, an AIF refers to an investment which differs from conventional investment avenues such as stocks, debt securities, etc.
- AIF does not include funds covered under the SEBI (Mutual Funds) Regulations, 1996, SEBI (Collective Investment Schemes) Regulations, 1999 or any other regulations of the Board to regulate fund management activities.
- Nonetheless, the alternative investment funds have to register with SEBI.

20. Samarth Udyog Bharat 40 Platform:
- Recently, Central Manufacturing Technology Institute (CMTI) Bangalore, under the SAMARTH Udyog Bharat 4.0 Platform organized a webinar on "Expert Talks from Samarth Udyog Centres" to celebrate the Azadi ka Amrit Mahotsav.
- SAMARTH Udyog Bharat 4.0 is an Industry 4.0 initiative of Department of Heavy Industry, Ministry of Heavy Industry & Public Enterprises, Government of India under its scheme on Enhancement of Competitiveness in Indian Capital Goods Sector.
- The scheme on 'Enhancement of competitiveness in the Indian Capital Goods Sector' was notified in 2014 to encourage technology development and infrastructure creation.
- Industry 4.0:
- It refers to the fourth industrial revolution, which is the cyber-physical transformation of manufacturing.
- It has been defined as "a name for the current trend of automation and data exchange in manufacturing technologies, including cyber-physical systems, the Internet of things, cloud computing and cognitive computing and creating the smart factory.

INDUSTRIAL REVOLUTION

1.0	2.0	3.0	4.0
Mechanization, steam power, weaving loom.	Mass production, assembly line, electrical energy.	Automation, computers and electronics.	Cyber Physical Systems, internet of things, network.

21. Global Manufacturing Risk Index:
- Recently, India has emerged as a global manufacturing hub and effectively surpassed the United States to become the world's second most desired manufacturing destination in the Global Manufacturing Risk Index 2021.
- In last year's report, the US was at second position while India ranked third.
- Global Manufacturing Risk Index assesses the most advantageous locations for global manufacturing among 47 countries in Europe, the Americas and Asia-Pacific (APAC).
- **The rankings in the report are determined based on four key parameters:**
1. Country's capability to restart manufacturing,
2. Business environment (availability of talent/labour, access to markets),
3. Operating costs,
4. Risks (political, economic and environmental).
- The index is released by the US-based property consultant Cushman & Wakefield.

- China remains at number one position and the US is at third position, in the Global Manufacturing Risk Index, 2021.
- The improvement in ranking indicates the growing interest shown by manufacturers in India as a preferred manufacturing hub over other countries, including the US and those in the APAC region.

Factors Responsible for Improvement in India's Ranking:
- The growing focus on India can be attributed to India's operating conditions and cost competitiveness.
- India has a huge population, which means a younger workforce with innovative capabilities that has the potential to fuel the country's manufacturing sector.
- The improvement in ranking can be also attributed to plant relocations from China to other parts of Asia due to an already established base in pharma, chemicals and engineering sectors.
- Also, these factors continue to be at the centre of the US-China trade tensions.

Recent Initiatives to Improve Manufacturing Sector in India:
- National Infrastructure Pipeline (NIP)
- Make in India
- Skill India
- Credit Guarantee Scheme for Micro and Small Enterprises
- A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)
- Prime Minister's Employment Generation programme (PMEGP)
- Industrial corridors

22. G-sec Acquisition Programme:
- Recently, the Reserve Bank of India (RBI) has announced that it will conduct an open market purchase of government securities of Rs 25,000 crore under the G-sec Acquisition Programme (G-SAP 2.0).
- Earlier, under G-SAP 1.0, the first purchase of government securities for an aggregate amount of Rs. 25,000 crore was made.
- The G-Sec Acquisition Programme (G-SAP) is basically an unconditional and a structured Open Market Operation (OMO), of a much larger scale and size.
- RBI has called the G-SAP as an OMO with a 'distinct character'. The word 'unconditional' here connotes that RBI has committed upfront that it will buy G-Secs irrespective of the market sentiment.
- Thrugh this, RBi aims to achieve a stable and orderly evolution of the yield curve along with management of liquidity in the economy.
- By purchasing G-secs, the RBI infuses money supply into the economy which inturn keeps the yield down and lower the borrowing cost of the Government.
- The government of India, with its massive borrowing programme (for example, National infrastructure pipeline project), can now breathe a sigh of relief as long-term borrowing costs come down.

Open Market Operations:
- Open market operations is the sale and purchase of government securities and treasury bills by RBI or the central bank of the country.The objective of OMO is to regulate the money supply in the economy.
- It is one of the quantitative monetary policy tools.
- RBI carries out the OMO through commercial banks and does not directly deal with the public.

Government Securities:
- A G-Sec is a tradable instrument issued by the Central Government or the State Governments.

- It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year- presently issued in three tenors, namely, 91 day, 182 day and 364 day) or long term (usually called Government bonds or dated securities with original maturity of one year or more).
- In India, the Central Government issues both treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs).
- G-Secs carry practically no risk of default and, hence, are called risk-free gilt-edged instruments.
- Gilt-edged securities are high-grade investment bonds offered by governments and large corporations as a means of borrowing funds.

What does a rise in bond yield mean?
- **Bond yield** means the returns an investor will **derive** by investing in the bond. The mathematical formula for calculating yield is the **annual coupon rate divided by the current market price of the bond.** Therefore, there is an inverse relationship between the yield and price of the bond.
- As the price of the bond goes up, the yield falls; and as the price of the bond goes down, the yield goes up.
- In India, the yield of 10-year government securities (G-Sec) is considered the benchmark and shows the overall interest rate scenario. This year, G-Sec yields have gone up compared to the previous year after the Centre announced its increased borrowing programmes in Budget 2021.
- As government borrowing goes up, the supply of bonds in the market goes up, putting pressure on prices. The government has announced a borrowing of ₹12 trillion in FY22.
- To control the rise in yields, the RBI has announced a secondary market government security acquisition programme, or GSAP, wherein it will buy government bonds worth ₹1 trillion from the secondary market in Q1 FY22. If bond yields go down, returns of debt MF investors may go up.

23. Financial Inclusion Index:
- Recently, the Reserve Bank of India (RBI) announced the formation of a composite Financial Inclusion Index (FI-Index) to capture the extent of financial inclusion across the country.
- The FI-Index for the period ended March 2021 stood at 53.9 compared with 43.4 for the period ended March 2017.

About Financial Inclusion Index:
- Annual Financial Inclusion Index (FII) will measure access and usage of a basket of formal financial products and services that includes savings, remittances, credit, insurance and pension products.
- It would rate states on their performance on last-mile banking services availability.
- The index will have three measurement dimensions
- access to financial services
- usage of financial services
- the quality of the products and the service delivery.
- These are also the G20 Financial Inclusion Indicators.
- It will be published in July every year by RBI.

Importance of Financial Inclusion Index:
- Provide information on the level of financial inclusion.
- Measure financial services for use of internal policy making.
- It can be used directly as a composite measure in development indicators.
- It enables fulfilment of G20 Financial Inclusion Indicators requirements.
- It will also facilitate researchers to study the impact of financial inclusion and other macro-economic variables.

24. TAPAS Initiative:
- Recently, the Ministry for Social Justice and Empowerment launched an online portal TAPAS (Training for Augmenting Productivity and Services), developed by the National Institute of Social Defence, Ministry of Social Justice and Empowerment.
- The idea of TAPAS was conceptualised at a time when exploring the online medium for work and education had become imperative due to the outbreak of Covid 19 pandemic.
- TAPAS offers various courses in the field of social defence for the capacity building of stakeholders. It is an initiative of National Institute of Social Defense (NISD).
- Social defence is generally understood as the protection of society against crime through a systematically organized and coherent action by both the State and civil society.
- TAPAS is a standard MOOC (Massive Open Online Course) platform with course material such as filmed lectures and e-study material.
- MOOC is a free Web-based distance learning program that is designed for the participation of large numbers of geographically dispersed students.
- It also includes discussion forums to support and encourage interactions among students and course coordinators-Video, Text, Self Assessment and Discussions.
- It can be taken up by anyone who wishes to enhance his or her knowledge on the topics and there is no fee for joining.

Courses:
- The five basic courses are on Drug (Substance) Abuse Prevention, Geriatric/Elderly Care, Care and Management of Dementia, Transgender Issues and on comprehensive course on Social Defence Issues.

National Institute of Social Defence:
- It is an autonomous Body and is registered under Societies Act XXI of 1860 with the Government of National Capital Territory (NCT), Delhi.
- It is a central advisory body for the Ministry of Social Justice and Empowerment. It is a Centre of Excellence on research and training in the field of social defence.

25. SAMRIDH Programme:
- Recently, the Ministry of Electronics & Information Technology (MeitY) has launched the Start-up Accelerators of MeitY for product Innovation, Development and growth (SAMRIDH) programme.
- The scheme aims create a conducive platform to Indian Software Product start-ups to enhance their products and secure investments for scaling their business.
- Focuses on accelerating the 300 start-ups by providing customer connect, investor connect, and international immersion in the next three years.
- To provide investment of up to Rs 40 lakh to the start-up based on current valuation and growth stage of the Start-Up through selected accelerators.
- It will be implemented by the Ministry of Electronics & Information Technology Start-up Hub (MSH).
- It will also work MSH as a national coordination, facilitation and monitoring centre that will integrate all the incubation centres, start-ups and innovation related activities of MeitY.

26. British Stamps Banned from Chagos Islands:
- Recently, Mauritius has moved a symbolic step closer to wresting control of the Chagos Islands, in the Indian Ocean, from the UK.The Universal Postal Union (UPU), a UN agency in charge of the world's postal policies, voted to block the use of UK stamps from the remote archipelago.All post from the Chagos Islands must now bear stamps from Mauritius.

- UPU is a United Nations specialized agency and the postal sector's primary forum for international cooperation.
- **Chagos archipelago** is an island group in the central Indian Ocean, located about 1,600 km south of the southern tip of the Indian subcontinent.
- In 2019, the International Court of Justice (ICJ) ruled that Britain should give up control of the islands.
- Later in 2019, the UN General Assembly adopted a resolution recognising that "the Chagos Archipelago forms an integral part of the territory of Mauritius" and urged UN agencies "to support the decolonisation of Mauritius".
- India has supported Mauritius' stand on the Chagos Archipelago. India in its submission to ICJ has said that the Chagos Archipelago has been and continues to be with Mauritius and demanded sovereignty over the Chagos Archipelago from Britain.
- India stayed committed to its Indian Ocean neighbor Mauritius, as well as its anti-colonial credentials.

Background of the issue:
- In the 19th century, Chagos were governed from Mauritius, which was a British Colony.
- Mauritius became independent in 1968, but the Chagos archipelago remained under British control. The U.K. government refers to it as BIOT.
- That Sparked protests by Chagossians, who accused London of carrying out an "illegal occupation" and barring them from their homeland.
- The UK retained possession of the Chagos archipelago, which includes the strategic US airbase of Diego Garcia, after Mauritius gained its independence by paying Mauritius more than 4 million pounds for the islands.
- About 1,500 native islanders were deported from the Diego Garcia island in Chagos archipelago so that it could be leased to the US for the airbase in 1971.
- Since 1975, Mauritius has made a concerted legal effort to secure the archipelago's return to its fold.

27. Greater Male Connectivity Project: Maldives:
- Recently, an Indian company-Afcons has signed a contract for the largest-ever infrastructure project in Maldives which is the Greater Male Connectivity Project (GMCP).
- The project has been seen as a result of bilateral consultation between India and the Maldives and has been under discussion since the visit of India's External Affairs Minister to Male in September 2019.
- The Greater Male Connectivity Project will consist of a 6.74 km-long bridge and causeway link between Male and nearby islands of Villingli, Gulhifalhu and Thilafushi. It will use renewable energy.
- The project is funded by a grant of USD 100 million and a Line of Credit (LOC) of USD 400 million from India.
- It is the biggest infrastructure project of India in the Maldives.
- The Indian aid to Maldives in August 2020 was appreciated and contrasted with the previous expensive commercial loans to Maldives by China which are being termed "debt-trap diplomacy" of China.

28. UNITE Aware Platform:
- UNITE Aware is a situational awareness software programme that will utilise modern surveillance technology for real time threat assessments to peacekeepers.
- The launch of the UNITE AWARE platform came as India assumed the Presidency of the 15-nation UN Security Council for the month of August, 2021.

- India has developed the technology platform in partnership with the UN Department of Peacekeeping Operations and the Department of Operational Support.India's Contribution: India has contributed USD 1.64 million for this project.
- This project aims to demonstrate the impact of modern surveillance technology on the detection of asymmetric threats.
- The **Situational Awareness Software Programme** utilises modern surveillance technology for real time threat assessments to peacekeepers in maintaining security.
- This will access live video and satellite imagery, and in very volatile circumstances can also deliver early warnings to peacekeepers.
- It can also record data on critical incidents and events and follow daily operational activities.
- Using the platform, the entire peacekeeping operation can be visualised, coordinated, and monitored on a real time basis.
- UNITE Aware platform will be deployed initially in four UN Peacekeeping Missions: MINUSMA (Mali), UNMISS (South Sudan), UNFICYP (Cyprus) and AMISOM (Somalia).

29. IBSA Forum:
- Recently, India organized the IBSA (India, Brazil and South Africa) Tourism Ministers' virtual meeting.
- The IBSA is a trilateral, developmental initiative between India, Brazil and South Africa to promote South-South cooperation and exchange.
- IBSA is a unique Forum which brings together India, Brazil and South Africa, three large democracies and major economies from three different continents, facing similar challenges. All three countries are developing, pluralistic, multi-cultural, multi-ethnic, multi-lingual and multi-religious nations.
- The genesis of **South-South Cooperation (SSC)** can be traced back to the decades of efforts by countries and groupings working together to ensure South-South solidarity such as Bandung conference 1955, Non-Aligned Movement 1961, G77 grouping, UNCTAD, the Buenos Aires Plan of Action 1978, and the 2009 Nairobi declaration.
- The grouping was formalized and named the IBSA Dialogue Forum when the Foreign Ministers of the three countries met in Brasilia (Brazil) on 6th June 2003 and issued the Brasilia Declaration.
- **IBSA does not have a headquarters or a permanent executive secretariat.**
- At the highest level, it counts on the Summits of Heads of State and Government.
- IBSAMAR (IBSA Maritime Exercise) is an important part of IBSA trilateral defence cooperation.
- Six editions of IBSAMAR have been held so far, the latest one being off the coast of South Africa in October, 2018.
- IBSA Fund (India, Brazil and South Africa Facility for Poverty and Hunger Alleviation) was established in 2004. It is a unique Fund through which development projects are executed with IBSA funding in fellow developing countries.
- The fund is managed by the United Nations (UN) Office for South-South Cooperation (UNOSSC). Each IBSA member country is required to contribute $1 million per annum to the fund.

30. India-Philippine Maritime Exercise:
- Recently, India and the Philippines conducted a naval exercise in the South China Sea on August 23, 2021. This exercise was conducted five days after conducting a similar drill with Vietnam in the region. Indian and Vietnamese navies had conducted the naval exercise on August 18.
- This bilateral exercise was conducted with the objective of strengthening bilateral collaboration in maritime domain in order to ensure a stable, peaceful and prosperous Indo-Pacific.
- The South China Sea region has been witnessing growing Chinese military expansionism.

- Indian Navy had deployed its guided missile destroyer INS Ranvijay and guided missile corvette INS Kora while the Philippine Navy has deployed its frigate BRP Antonio Luna, in the exercise.
- This joint exercise included several operational maneuvers. Participating ships were satisfied with the consolidation of interoperability that was achieved through this operational interaction at sea.

Dispute between China and Philippines:
- This military drill is significant considering the fact that, the Philippines government call the eastern parts of South China Sea as West Philippine Sea. On the other hand, China claims sovereignty over all South China Sea as it is a huge source of hydrocarbons.

31. Malabar Exercise 2021:
- Recently, the navies of the four member nations of the Quadrilateral Security Dialogue, or the Quad — India, the United States, Japan, and Australia — have participated in the 25th edition of the Malabar Exercise, which began off the coast of Guam in the Pacific Ocean on Thursday (August 26).
- Guam is a US island territory in the North Pacific Ocean, which is much closer to China in the East than to the US mainland in the West making it an ideal US military strategic outpost for Indo-Pacific operations.
- The Malabar Exercise is a multilateral war-gaming naval exercise that was started in 1992. It began as a bilateral exercise between the navies of India and the United States.
- Two more editions of the exercise were carried out in 1995 and 1996, after which there was a break until 2002 in the aftermath of India's nuclear tests.
- From 2002 onward, the exercise has been conducted every year.Japan and Australia first participated in 2007, and since 2014, India, the US and Japan have participated in the exercise every year.
- In 2020 Australia joined the Malabar Exercise on India's request in order to contain China in the Indo-Pacific region.
- The Malabar Exercise is aimed to support free, open and inclusive Indo-Pacific and remain committed to a rules based international order.

32. Merger of Three Supermassive Black Holes:
- Recently, Indian researchers have discovered three super-massive black holes from three galaxies merging together to form a triple active galactic nucleus, a compact region at the center of a newly discovered galaxy that has a much-higher-than-normal luminosity. This rare occurrence in our nearby Universe indicates that small merging groups are ideal laboratories to

- detect multiple accreting supermassive black holes and increases the possibility of detecting such rare occurrences.
- Active galactic nuclei are active supermassive black holes that emit bright jets and winds, and shape their galaxies, whether they are nearby Seyfert galaxies or extremely distant quasars and blazars.
- Scientists were studying the AGN in the two massive barred spiral galaxies **NGC7733** and NGC7734 when they detected unusual emissions from the centre of the latter and a curious movement of a large bright clump within it, having a different velocity than that of NGC7733. The third one was a separate galaxy, the scientists named it **NGC7733N**.
- All three merging black holes were part of galaxies in the **Toucan** constellation.
- Supermassive black holes are difficult to detect because they do not emit any light. But they can reveal their presence by interacting with their surroundings.
- When the dust and gas from the surroundings fall onto a supermassive black hole, some of the mass is swallowed by the black hole, but some of it is converted into energy and emitted as electromagnetic radiation that makes the black hole appear very luminous. They are called active galactic nuclei (AGN) and release huge amounts of ionized particles and energy into the galaxy and its environment. Both of these ultimately contribute to the growth of the medium around the galaxy and ultimately the evolution of the galaxy itself.
- What Is a Black Hole?
- A black hole is a place in space where gravity pulls so much that even light can not get out. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.
- Because no light can get out, people can't see black holes. They are invisible. Space telescopes with special tools can help find black holes. The special tools can see how stars that are very close to black holes act differently than other stars.
- Black holes can be big or small. Scientists think the smallest black holes are as small as just one atom. These black holes are very tiny but have the mass of a large mountain. Mass is the amount of matter, or "stuff," in an object.
- An atom is a particle of matter that uniquely defines achemical element. An atom consists of a central nucleus that is usually surrounded by one or more electrons.

Event Horizon

Singularity

Schwarzschild radius
$$R=\frac{2GM}{c^2}$$

Black hole

z

y

x

Singularity
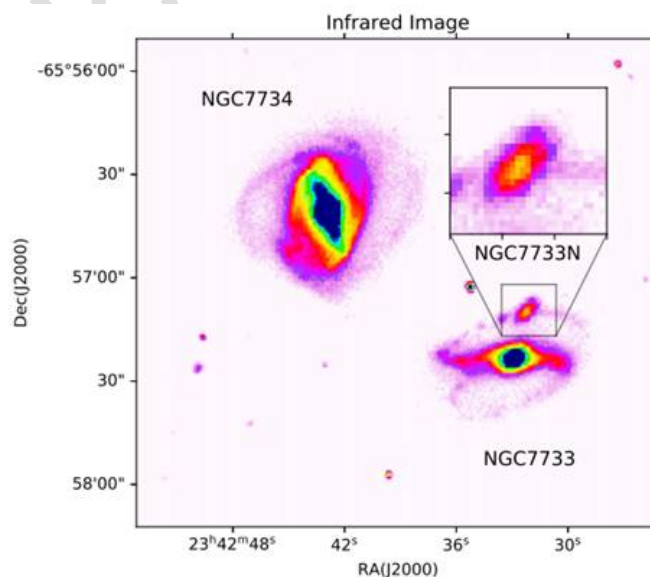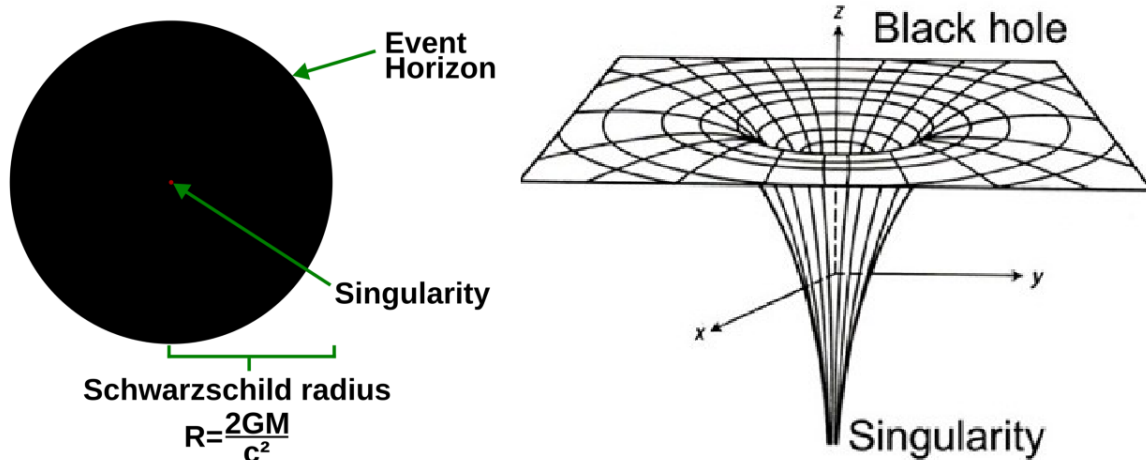
33. Human Trials for New HIV Vaccine:
- Recently, an American biotechnology company called Moderna started human trials for its novel mRNA vaccine (**mRNA-1644**) for HIV (Human Immunodeficiency Virus).
- This is the first trial for an mRNA vaccine for HIV after the success of mRNA vaccines with Covid-19.
- According to the World Health Organization, there were around 37.7 million living with HIV as of 2020.
- mRNA Vaccine vs Traditional Vaccines:
- Vaccines work by training the body to recognise and respond to the proteins produced by disease-causing organisms, such as a virus or bacteria.
- Traditional vaccines are made up of small or inactivated doses of the whole disease-causing organism, or the proteins that it produces, which are introduced into the body to provoke the immune system into mounting a response.
- mRNA vaccines tricks the body into producing some of the viral proteins itself.
- They work by using mRNA, or messenger RNA, which is the molecule that essentially puts DNA instructions into action. Inside a cell, mRNA is used as a template to build a protein.

mRNA vaccine for HIV:
- The vaccine is expected to work similar to the Covid-19 vaccine — by getting the body's cells to produce the HIV virus' spike protein triggering an immune response.
- The larger purpose of stimulating the B cells is to generate what are called broadly neutralising antibodies (bnAbs), which are specialised blood proteins that attach to the surface proteins of HIV and disable them by accessing key but hard-to-reach regions on the virus.
- B-cells fight bacteria and viruses by making Y-shaped proteins called antibodies, which are specific to each pathogen and are able to lock onto the surface of an invading cell and mark it for destruction by other immune cells.
- An immunogen refers to a molecule that is capable of eliciting an immune response by an organism's immune system, whereas an antigen refers to a molecule that is capable of binding to the product of that immune response.Thus, an immunogen is necessarily an antigen, but an antigen may not necessarily be an immunogen.

34. Nano-Robots:
- Recently, a group of scientists has found a way to tackle issues pertaining to root canal treatments (dental procedures) using nanosized robots.
- Root canal treatment is designed to eliminate bacteria from the infected root canal, prevent reinfection of the tooth and save the natural tooth.

- A significant percentage of root canal treatments fail, because the procedure leaves out some bacteria that are located deep within the dentinal tubules.
- In the research the scientist has found a way to tackle this using nanosized robots that will travel through the tubules and target the bacteria.
- Under this method, spiral silica nanobots with a bit of iron embedded in them are injected in the central canal of the tooth. Then a rotating magnetic field is applied. This causes the nanorobot to move - like screws move into a wall.
- Once the bacterial colony is reached, the nanorobot can deploy various antibacterial strategies one of which is localised heating.

What are Nanorobots?
- Nanorobotics describes the technology of producing machines or robots at the nanoscale.'Nanobot' is an informal term to refer to engineered nano machines.
- Nanobots are robots that carry out a very specific function and are ~50–100 nm wide. They can be used very effectively for drug delivery.

Uses of Nanotechnology in Health Care:
- Nanotech detectors for heart attack.
- Nanocarriers for eye surgery, chemotherapy etc.
- Diabetic pads for regulating blood sugar levels.
- NanoFlares are used for detection of cancer cells in the bloodstream.
- Nanopores are used in making DNA sequencing more efficient.
- Nanosponges are polymer nanoparticles coated with a red blood cell membrane, and can be used for absorbing toxins and removing them from the bloodstream.

35. National Gene Bank:
- Recently, the Union Minister for Agriculture and Farmers Welfare inaugurated the world's second-largest refurbished state-of-the-art National Gene Bank at the National Bureau of Plant Genetic Resources (NBPGR), Pusa, New Delhi.
- Gene Banks are a type of biorepository which preserve genetic material. A collection of seed plants, tissue cultures etc.
- A gene is the basic physical and functional unit of heredity. Genes are made up of Deoxyribonucleic Acid (DNA).

National Bureau of Plant Genetic Resources (NBPGR):
- It is a nodal organisation for management of plant genetic resources in India and functions under the control of Indian Council of Agricultural Research (ICAR).
- It is conserving seed germplasm for long-term conservation (at -20°C) in its National Genebank (NGB).
- It plans, organizes, conducts and coordinates exploration and collection of indigenous and exotic plant genetic resources. It is headquartered in New Delhi and has 10 regional stations.

Key Information:
- Establishment: The National Gene Bank was notified in 1996-97.
- Hosted By: National Bureau of Plant Genetic Resources (NBPGR), New Delhi.
- Purpose: To conserve the Plant Genetic Resources (PGR) for future generations in the form of seeds, genomic resources, pollen etc.

36. Bharat Biotech's Chikungunya vaccine:
- Recently, International Vaccine Institute (IVI) has announced that Bharat Biotech's Chikungunya vaccine candidate (BBV87) has entered into Phase II and III clinical trials. Currently, there is no commercial chikungunya vaccine.
- Named as BBV87, is an inactivated virus vaccine, similar to Covaxin.

- Inactivated vaccines contain viruses whose genetic material has been destroyed by heat, chemicals or radiation so they cannot infect cells and replicate, but can still trigger an immune response.
- Bharat Biotech's Chikungunya vaccine candidate was developed in partnership with the International Vaccine Institute (IVI).
- The Development of Chikungunya Vaccine is an initiative of the United Nations Development Programme (UNDP), as part of the Global Chikungunya Vaccine Clinical Development Program (GCCDP).
- It was funded by the Coalition for Epidemic Preparedness Innovations (CEPI) with support from the Ind-CEPI mission of the Department of Biotechnology, Government of India.

Chikungunya:
- First identified in Tanzania in 1952, Chikungunya virus is spread by the bite of infected female Aedes mosquitoes.
- The name is derived from the local Kimakonde language and means "to become contorted", evoking the stooped appearance of patients suffering acute joint pain.
- It is transmitted to people through the bite of an infected mosquito.
- It is most often spread to people by Aedes aegypti and Aedes albopictus mosquitoes. These are the same mosquitoes that transmit dengue virus.
- Mosquitoes acquire the infection by biting infected humans or animals.
- Weather conditions also affect their breeding and survival.
- The Symptoms include severe joint pain, muscle pain, headache, nausea, fatigue and rashes.
- Currently, there are no vaccines or antiviral drugs available to cure Chikungunya, and the treatment is only focused on relieving the symptoms associated with the infection.

37. Shrinking of Sambhar Lake: Rajasthan:
- According to recent research, the **Sambhar Salt Lake in Rajasthan** is decreasing due to poor soil and water quality and migratory bird populations.
- Sambhar Salt Lake is located 80 km south-west of Jaipur in east-central Rajasthan, it is the country's largest inland saline water body.
- It represents the depression of the Aravalli Range.
- It is famous for the production of brine/salt, houses one of the largest salt manufacturing units in the country. Thousands of migratory birds visit this lake every year.
- Sambhar Salt Lake is a wetland of 'international importance' under the Ramsar Convention, declared in 1990.

What are the major concerns about sambhar lake?
- Area Loss: Mining and other activities, such as illegal salt pan encroachments, have resulted in the loss of about 30% of Sambhar Lake's area.
- Local People's Livelihoods: The loss of the region has put local people's livelihoods in jeopardy since they have traditionally lived in peace with the lake and its environment.
- The Aravalli mountains have shrunk by 0.1 percent (as compared to in 1971). The hill has served as a natural barrier, preventing the salt from moving farther into the fruitful zone.
- People will be forced to relocate if this natural barricade continues to crumble.
- In the case of migratory birds, the wetland has shrunk while vegetation has grown, resulting in a scarcity of red algae, the primary source of food for these birds.
- In 2019, avian botulism claimed the lives of about 20,000 birds from around ten different species that come to the lake every year.

What are the steps to address this issue?
- New Tourist Attractions: The Rajasthan State Government recently decided to identify new tourist attractions near Sambhar Salt Lake.

- In the Centre's Swadesh Darshan Scheme, the lake is part of the desert circuit.
- Around the lake, new attractions such as a salt museum, caravan park, cycling track, and gardens will be completed.
- Train of Salt: A "salt train" will also be reactivated, which will deliver salt from the pans to a neighbouring refinery.
- Saving the Environment: Illegal salt production in the lake will be halted by taking action against unlicensed borewells and pipelines in the area and removing encroachments on the property with the cooperation of the police.
- In the case of migratory birds: The Rajasthan government plans in 2020 to construct temporary migratory bird houses near the lake.

38. Leaded Petrol Eradicated Globally:
- According to United Nations Environment Programme (UNEP), use of leaded petrol has been eradicated from the globe.
- UNEP highlighted, this milestone will prevent more than 1.2 million premature deaths and save over USD 2.4 trillion annually for world economies.
- This milestone was achieved century after doctors first issued warnings regarding the toxic effects of leaded petrol, Algeria (last country to use the fuel) exhausted the supplies in July 2021. It is a big milestone for global health and environment as well.
- UNEP also warned that, use of fossil fuel must still be drastically reduced, in general, to do away with the frightening effects of climate change.
- During 1970s, almost all the gasoline that used to be sold worldwide contained lead. The UNEP launched its campaign called "Partnership for Clean Fuels and Vehicles (PCFV)" for eradication of 'leaded petrol' in 2002. Major economies including United States, China and India had already stopped using fuel in 2002. But, the situation in lower-income countries was critical. Concerns regarding the leaded petrol were first raised in 1924.

Impact of leaded petrol:
- Use of leaded petrol in transport sector is responsible for about quarter of energy-related global greenhouse gas emissions. It is set to grow to one third by the year 2050.
- Leaded petrol causes major health problems like heart disease, stroke and cancer.
- Leaded petrol also impacts the development of human brain.

Significance of eradication:
- Eradication of leaded petrol is expected to support realization of multiple Sustainable Development Goals (SDG) like good health & well-being, clean water, clean energy, sustainable cities, climate action and life on land.

39. Immune Cells in Sea Corals:
- Recently, a new study has identified for the first time that specialised immune cells (phagocytic cells) exist in certain varieties of sea corals and anemones.
- It will help in better understanding how reef-building corals and other reef animals protect themselves from foreign invaders like bacteria and viruses found in and around coral reefs.

Phagocytosis:
- It is the process by which certain living cells called phagocytes ingest or engulf other cells or particles.
- The phagocyte may be a free-living one-celled organism, such as an amoeba, or one of the body cells, such as a white blood cell.
- In some forms of animal life, such as amoebas and sponges, phagocytosis is a means of feeding.
- In higher animals phagocytosis is chiefly a defensive reaction against infection and invasion of the body by foreign substances (antigens).

Sea anemones:
- They are sometimes called the 'flowers of the sea', sea anemones are actually beautiful animals, they are a close relative of coral and jellyfish, and are the marine, predatory animals of the order Actiniaria.
- They are found from the tidal zone of all oceans to depths of more than 10,000 metres.

About Coral:
- Corals are made up of genetically identical organisms called polyps. These polyps have microscopic algae called zooxanthellae living within their tissues.
- The corals and algae have **a mutualistic relationship**.
- The coral provides the zooxanthellae with the compounds necessary for photosynthesis. In return, the zooxanthellae supply the coral with organic products of photosynthesis, like carbohydrates, which are utilized by the coral polyps for the synthesis of their calcium carbonate skeletons.
- In addition to providing corals with essential nutrients, zooxanthellae are responsible for the unique and beautiful colors of corals.
- There are two types of corals-Hard, shallow-water corals—the kind that builds reefs; and Soft corals and deepwater corals that live in dark cold waters.
- Corals are home to over 1 million diverse aquatic species, including thousands of fish species.They are also called the "rainforests of the seas".
- Coral reefs and related ecosystems have a global estimated value of USD 2.7 trillion per year, or 2.2% of all global ecosystem service values', this includes tourism and food.
- Coral reefs reduce shoreline erosion by absorbing energy from the waves. They can protect coastal housing, agricultural land, and beaches.
- Reefs are home to species that have the potential for treatments for some of the world's most prevalent and dangerous illnesses and diseases.

Reasons of Threats:

Overfishing & Destructive Fishing:
1. Overfishing can affect the reef's ecological balance and biodiversity.
2. Fishing with dynamite, cyanide, bottom trawling and Muro Ami (banging on the reef with sticks) can damage entire reefs and is unsustainable.
3. Recreational Activities
4. Coastal Development
5. Marine Pollution
6. Climate Change-Temperature of ocean water is gradually increasing and due to Ocean Acidification.

- Symbiosis is a close ecological relationship between the individuals **of two (or more) different species.**
- Sometimes a symbiotic relationship benefits both species, sometimes one species benefits at the other's expense, and in other cases neither species benefits.
  Therefore, different terms are used for each type of symbiotic relationship. They are:
1. Mutualism: both species benefit
2. Commensalism: one species benefits, the other is unaffected
3. Parasitism: one species benefits, the other is harmed
4. Competition: neither species benefits
5. Neutralism: both species are unaffected

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40. India approves the ratification of the Kigali Amendment:

- Recently, the Union Government approved the ratification of the Kigali Amendment to the Montreal Protocol on phasing down climate-damaging refrigerant Hydrofluorocarbons (HFCs).
- The Kigali Amendment to the Montreal Protocol is an international agreement to gradually reduce the consumption and production of hydrofluorocarbons. It is a legally binding agreement designed to create rights and obligations in international law.

Under the amendment:
- Developed countries will reduce HFC consumption beginning in 2019.
- Most developing countries will freeze consumption in 2024,
- Some developing countries including India with unique circumstances will freeze consumption in 2028.
- The plan also provides financing to certain countries, to help them transition to climate-friendly alternatives.
- With the Kigali Amendment, the Montreal Protocol has become an even more powerful instrument against global warming.

Background:
- The 1989 Montreal Protocol is not a climate agreement. It is instead aimed at protecting the earth from Ozone-Depleting Substances (ODSs) like the ChloroFluoroCarbons (CFCs), that were earlier used in the air-conditioning and refrigerant industry.
- The widespread use of CFCs had caused a hole in the Ozone layer of the atmosphere, which allowed some harmful radiation to reach the earth. These radiations were considered potential health hazards.
- The **Montreal Protocol** led to the replacement of CFCs with **Hydrofluorocarbons** (HFCs) which do not destroy the Ozone layer.
- But they were later found to be extremely potent in causing Global Warming. So, the HFCs solved one problem, but were contributing in a major way to another.
- But these could not be eliminated under the original provisions of Montreal Protocol which was meant to phase-out ODSs only.
- The Kigali Amendment enabled the Montreal Protocol to mandate the elimination of HFCs as well.
- In October 2016, with the United States' leadership, 197 countries adopted an amendment to phase down HFCs under the Montreal Protocol in Kigali, Rwanda.

41. Sea Erosion in India: NCCR:
- Recently, the National Centre for Coastal Research (NCCR) under the Ministry of Earth Science has published a report that said one-third of India's coastline underwent sea erosion in 28 years.
- As much as 32% of India's coastline underwent sea erosion and 27% of it expanded between 1990 and 2018.
- India's coastline is 6,631.53 kilometres long which is surrounded by the Arabian Sea in the west, Bay of Bengal in the east, and the Indian Ocean in the south.
- 2,135.65 kilometres was subject to varying degrees of erosion and 1,760.06 km expanded during this period.
- Nearly 2,700 km of the coastline is stable.
- 60% of the coastline of West Bengal underwent erosion during the period followed by Puducherry (56%), Kerala and Tamil Nadu at 41% and 41%, respectively.
- The eastern coast sees a lot of rain which keeps the seas rough through most of the year. Besides the Southwest Monsoon (June to September), the eastern coast also witnesses the Northeast Monsoon from October to December and brings rain to coastal Andhra Pradesh and Tamil Nadu.

- The eastern coast underwent more erosion due to frequent Cyclonic Activities from Bay of Bengal in the past three decades, compared to the western coast, which remained largely stable.
- Odisha on the eastern coast is the only state where the coast witnessed an expansion of more than 50%.
- This was followed by the coast of Andhra Pradesh, which expanded 48%; Karnataka (26%) etc.

What is Coastal Erosion?

- Coastal erosion is the process by which local sea level rise, strong wave action, and coastal flooding wear down or carry away rocks, soils, and/or sands along the coast.
- Erosion and accretion are complementary to each other. If the sand and sediments have drifted from one side, it must accumulate somewhere else.
- Soil erosion is the loss of land and human habitation as sea water washes off regions of soil along the coastline.
- Soil accretion, on the other hand, results in an increase in the land area. However, if accretion happens in Deltas, Estuaries, and creeks, the soil will block the inflow of seawater into these areas which are breeding ground for several species of aquatic flora and fauna.
- Due to coastal erosion, recreational activities (sun bathing, picnicking, swimming, surfing, fishing, boating, diving, etc.) may be affected if existing beaches are reduced in width or disappear altogether. Also, there can be an impact on livelihoods of coastal communities.
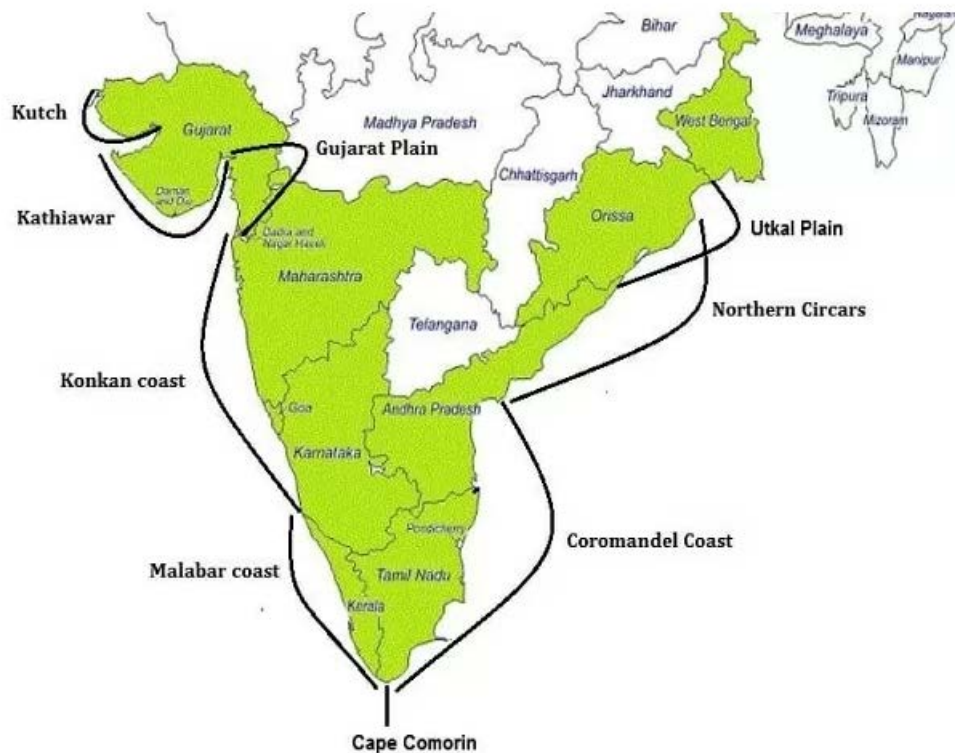
42. Plastic Crisis: Sundarbans:

- Unregulated inflow of relief to the Sundarbans has resulted in a new crisis in the cyclone-battered region as plastic has been accumulated in the area.
- The threat posed by plastic is so great for the Sundarbans because the region is witnessing frequent tropical storms, which lead to devastation.
- Plastic pollution is caused by the accumulation of plastic waste in the environment.

- It can be categorized in primary plastics, such as cigarette butts and bottle caps, or secondary plastics, resulting from the degradation of the primary ones.

Reasons for Accumulation of Plastic in Sundarbans:

Cyclones:
- The region is witnessing frequent cyclones, which lead to devastation, followed by the necessity for relief and rehabilitation of inhabitants. In geography, a location's relief is the difference between its highest and lowest elevations.
- Plastic waste associated with relief material, used in the aftermath of Cyclone Amphan (May 2020) in the Sundarbans, could cause damage to the eco-sensitive region.
- Prior to this, the region had witnessed cyclones Fani (May 2019) and Bulbul (November 2019).

Tourism:
- Besides recent cases of cyclones in the region, tourists have also contributed to the accumulation as they leave behind heaps of plastic waste that is strewn all over the forest.

Concerns:

Increase Toxicity:
- The presence of plastic in saline water increases the toxicity of water and could also contribute to the eutrophication of water.
- Eutrophication is the process by which an entire body of water, or parts of it, becomes progressively enriched with minerals and nutrients.
- It also results in oxygen depletion.
- Given that Sunderbans is connected to the sea, the increase of plastic in the region could lead to plastic waste entering the ocean.

Threat to food System:
- The breakdown of plastics in the water will lead to an increase in microplastics, which would subsequently enter the food system.

Affects Livelihoods:
- Sunderbans is largely dependent on fisheries and aquaculture and any change in the delicate ecosystem can spell doom not only for the ecology but also for livelihoods.

43. **Children's Climate Risk Index: UNICEF:**
   - Recently, the United Nations Children's Fund (UNICEF) in collaboration with Fridays for Future launched a report named 'The Climate Crisis Is a Child Rights Crisis: Introducing the Children's Climate Risk Index'.

- The Children's Climate Risk Index ranks countries based on how exposed children are to climate and environmental shocks, like cyclones and heat-waves. It also looks at the access young people have to essential services, such as water, sanitation, healthcare and education.
- It is the first comprehensive analysis of climate risk from a child's perspective.
- Earlier an analysis, based on Notre Dame Global Adaptation Initiative (ND-GAIN) index, had shown the impact of Climate Change on children across the world.
- Pakistan (14th), Bangladesh (15th), Afghanistan (25th) and India (26th) are among four South Asian countries where children are at extremely high risk of the impacts of the climate crisis.

Indian Scenario:
- India is among four South Asian countries where children are most at risk of the impacts of climate change threatening their health, education, and protection.
- It is estimated that more than 600 million Indians will face 'acute water shortages' in the coming years, while at the same time Flash Flooding is to increase significantly in the majority of India's urban areas once the global temperature increase rises above 2 Celsius.
- Twenty-one of the world's 30 cities with the most polluted air in 2020 were in India.

44. Forum for Decarbonisation of Transport Sector:
- Recently, Indian government's think-tank NITI Aayog, in collaboration with World Resources Institute (WRI), launched the Forum for Decarbonising Transport in the country.
- Decarbonisation is the reduction of carbon dioxide emissions through the use of low carbon power sources, achieving a lower output of greenhouse gasses into the atmosphere.
- WRI India is an independent charity legally registered as the India Resources Trust which provides objective information and practical proposals to foster environmentally sound and socially equitable development.
- NITI Aayog serves as an advisory think tank for the government and is chaired by the Prime Minister. It replaced the Planning Commission.
- The forum aims to Bring down the peak level of Green House Gas emissions (transport sector) in Asia (in line with a well below 2-degree pathway), resulting in problems like congestion and air pollution.
- The forum is a part of the **Nationally Determined Contributions (NDC)**-Transport Initiative for Asia (NDC-TIA) project, which focuses on developing a coherent strategy of effective policies and the formation of a multi-stakeholder platform for decarbonising transport in the region.
- NDC-TIA is a joint programme of seven organisations that will engage China, India, and Vietnam in promoting a comprehensive approach to decarbonising transport in their respective countries. The project is part of the International Climate Initiative (IKI).
- The IKI is a key element of Germany's climate financing and the funding commitments in the framework of the Convention on Biological Diversity.
- It will act as the conduit for bringing diverse voices and needs to adopt an integrated approach for greening the transport sector in India.

What are nationally determined contributions (NDC)?
- Nationally determined contributions (NDCs) are at the heart of the Paris Agreement and the achievement of these long-term goals.
- NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.
- India's INDC **(Intended Nationally Determined Contribution)** target had stated that its emissions intensity (i.e. CO_2 emissions per unit of GDP) will be 33-35% lower in 2030 compared to the 2005 figure, and also that India's power generating capacity (and not generation) from non-fossil sources will be 40% of the total capacity.

45. New Algal Species:
- Recently, a group of botanists has discovered an algal species with an 'umbrella head' from the Andaman and Nicobar Islands.
- The Andaman and Nicobar Islands are home to Coral Reefs and are rich in marine biodiversity.
- In March 2021 two new red algal Seaweed species were discovered along India's coastline.
- Named after the imaginary sea mermaid, Acetabularia jalakanyakae is very primitive and is a single-cell organism.
- It is a bright green algae with a size as small as 20 to 40 mm.
- Jalakanyaka in Sanskrit literally means mermaid and a goddess of oceans.
- It is the first species of the genus Acetabularia discovered in India.
- It resembles an umbrella or a mushroom. It has grooves on its cap measuring 15 to 20 mm in diameter.
- It is made up of one gigantic cell with a nucleus. Its nucleus forms a rhizoid structure, which facilitates the algae to attach itself to shallow rocks. It is highly regenerative in nature.
- Rhizoids are a structure in plants and fungi that functions like a root in support or absorption.

Algae:
- **Algae** are defined as a group of predominantly aquatic, photosynthetic, and nucleus-bearing organisms that lack the true roots, stems, leaves, and specialized multi-cellular reproductive structures of plants.
- Their photosynthetic pigments are more varied than those of plants, and their cells have features not found among plants and animals.
- They have ecological roles as oxygen producers and as the food base for almost all aquatic life.
- They are economically important as a source of crude oil and as sources of food and a number of pharmaceutical and industrial products for humans. The study of algae is called Phycology.

46. Controversy related to Malabar Rebellion:
- Recently, the Indian **Council for Historical research (ICHR**) has constituted a three-member committee to review the entries in the book Dictionary of Martyrs: India's Freedom Struggle 1857-1947, which was released by the Prime Minister on 7th March 2019.
- The book contains an account of the martyrs from India's First War of Independence in 1857, to India's Independence in 1947. The project for its compilation was commissioned by the Ministry of Culture to ICHR to commemorate the 150th anniversary of the uprising of 1857.
- A review report submitted to the Indian Council of Historical Research (ICHR) by one of its members in 2016 had recommended the delisting 387 names including victims of Wagon Tragedy and Malabar/Moplah Rebellion leaders Ali Musliyar and Variamkunnath Ahmad Haji from the Dictionary of Martyrs.
- The year 2021 will mark the 100th year anniversary of the Malabar rebellion of 1921.
- There has been recent controversy on a film being released on this issue.

Issues involved:
- The review report of 2016 noted that "almost all the Moplah outrages were communal. They were against the Hindu society and done out of sheer intolerance."
- The report also said that none of those who died in the Wagon Tragedy were freedom fighters of India as they hoisted the Khilafat flag and established Khilafat and Khilafat courts for a brief period.
- Issue of forced conversion of Hindus into Islam by the leaders of the rebellion were also raised by many organizations.
- However, many historians view this as a one of the first cases of nationalist uprisings in Southern India.

Malabar Rebellion or Moplah Uprising or Mapillah Revolt (1921):

- The trigger of the uprising came from the Non-Cooperation Movement launched by the Congress in 1920 along with the Khilafat agitation.
- The anti-British sentiment fuelled by these agitations affected the **Muslim Mapillahs** (also known as **Moplahs**) of south Malabar region of Kerala.

New Tenancy Laws:
- After the death of Tipu Sultan in 1799 in the Fourth Anglo-Mysore War, Malabar had come under British authority as part of the Madras Presidency.
- The British had introduced new tenancy laws that tremendously favoured the landlords known as Janmis and instituted a far more exploitative system for peasants than before.
- The new laws deprived the peasants of all guaranteed rights to the land, share in the produce they earlier got and in effect rendered them landless.
- The Communal Angle: Most of the landlords were Namboodiri Brahmins while most of the tenants were Mapillah Muslims.

47. Kilauea Volcano: Hawaii:
- Recently, a surge of earthquakes and the ground swelling at the southern part of the crater was noticed at Hawaii's Kilauea volcano.
- A volcano is an opening on the surface that allows material warmer than its surroundings to escape from its interior.

About Kilauea Volcano:
- It overlaps the E flank of the Mauna Loa shield volcano.
- It is located the southeastern-most volcano in Hawaii.
- Its East Rift Zone (ERZ) has been intermittently active for at least 2,000 years.
- It is the second-youngest product of the Hawaiian hotspot and the current eruptive center of the Hawaiian–Emperor seamount chain.

Formation of Kilauea Volcano:
- It was created as the Pacific tectonic plate moved over the Hawaiian hotspot in the Earth's underlying mantle.
- The Hawaii Island volcanoes are the most recent evidence of this process that, over 70 million years, has created the 6,000 km (3,700 mi)-long Hawaiian–Emperor seamount chain.
- It is one of five subaerial volcanoes that make up the island of Hawaii, created by the Hawaiian hotspot.
- Kīlauea started as a submarine volcano, gradually building itself up through underwater eruptions of alkali basalt lava before emerging from the sea with a series of explosive eruptions.
- Reasons for Volcanic Eruption:
- There are three types of volcanoes i.e. active, dormant or extinct.
- An eruption takes place when magma (a thick flowing substance), that is formed when the earth's mantle melts, rises to the surface.
- As magma is lighter than rock, it is able to rise through vents and fissures on the surface of the earth.
- The molten magma is called Lava after eruption takes place.
- The explosiveness of volcano is dependent on the composition of magma which means:
- When the magma is runny and thin, gases can easily escape it and the magma will flow out towards the surface.
- If the magma is thick and dense and gases cannot escape it, it builds up pressure inside resulting in a violent explosion.

Kilauea volcano
People forced to flee as lava flows in residential areas

48. Milky Sea Phenomenon:
- The milky sea is caused by bioluminescent bacteria, billions of trillions of them, that live throughout the water column from the surface to the sea floor. This phenomenon is called mareel.
- Bioluminescence is light produced by a chemical reaction within a living organism.
- Recently, the scientists are using new satellite technology Day/Night Band to find glow-in-the-dark milky seas.
- About two or three milky seas occur per year worldwide, mostly in the waters of the northwest Indian Ocean and off the coast of Indonesia.
- Sometimes exceeding 1,00,000 km2 in surface area, it persists for days to weeks, drifting within doldrums amid the prevailing sea-surface currents and aligning with narrow ranges of sea-surface temperature and marine biomass in a way that suggests water mass isolation.
- Causes:
- Arises from a saprophytic relationship between luminous bacteria and microalgae that expresses on the macroscale.
- A strain of luminous bacteria called Vibrio harveyi colonizing algae at the water's surface has been found.

49. SAMVAD Initiative:
- Recently, the Ministry of Women and Child Development has launched the 2nd phase of the SAMVAD programme.
- SAMVAD is a National Initiative & Integrated Resource for Child Protection, Mental Health, & Psychosocial Care), Dept. of Child and Adolescent Psychiatry, National Institute of Mental Health And Neuro Sciences (NIMHANS), Supported by Ministry of Women & Child Development, Government of India.
- The programme is aimed at mental health outreach for children who are abandoned and orphaned, child survivors of trafficking, or in conflict with law.
- Earlier, the government had announced a special "PM-CARES for Children" scheme for all those orphaned due to Covid-19.
- SAMVAD stands for Support, Advocacy & Mental health interventions for children in Vulnerable circumstances and Distress.
- Implementing Body is led by the National Institute of Mental Health and Neuro Sciences (NIMHANS).

50. Shankaracharya Temple of Srinagar:

- Recently, the holy Silver Mace of Lord Shiva 'Chhari-Mubarak' was taken to historic Shankaracharya Temple in the summer capital, Srinagar.
- It is amongst the top religious attractions in Srinagar dedicated to Lord Shiva.
- It is named after the great philosopher Shankarcharya, who once visited Kashmir.
- It is on top of the Shankaracharya Hill (also called Hill of Solomon) on the Zabarwan Mountain in Srinagar, Kashmir.
- The Hindu temple enjoys a strategic location from where devotees and tourists can see a panoramic view of Srinagar City.
- It is also known as Jyeshteshwara Temple.
- It is accessible by a staircase of 243 steps and is visited by a large number of Hindu devotees during the Amarnath Yatra season.

Shankaracharya:
- He was also known as Adi Shankara. Born in Kaladi, Kerala in 788 CE.
- Propounded the Doctrine of Advaita (Monism) and wrote many commentaries on the Vedic canon (Upanishads, Brahma Sutras and Bhagavad Gita) in Sanskrit.

Major Works:
1. Brahmasutrabhasya (Bhashya or commentary on the Brahma Sutra).
2. Bhajagovinda Stotra.
3. Nirvana Shatakam.
- He was responsible for reviving Hinduism in India to a great extent when Buddhism was gaining popularity.
- He established four Mathas in the four corners of India and the tradition continues to this day.

51. Al-Mohed Al–Hindi:
- Recently, the 'Al-Mohed Al–Hindi' is a maiden bilateral exercise between Indian Navy and Royal Saudi Naval Force commenced on the coast of Al Jubail. Indian Navy participated with its indigenously built stealth destroyer Kochi with two integral Sea King helicopters.
- It saw the two navies undertake co-ordinated action against asymmetric threat, replenishment at sea procedures, anti-piracy and boarding operations. Complex and collaborative exercises including weapon targeting drills beyond the horizon were also conducted to enhance synergy and inter-operability between the two navies.
- The decision on this Bilateral exercise was taken in the Riyadh Summit held in 2019.
- This exercise aims to carry out tactical manoeuvres, search and rescue operations, and an electronic warfare drill to enhance interoperability.
- It reflects the growing defense ties between the two countries in the midst of rapidly changing developments in the Gulf region.
- It will enhance bilateral cooperation and security in the Indian Ocean Region.

52. West Nile Virus Infections:
- Recently, Russia warned of a possible increase in West Nile Virus (WNV) Infections this autumn as mild temperatures and heavy precipitation create favourable conditions for the mosquitos that carry it.

About West Nile Virus (WNV):
- West Nile Virus (WNV) is a member of the flavivirus genus and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.
- West Nile Virus (WNV) was first isolated in a woman in the West Nile district of Uganda in 1937. It was identified in birds (crows and columbiformes) in Nile delta region in 1953.
- Before 1997 WNV was not considered pathogenic for birds, but at that time in Israel a more virulent strain caused the death of different bird species presenting signs of encephalitis and
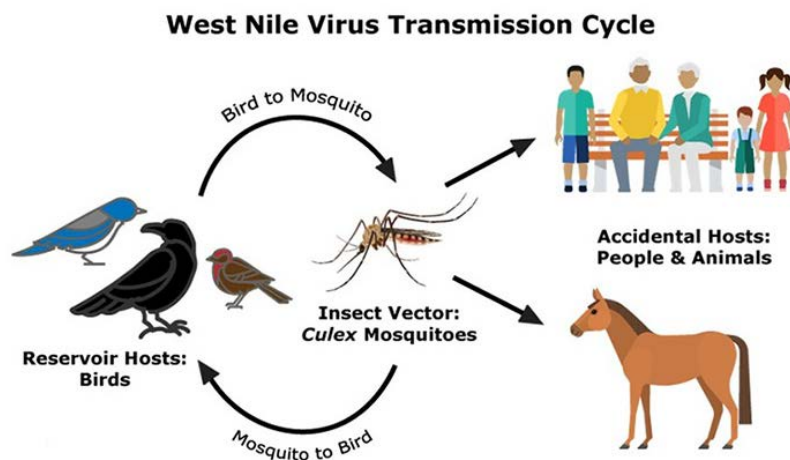
paralysis. Human infections attributable to WNV have been reported in many countries in the World for over 50 years.

- Till date, the largest outbreaks occurred in Greece, Israel, Romania, Russia and USA. Outbreak sites are on major birds migratory routes.

Key facts:

- West Nile virus can cause a fatal neurological disease in humans.
- However, approximately 80% of people who are infected will not show any symptoms.
- West Nile virus is mainly transmitted to people through the bites of infected mosquitoes.
- The virus can cause severe disease and death in horses.
- Vaccines are available for use in horses but not yet available for people.
- Birds are the natural hosts of West Nile virus.

West Nile Virus Transmission Cycle

Bird to Mosquito

Accidental Hosts:
People & Animals

Insect Vector:
Culex Mosquitoes

Reservoir Hosts:
Birds

Mosquito to Bird

53. Protest by the Chakma Community:

- Recently, the Chakma organisations have opposed the proposed deportation of 60,000 people belonging to the Chakma and Hajong communities from Arunachal Pradesh. They are ethnic people who lived in the Chittagong Hill Tracts, most of which are located in Bangladesh.
- Chakmas are predominantly Buddhists, while Hajongs are Hindus. They are found in northeast India, West Bengal, Bangladesh and Myanmar.
- They fled erstwhile East Pakistan (now Bangladesh) in 1964-65 and came to India and settled in Arunachal Pradesh.
- The Chakmas lost their land to the development of the Kaptai Dam on the Karnaphuli River, Bangladesh.
- Hajongs faced religious persecution as they were non-Muslims and did not speak Bengali.
- In 2015, the Supreme Court directed the Centre to grant citizenship to Chakma and Hajongs who had migrated from Bangladesh in 1964-69.
- They did not directly come into the ambit of the Citizenship Amendment Act, 2019 (CAA) because Arunachal Pradesh is among the states exempted from the CAA since it has an Inner Line Permit to regulate entry of outsider.
- The 2019 CAA amended the Citizenship Act of 1955 allowing Indian citizenship for Hindu, Sikh, Buddhist, Jain, Parsi, and Christian religious minorities who fled from the neighboring Muslim majority countries of Pakistan, Bangladesh and Afghanistan before December 2014 due to "religious persecution or fear of religious persecution". However, the Act excludes Muslims.

- Even as the original immigrants await citizenship, many of their descendants born in India who are eligible for citizenship by birth are struggling to enroll as voters. The refugees were given voting rights in 2004.
- For a very long time local people have been protesting against Chakmas and Hajongs because of their differing ethnicity. If the Chakmas and Hajongs are ejected from Arunachal Pradesh, Assam shall be the dumping ground for all the unwanted communities in the States covered by the Inner-Line Permit (Manipur, Mizoram and Nagaland besides Arunachal Pradesh) and the Sixth Schedule areas (Meghalaya).

54. Exercise Konkan-2021:
- Exercise Konkan-2021 is an Indo-UK Naval Exercise.
- It was held between INS Tabar and HMS Westminster on 16 August 2021 in the English Channel.
- The exercise included the participation of integral helicopters of the two ships and the Falcon Electronic Warfare aircraft. A wide range of exercises including co-ordinated anti-submarine procedures, firing drills, combined maritime picture compilation, combat formation maneuvering and replenishment at sea were conducted.
- These along with the diverse professional engagements held earlier in harbour, have enabled Exercise Konkan 2021 consolidate interoperability and helped cement the strong bonds of friendship the between the two navies.

55. Surangam Water Harvesting Structure:
- The surangam or suranga is usually found in northern Kerala and southern Karnataka.
- Surangam is basically a tunnel dug through a laterite hillock from the periphery of which water and moisture seeps out.
- Surangams are similar to Qanats which once existed in Mesopotamia and Babylon around 700 Before Common Era (BCE). By 714 BCE, this technology had spread to Egypt, Persia and India.
- Qanats are underground tunnel systems that bring infiltrated groundwater, surface water, or spring water to the earth's surface using only gravitational force.
- This system has been very effectively used for domestic and agriculture purposes in dry areas of northern Malabar.
- Some people believe the surangam is indigenous and a likely origin of the suranga system refers to 18 Karhada Brahmin families that had been moved to the Kasargod area from modern-day Maharashtra in the 17th century under duress.
- The Karez System of Afghanistan is in threat whereas a similar system named Surangam in South India is thriving.
- The karez system is a legacy of its Persian cultural moorings. It has suffered extensive damage in 43 years of war and stares at an uncertain future under the Taliban's second regime.
- Karez is a water harnessing technology in which groundwater is brought to the surface by a tunnel.
- In this system, no mechanical pump or lift is used. Gravity alone brings the water from the underground source.
- The technology originated in Persia/Iran and was widely used during the medieval period.

56. Madur Mats:
- Recently, two women from Sabang in West Bengal's Paschim Medinpur district have been given the National Handicraft Award in recognition of their outstanding contribution to the development of crafts.

- Gauri Rani Jana and Gauri Bala Das were honoured for their skills in making madur floor mats that are unique to West Bengal.

About Madur mats:
- These are an intrinsic part of the Bengali lifestyle.
- They are made of natural fibres.
- Around 74% of the weavers make hand woven mats and the remaining develop loom based products.
- Few of the traditional mat making families still retain the knowledge of weaving a fine variety of exclusive mats locally known as Masland or Mataranchi.
- WBKVIB (West Bengal Khadi & Village Industries Board) has taken up an initiative to develop skill, capacity and institutions of Madurkathi artisans, facilitate market linkage in order to augment their earnings and provide infrastructural support in Purba and Paschim Medinipur.
- Women Of the Households Are Involved In Weaving This beautiful craft.

About Masland:
- Masland is a fine quality madur mat, which takes weeks to weave.
- During the 18th century, Masland mats flourished under royal patronage.
- In 1744, Nawab Alibardi Khan issued a charter to land-owning jagirdar in this regard, and as a result, it was obligatory to supply Masland mats for use in the Collectorate.

Madurkathi:
- Madurkathi was awarded the geographical indication (GI) tag by the Geographical Indication Registry in April 2018.
- Madurkathi is a rhizome-based plant (Cyperus tegetum or Cyperus pangorei) found abundantly in the alluvial tracts of Purba and Paschim Medinipur.

57. **Cave Lion:**
- Recently, scientists have found two perfectly frozen cave lion cubs which lived 28,000 years ago. The lion cubs were found in Siberia's Permafrost in Russia and have been nicknamed Boris and Sparta.

About Cave Lion:
- Cave Lions (Panthera spelaea) are also known as European cave lions and Eurasian cave lions. They are an ancient big cat species that have been extinct for thousands of years.
- They belong to the genus of the prehistoric lions that originated during the Pleistocene epoch in what is now Europe.
- Furthermore, they are thought to be one of the largest species of the lion to have ever lived. Scientists believe that cave lions were as much as 10% larger than modern lions.
- Diet Behaviour: The Cave Lions were major predators, hunting ice age deer, bison, and other animals. These lions also were ambush predators, laying in wait and erupting out of the brush to tackle their prey with impressive speed, agility, and strength.
- However, like all cats, the Cave Lion could only chase prey over a short distance

Significance of these Findings:
- Findings like these in Russia's vast Siberian region have started happening more and more.
- This is because climate change is warming the Arctic at a faster pace than the rest of the world and has defrosted the ground in some areas long locked in permafrost.

58. Incel Movement:
- Recently, experts have warned that the 'incel' movement is slowly becoming a threat to law and order.
- The movement came into the spotlight yet again in the UK's Plymouth, where a 22-year-old man shot dead five people, including a toddler.

About Incel Movement:
- Incels are a large online community of men who describe themselves as "involuntary celibates".(Celibates means a person who abstains from marriage and sexual relations).
- Men who are part of this movement have a deep resentment towards both women and other men who are sexually active.
- They blame women for their own lack of sexual and social status. Moreover. an extreme section of Incels even advocates violence against women.

Black Pill and Red Pill Mentality:
- Black Pill theory often associated with incels promotes the defeatist idea that your fate is sealed at birth and no matter what changes you try to make, your sexual capital cannot be altered.
- On the other hand, Red Pill theory believes that the world is biased toward women, and sees feminism as female supremacy. They believe there is a systemic bias in favour of women.

59. Use of satellite phones in conservation of wildlife:
- Kaziranga(Assam) has become the first in the country to use satellite phones, which are generally used by the law-enforcing agencies.
- Kaziranga National Park is one of India's oldest reserve areas. It is located in Golaghat and Nagaon, in the Karbi Anglong district of Assam in northeast India. The park is administered by the forest department of the Assam State Government.
- The sanctuary, which hosts two-thirds of the world's great one-horned rhinoceroses, is a World Heritage Site.
- Kaziranga is home to the highest density of tigers among protected areas in the world and was declared a Tiger Reserve in 2006 (now the highest tiger density is in Orang National Park, Assam).

Significance of floods in Kaziranga's ecosystem:
- The entire area of Kaziranga — formed by alluvial deposits from the Brahmaputra and its tributaries — is centred on the river.
- There is a consensus that floods are necessary for Kaziranga by virtue of it being riverine ecosystem.
- The regenerative nature of floods helps replenish Kaziranga's water bodies and maintain its landscape, a mix of wetlands, grasslands and semi-evergreen deciduous forests.
- The floodwaters also function as a breeding ground for fish.
- The same fish are carried away by the receding waters into the Brahmaputra — in a way, the park replenishes the river's stock of fish too.
- The waters also help get rid of unwanted plants such as water hyacinth which collect in huge masses in the landscape.

60. Women in Combat Role in ITBP:
- Indo-Tibetan Border Police (ITBP) has inducted its first women officers in combat. On 8th August, 2021 ITBP commissioned its first two women officers in combat after they completed their training at the ITBP officers' training academy located in Mussoorie.

- A first-ever 'History of ITBP' book containing many unknown facts and photographs of the border guarding force was also released by Uttarakhand Chief Minister Pushkar Singh Dhami along with ITBP director general S. S. Deswal.

Indo-Tibetan Border Police Force:
- ITBP is a Central Armed Police Force functioning under the Ministry of Home Affairs, Government of India.
- Other Central Armed Police Forces are: Assam Rifles (AR), Border Security Force (BSF), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF), National Security Guards (NSG) and Sashastra Seema Bal (SSB).
- The ITBP was raised on 24th October, 1962 during the India-China War and is a border guarding police force specializing in high altitude operations.
- Presently, ITBP is deployed on border guarding duties from Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh covering 3488 km of Indo-China Border.
- The Force is also deployed for Anti Naxal operations and other internal security duties.
- ITBP was initially raised under the Central Reserve Police Force (CRPF) Act, 1949. However, in 1992, parliament enacted the ITBPF Act and the rules were framed in 1994.

61. SC Judgement on Preventive Detention:
- The Supreme Court (SC) ruled that a preventive detention order can only be passed if the detenu is likely to adversely affect the maintenance of public order. The Court also directed the government that the State should not arbitrarily resort to "preventive detention" to deal with all and sundry "law and order" problems, which could be dealt with by the ordinary laws of the country.
- Article 22 grants protection to persons who are arrested or detained. The article has two parts, the first part deals with the cases of ordinary law and the second part deals with the cases of preventive detention law.
- The 44th Amendment Act of 1978 has reduced the period of detention without obtaining the opinion of an advisory board from three to two months. However, this provision has not yet been brought into force, hence, the original period of three months still continues.

62. Eighth Schedule of the Indian Constitution:
- The Eighth Schedule to the Constitution consists of the following 22 languages:
- Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi,Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili and Dogri.

The Constitutional provisions related to the Eighth Schedule are:
- **Article 344:** Article 344(1) provides for the constitution of a Commission by the President on expiration of five years from the commencement of the Constitution.
- **Article 351:** It provides for the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India. However, It can be noted that there is no fixed criteria for any language to be considered for inclusion in the Eighth Schedule.

63. Mission Karmayogi:
- Recently, the Union government has rolled out the long overdue reform of the Indian bureaucracy. Mission Karmayogi' - the National Programme for Civil Services Capacity Building (NPCSCB) aims to transform capacity-building in the bureaucracy through institutional and process reforms.

- Mission Karmayogi' envisages to prepare Indian civil servants for the future by making them more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled.
- The mission has been so designed that it remains entrenched in Indian Culture and sensibilities while drawing learning resources from the best institutions and practices from across the world.
- Need of The Mission
- There is a need to develop domain knowledge besides administrative capacity in the bureaucracy.
- There is a need to formalize the recruitment process and match the public service to a bureaucrat's competence, so as to find the right person for the right job.
- The plan is to begin right at the recruitment level and then invest in building more capacity through the rest of their career.
- As the Indian economy grows, it will get more complex to govern; the governance capacities will have to be enhanced proportionately which this reform undertakes.
- The reforms in the Indian bureaucracy is the need of the hour and It is a major reform undertaken in recent years to transform it.

Major Administrative Reforms:

Lateral Entry:
- This is significant because contemporary times require highly skilled and motivated individuals at the helm of administrative affairs, without which public service delivery mechanisms do not work smoothly.
- Lateral Entry helps in bringing the values of economy, efficiency, and effectiveness in the Government sector. It will help in building a culture of performance within the Government sector.

e-Samiksha:
- A real time online system for monitoring and follow up action on the decisions taken by the Government at the Apex level in respect of implementation of important Government programmes/projects.
- It is a digital monitor for bureaucracy to rein in slackers.

e-Office:
- e-Office Mission Mode Project (MMP) has been strengthened for enabling Ministries/Departments to switch over to paperless office and efficient decision making.

Citizen Charters:
- Government has mandated Citizen Charters for all Ministries/Departments which are updated and reviewed on a regular basis.
- It is a written document that spells out the service provider's efforts taken to focus on their commitment towards fulfilling the needs of the citizens/customers.

Good Governance Index 2019:
- It assesses the Status of Governance and impact of various interventions taken up by the State Government and Union Territories (UTs).
- The objectives of GGI are to provide quantifiable data to compare the state of governance in all States and UTs, enable States and UTs to formulate and implement suitable strategies for improving governance and shift to result oriented approaches and administration.
- It has been launched by the Ministry of Personnel, Public Grievances & Pensions.

National Conference on e-Governance:
- It provides a platform for the government to engage with experts, intellectuals from industry and academic institutions to exchange experiences relating to e-Governance initiatives.

- In 2020, the 23rd National Conference on e-Governance was organised by the Department of Administrative Reforms and Public Grievances (DARPG) along with the Ministry of Electronics and Information Technology (MeitY) in Mumbai.

Centralized Public Grievance Redress and Monitoring System (CPGRAMS):
- It is an online web-enabled system developed by National Informatics Centre (Ministry of Electronics & IT [MeitY]), in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG).
- The CPGRAMS provides the facility to lodge a grievance online from any geographical location. It enables the citizen to track online the grievance being followed up with Departments concerned and also enables DARPG to monitor the grievance.

National e-Governance Service Delivery Assessment:
- It aims at assessing the States, UTs and Central Ministries on the efficiency of e-Governance service delivery.
- Comprehensive restructuring of the Scheme for 'Prime Minister's Awards for Excellence in Public Administration' in 2014 and thereafter in 2020.

Administrative Reforms Commission:
- The **ARC** is set up by the Government of India to review the public administration system and give recommendations to improve it.
- The first ARC (1966) was headed by Morarji Desai initially and later by K. Hanumanthaiah. The second ARC constituted in 2005 was chaired by Veerappa Moily.

64. Governor's Pardon Power Overrides 433A: SC
- Recently, The Supreme Court held that the Governor of a State can pardon prisoners even before they have served a minimum of 14 years of a prison sentence.
- **Section 433-A of the Criminal Procedure Code** mandates that a prisoner's sentence can be remitted only after 14 years of jail.
- The SC has noted that the constitutional power conferred on the President/Governor to grant pardon under Articles 72 or 161 of the Constitution overrides the provisions under Section 433A of the Code.

Pardoning powers of the Governor:
- **Pardon:** it means completely absolving the person of the crime and letting him go free. The pardoned criminal will be like a normal citizen.
- **Commutation:** it means changing the type of punishment given to the guilty into a less harsh one, for example, a death penalty commuted to a life sentence.
- **Reprieve:** it means a delay allowed in the execution of a sentence, usually a death sentence, for a guilty person to allow him some time to apply for Presidential Pardon or some other legal remedy to prove his innocence or successful rehabilitation.
- **Respite:** it means reducing the quantum or degree of the punishment to a criminal given some special circumstances, like pregnancy, mental condition etc.
- **Remission:** it means changing the quantum of the punishment without changing its nature, for example reducing twenty-year rigorous imprisonment to ten years.

65. 100 Years of Madras Legislative Council:
- Recently, the President addressed the commemoration of the 100th year of the Tamil Nadu Assembly, formerly known as the **Madras Legislative Council (MLC)** in Chennai.
- It was Madras Legislative Council was set up in 1921 under the Government of India Act 1919.
- The term of the Council was for a period of three years. It consisted of 132 Members of which 34 were nominated by the Governor and the rest were elected.
- It met for the first time on the 9th January 1921 at Fort St. George, Madras.

- The Council was inaugurated by the Duke of Cannaught, a paternal uncle of the King of England, on the 12th January 1921 on the request made by the Governor Wellington.
- The Second and Third Councils, under this Act were constituted after the general elections held in 1923 and 1926 respectively.
- The fourth Legislative Council met for the first time in November 1930 after the general elections held during the year and its life was extended from time to time and it lasted till the provincial autonomy under the Government of India Act, 1935 came into operation.
- Abolition of the **Devadasi system**, widow remarriage, mid-day meals in schools and distribution of agricultural land to the landless were some of the revolutionary ideas that transformed the society.

66. Constitution (Scheduled Tribes) Order (Amendment) Act, 2021:

- Recently, the Rajya Sabha has passed the Constitution (Scheduled Tribes) Order (Amendment) Bill, 2021. It provides for modifying Part-XVIII of the Schedule to the Constitution (Scheduled Tribes) Order, 1950, relating to the state of Arunachal Pradesh.
- It seeks to amend the constitutional list of Scheduled Tribes as recommended by Arunachal Pradesh.
- At present, there are **18 communities** with their synonyms appearing in the illustrative list of Scheduled Tribes in respect of the state of Arunachal Pradesh.
- This amendment in the list of Scheduled Tribes, relating to the state of Arunachal Pradesh, will entail no additional recurring expenditure from the Consolidated Fund of India, on account of benefits likely to be provided to persons belonging to the communities proposed in the Bill.
- The **Ministry of Tribal Affairs** is funding the welfare of 10.45 crores of Scheduled Tribes population (Census, 2011).
- Further, the **Scheduled Tribes** are also eligible for benefits under the Scheduled Tribes Component (STC) of schemes under the central government and state governments.
- The basic objective of Schedule Tribe Component is to channelize/monitor the flow of outlays and benefits from the general sectors in the Central Ministries/Departments for the development of Scheduled Tribes at least in proportion to their population.
- The Bill removes the Abor tribe from the list of identified STs in Arunachal Pradesh.
- It replaces certain STs with other tribes (as indicated below):

Original list	Changes under the Act
Abor	Deleted from the list
Khampti	Tai Khamti
Mishmi, Idu, and Taroan	Mishmi-Kaman (Miju Mishmi), Idu (Mishmi), and Taraon (Digaru Mishmi)
Momba	Monpa, Memba, Sartang, and Sajolang (Miji)
Any Naga Tribes	Nocte, Tangsa, Tutsa, and Wancho

67. Constitutional (127th) Amendment Bill, 2021:

- The Constitution (One Hundred and Twenty-Seventh Amendment) Bill, 2021 was introduced in Lok Sabha by the Minister of Social Justice and Empowerment, Dr. Virendra Kumar, on August 9, 2021. The Bill amends the Constitution to allow states and union territories to prepare their own list of socially and educationally backward classes.
- List of socially and educationally backward classes: The National Commission for Backward Classes (NCBC) was established under the National Commission for Backward Classes Act, 1993. The Constitution (One Hundred and Second Amendment) Act, 2018 gave constitutional status to the NCBC, and empowered the President to notify the list of socially and educationally backward classes for any state or union territory for all purposes.
- The 2021 Bill amends this to provide that the President may notify the list of socially and educationally backward classes only for purposes of the central government. This central list will be prepared and maintained by the central government. Further, the Bill enables states and union territories to prepare their own list of socially and educationally backward classes. This list must be made by law, and may differ from the central list.
- Consultation with the NCBC: Article 338B of the Constitution mandates the central and state governments to consult the NCBC on all major policy matters affecting the socially and educationally backward classes. The Bill exempts states and union territories from this requirement for matters related to preparation of their list of socially and educationally backward classes.

68. E-Prison Project:

- This project aims at computerization of the functioning of prisons in the country. It has been operationalised in all States and Union Territories.
- e-Prisons data has been integrated with the Police and Court system under the Inter-operable
- Criminal Justice System.
- ePrisons application suite has been developed by National Informatics Centre (NIC), Ministry of Electronics & IT (MeitY).

It has 3 components:

- **e-Prison Management Information System (MIS):** It is used at the prisons for their day to day regular activities.
- **National Prisons Information Portal:** It is a citizen centric portal showing statistical data of various prisons in the country.
- **Kara Bazaar:** Portal for showcasing and selling the products manufactured in various prisons of the country by inmates.

Inter-operable Criminal Justice System:

- It is a common platform for information exchange and analytics of all the pillars of the criminal justice system comprising Police, Forensics, Prosecution, Courts, Prisons.
- Purpose: To reduce errors and time taken in sharing of necessary information between the pillars, which often lead to larger challenges like longer duration of trials, poorer convictions, transit losses of documents etc.
- Some other critical benefits arising out of the ICJS ecosystem are usable analytics products like the National Database on Sexual Offenders (NDSO) to identify & track repeat and habitual sexual offenders.

69. The Adivasi self-governance system in Jharkhand:

- After the introduction of the Bihar Panchayat Raj System (BPRS) in 1947, these Adivasi traditional governance systems became weak.
- BPRS was formed keeping the non-Adivasi areas in view.

- As a result, due to the non-priority and neglect, the process of the traditional governance system was affected.
- This was aggravated by industrialisation, displacement of Adivasis and urbanisation.

70. Panchayat Extension to Scheduled Areas (PESA) Act, 1996:

- To promote local self-governance in rural India, the 73rd constitutional amendment was made in 1992.
- Through this amendment, a three-tier Panchayati Raj Institution was made into a law.

India's Tribal Policy:
- In India, most of the tribes are collectively identified under Article 342 (1&2) as "Scheduled Tribes".
- Their right to self-determination is guaranteed by Part X: The Scheduled and Tribal Areas – Article 244: Administration of Scheduled Areas and Tribal Areas.
- That is, Fifth and Sixth Schedules of the Indian Constitution.
- The Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996 or PESA.

71. Faceless Assessment Scheme: Income Tax:

- The Central Government introduced the Faceless Assessment Scheme to provide greater transparency, efficiency and accountability in Income Tax assessments.
- All provisions introduced under Faceless Assessment, under the Income Tax Act, 1961, are introduced to
1. Eliminate the interface between the Assessing Officer and the assesses during the course of proceedings, to the extent that is technologically feasible;
2. Optimize the utilization of resources through the economies of scale and functional specialization; and
3. Introduce a team-based determination of arm's length price with dynamic jurisdiction.

The CBDT would set up the below 'centres' and 'units' and specify their respective jurisdiction:
1. A 'National e-Assessment Centre' to facilitate and centrally control the e-assessment.
2. 'Regional e-Assessment Centres' under the jurisdiction of the regional Principal Chief Commissioner for making assessment.
3. 'Assessment units' for identifying points or issues, material for the determination of any liability (including refund), analysing information, and such other functions.
4. 'Verification units' for enquiry, cross verification, examination of books of accounts, witness and recording of statements, and such other functions.
5. 'Technical units' for technical assistance including any assistance or advice on legal, accounting, forensic, information technology, valuation, audit, transfer pricing, data analytics, management or any other technical matter.
6. 'Review units' for reviewing the draft assessment order to check whether the facts, relevant evidence and law and judicial decisions have been considered in the draft order.

72. Doing Away With Retrospective Taxation:

- Retrospective Taxation allows a country to pass a rule on taxing certain products, items or services and deals and charge companies from a time behind the date on which the law is passed.
- Countries use this route to correct any anomalies in their taxation policies that have, in the past, allowed companies to take advantage of such loopholes.
- Apart from India, many countries including the USA, the UK, the Netherlands, Canada, Belgium, Australia and Italy have retrospectively taxed companies.

Proposed changes in the Taxation Laws (Amendment) Bill:

- The Bill says that it is argued that such retrospective amendments militate against the principle of tax certainty and damage India's reputation as an attractive destination.
- The country today stands at a juncture when quick recovery of the economy after the COVID-19 pandemic is the need of the hour and foreign investment has an important role to play.
- The Bill proposes to do away with retrospective taxation on the sale of assets in India by foreign entities executed before May 2012, with a caveat, the companies that will benefit from the amendment must withdraw all legal cases against the government and forfeit interest, costs and any damages.
- The government, on its part, is willing to refund any tax dues it may have collected or seized.

73. e-RUPI: Voucher Based Digital Payment System:

- **e-RUPI** is a digital solution launched by the Hon'ble PM via video conferencing to allow cashless payment solution for COVID-19 vaccination. The digital payment solution has been developed with the support of DFS (Department of Financial Services) and NHA (National Health Authority) and is powered by National Payments Corporation of India (NPCI).
- This seamless one-time payment mechanism enables users to redeem the voucher without a card, digital payments app or internet banking access, at the merchants accepting UPI e-Prepaid Vouchers. The e-RUPI **would be shared** with the beneficiaries for a specific purpose or activity by organizations via **SMS or QR code.**
- This contactless e-RUPI is easy, safe and secure as it keeps the details of the beneficiaries completely confidential. The entire transaction process through this voucher is relatively faster and at the same time reliable, as the required amount is already stored in the voucher.
- e-RUPI should not be confused with Digital Currency which the Reserve Bank of India is contemplating. Instead e-RUPI is a person specific, even purpose specific digital voucher.

How is e-RUPI advantageous to the Consumer?

- e-RUPI does not require the beneficiary to have a bank account, a major distinguishing feature as compared to other digital payment forms. It ensures an easy, contactless two-step redemption process that does not require sharing of personal details either.
- Another advantage is that e-RUPI is operable on basic phones also, and hence it can be used by persons who do not own smart-phones or in places that lack internet connection.

What are the benefits of e-RUPI for the sponsors?

- e-RUPI is expected to play a major role in strengthening Direct-Benefit Transfer and making it more transparent. Since, there is no need for physical issuance of vouchers, it will also lead to some cost savings as well.

What benefits accrue to the Service Providers?

- Being a prepaid voucher, e-RUPI would assure real time payments to the service provider.

Which Banks issue e-RUPI?

- NPCI has partnered with 11 banks for e-RUPI transactions. They are Axis Bank, Bank of Baroda, Canara Bank, HDFC Bank, ICICI Bank, Indian Bank, IndusInd Bank, Kotak Mahindra Bank, Punjab National Bank, State Bank of India and Union Bank of India.
- The acquiring Apps are Bharat Pe, BHIM Baroda Merchant Pay, Pine Labs, PNB Merchant Pay and YoNo SBI Merchant Pay.
- More banks and acquiring Apps are expected to join the e-RUPI initiative soon.

Where can e-RUPI be used now?

- To begin with NPCI has tied up with more than 1,600 hospitals where e-RUPI can be redeemed.
- Experts say, in the days to come the user base of e-RUPI is expected to widen, with even private sector using it to deliver employee benefits and MSMEs adopting it for Business to Business (B2B) transactions.

74. Pradhan Mantri Kisan SAMPADA Yojana:

- PM Kisan SAMPADA Yojana is a comprehensive package which will result in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. It will not only provide a big boost to the growth of food processing sector in the country but also help in providing better returns to farmers and is a big step towards doubling of farmers income, creating huge employment opportunities especially in the rural areas, reducing wastage of agricultural produce, increasing the processing level and enhancing the export of the processed foods.
- The following schemes will be implemented under PM Kisan SAMPADA Yojana:
1. Mega Food Parks
2. Integrated Cold Chain and Value Addition Infrastructure
3. Creation/ Expansion of Food Processing/ Preservation Capacities (Unit Scheme)
4. Infrastructure for Agro-processing Clusters
5. Creation of Backward and Forward Linkages
6. Food Safety and Quality Assurance Infrastructure
7. Human Resources and Institutions
- PM Kisan SAMPADA Yojana is expected to leverage investment of Rs. 31,400 crore for handling of 334 lakh MT agro-produce valued at Rs. 1,04,125 crore, benefiting 20 lakh farmers and generating 5,30,500 direct/indirect employment in the country by the year 2019-20.

75. National Mission on Edible Oil-Oil Palm:

- NMEO-OP is a new Centrally Sponsored Scheme. It is proposed to have an additional 6.5 lakh hectares for palm oil by 2025-26.
- It will involve raising the area under oil palm cultivation to 10 lakh hectares by 2025-26 and 16.7 lakh hectares by 2029-30.
- Oil palm farmers will be provided financial assistance and will get remuneration under a price and viability formula.
- The Viability Formula is a Minimum Support Price-type mechanism and the government will fix this at 14.3% of Crude Palm Oil (CPO) price.
- It will eventually go up to 15.3%.
- Another focus area of the scheme is to substantially increase the support of inputs/interventions.
- Special assistance will be given to replant old gardens for their rejuvenation.

Special Focus:
- The special emphasis of the scheme will be in India's North-Eastern (NE) states and the Andaman and Nicobar Islands due to the conducive weather conditions in the regions.
- To attract industry to the NE and Andaman regions, a provision of Rs 5 crore of 5 mt/hr (million tonne per hectare) with pro-rata increase for higher capacity will be given.

Objective:
- To harness domestic edible oil prices that are dictated by expensive palm oil imports and become self-reliant in edible oil.
- To raise the domestic production of palm oil by three times to 11 lakh MT by 2025-26.

76. Annual Public Enterprises Survey:

- Recently, the 60th Public Enterprises (PE) Survey 2019-20 was released by the Department of Public Enterprises (DPE), Ministry of Finance.
- It is the single largest source of information on Central Public Sector Enterprises (CPSEs) and acts as a basis for informed policy making.

- The government has reallocated the Department of Public Enterprises (DPE) to the finance ministry from the ministry of heavy industries.
- PE Survey is a 100% enumeration of the CPSE universe. It captures essential statistical data for all CPSEs on various financial and physical parameters.

PE Survey divides CPSEs into five sectors namely:
1. Agriculture
2. Mining & Exploration
3. Manufacturing, Processing & Generation
4. Services
5. Enterprises Under Construction
- The Department of Public Enterprises (DPE) started bringing out the Public Enterprises Survey from the financial year 1960-61 on the recommendations of the Estimates Committee of the 2nd Lok Sabha, 73rd report (1959-60).

78. Open Acreage Licensing Programme:
- The Hydrocarbon Exploration and Licensing Policy (HELP) replacing the erstwhile New Exploration Licensing Policy (NELP) was approved in March 2016 and the Open Acreage Licensing Policy (OALP) along with the National Data Repository (NDR) were launched in June 2017 as the key drivers to accelerate the Exploration and Production (E&P) activities in India.
- Under OALP, companies are allowed to carve out areas they want to explore oil and gas in. Companies can put in an expression of interest for any area throughout the year but such interests are accumulated thrice in a year. The areas sought are then put on auction.
- The successful roll-out of the HELP regime, followed by OALP Bid Rounds, has led to an increase in exploration acreages in India.
- The exploration acreage which stood at about 80,000 sq. km. from earlier regimes now stands at approx. 2,37,000 sq. km., post the award of blocks under OALP Round-V.
- The OALP has helped in removing red-tapism and brought in a quantum jump in the Exploration & Production sector.

Concerns:
- Inadequate Role of Private Players: State-owned Oil and Natural Gas Corp (ONGC) and Oil India (OIL) have won all the 11 blocks offered in the latest bidding round for oil and gas exploration blocks.
- The lack of interest from private players in recent rounds of OALP bidding has been a result of a lack of policy clarity from the government and unsuitable taxation and regulatory conditions.
- A proposal by the Petroleum Ministry to reduce the oil cess charge on domestic production of crude has been rejected by the Finance Ministry.
- Limited Participation of Foreign Companies: India's efforts to attract foreign energy giants into hydrocarbon exploration and production haven't been quite fruitful.

79. Sovereign Right to Taxation:
- The government has decided to withdraw the retrospective taxation amendment in the I-T Act introduced in March 2012, by Pranab Mukherjee, the then Finance Minister in the UPA government.
- While scrapping the retrospective levy is believed to provide clarity to investors by removing a major source of ambiguity on taxation laws, the government has stressed the need to establish its "sovereign right to taxation".
- In India, the Constitution gives the government the right to levy taxes on individuals and organisations, but makes it clear that no one has the right to levy or charge taxes except by the

authority of law. Any tax being charged has to be backed by a law passed by the legislature or Parliament.
- Taxes in India come under a three-tier system based on the Central, State and local governments, and the Seventh Schedule of the Constitution puts separate heads of taxation under the Union and State list. There is no separate head under the Concurrent list, meaning Union and the States have no concurrent power of taxation, as per the document.

80. Indo-US Nuclear-Deal:
- Recently, the former foreign secretary of India, Vijay Gokhale in his book claimed that the Left parties in India were influenced by China in their decision to oppose the Indo-US nuclear deal.
- **NSG Waiver:** A major aspect of the Indo-US nuclear deal was the Nuclear Suppliers Group (NSG) gave a special waiver to India that enabled it to sign cooperation agreements with a dozen countries.
- SeparateProgrammes: It enabled India to separate its civilian and military programmes and placed its civilian nuclear facilities under the International Atomic Energy Agency (IAEA) safeguards.
- Transfer of Technology: It refrains India from transfer of enrichment and reprocessing technologies to states that do not have them and India should also support international efforts to limit their spread.

Nuclear Supplier Group:
- It is a group of nuclear supplier countries that seeks to contribute to the non-proliferation of nuclear weapons through the implementation of two sets of Guidelines for nuclear exports and nuclear-related exports.
- It was created following the explosion in 1974 of a nuclear device by a non-nuclear-weapon State (India), which demonstrated that nuclear technology transferred for peaceful purposes could be misused.
- The grouping has 48 participating governments and the NSG Guidelines are implemented by each member in accordance with its national laws and practices. The NSG takes decisions by consensus.

81. India Assumes UNSC Presidency:
- India began its two-year tenure as a non-permanent member of the UNSC in January 2021.This is India's eighth term on the UNSC.

United Nation Security Council
- The UNs Charter established six main organs of the UN, including the UNSC. Article 23 of the UN Charter concerns the composition of the UNSC.
- The other 5 organs of the UN are—the General Assembly, the Trusteeship Council, the Economic and Social Council, the International Court of Justice, and the Secretariat.
- The UNSC has been given primary responsibility for maintaining international peace and security and may meet whenever peace is threatened.
- While other organs of the UN make recommendations to member states, only the Security Council has the power to make decisions that member states are then obligated to implement under the Charter.
- The council is headquartered at NewYork.

Members:
- The UNSC is composed of 15 members, 5 permanent and 10 non-permanent.
- Five permanent members: China, France, the Russian Federation, the United Kingdom, and the United States.
- Ten non-permanent members: Elected for two-year terms by the General Assembly.

- Each year, the General Assembly elects five non-permanent members (out of ten in total) for a two-year term. The ten non-permanent seats are distributed on a regional basis.
- The council's presidency is a capacity that rotates every month among its 15 members.

82. Indian Base in Mauritius' Agalega Islands:

- In 2015, India signed an agreement with Mauritius for development of Agalega Islands.
- It provided for setting up and upgradation of infrastructure for improving sea and air connectivity enhancing capabilities of the Mauritian Defence Forces in safeguarding their interests in the Outer Island.
- However, since then, there have been growing reports over the Indian naval and coastguard's interests in setting up transponder systems and surveillance infrastructure, which has led to some local protests.
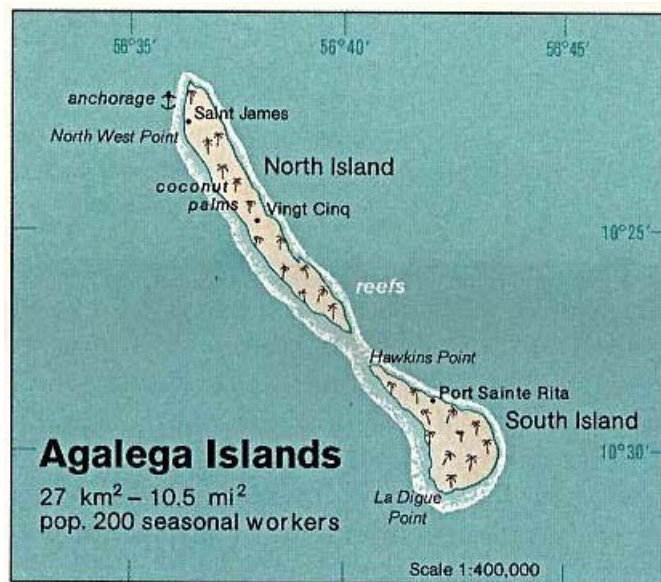
Agelega Project:
- Agelega project includes the construction of a jetty, rebuilding, and extension of the runway, and building an airport terminal on Agalega Island.
- The USD 87 million projects are funded by India.
- The project would add a new airport, port and logistics and communication facilities and potentially any other facilities related to the project.

About the Agalega Islands:
- The Agalega is a group of two small islands, the North island which is the main island, and the South Island, located in the Indian Ocean, 1122 Km (697 miles) north of Mauritius.Both islands are part of the territories and dependencies of the Republic of Mauritius.

83. UNSC Meet on Maritime Security:
- India, as the UNSC president for August 2021, noted the threats to maritime safety and security and called upon the members to consider implementing the 2000 UN Convention against Transnational Organized Crime.
- All the permanent members of UNSC (US, China, Russia, UK and France) attended the Meet.

UN Convention against Transnational Organized Crime (UNTOC):
- UNTOC is also known as the Palermo Convention since it was adopted in Palermo in Italy in 2000, entered into force in 2003. India joined UNTOC in 2002.

- The idea behind having an international convention against organized crime was that if crimes could cross borders, so must law enforcement.

United Nations Convention on the Law of the Sea (UNCLOS):
- The 'Law of the Sea Treaty', formally known as the United Nations Convention on the Laws of the Sea (UNCLOS) was adopted in 1982 to establish jurisdictional limits over the ocean areas.
- The convention defines distance of 12 nautical miles from the baseline as Territorial Sea limit and a distance of 200 nautical miles distance as Exclusive Economic Zone limit.
- India became a signatory to the UNCLOS in 1982.

84. Sanctions Imposed Against Belarus:
- The UK, the US and Canada have issued fresh trade, financial and aviation sanctions on Belarus, in a bid to increase pressure on the country's leader Alexander Lukashenko. The idea is to focus on the regime and Lukashenko's associates as precisely as possible and discourage Western companies from doing business with Belarus.
- The latest sanctions restrict exports of surveillance and military technology to Belarus.
- The sanctions partially ban imports of potash fertilizer, petrol and petrol-based products from Belarus.
- Europe's longest-serving ruler, President of Belarus (Lukashenko) took office in 1994 amid the chaos caused by the collapse of the Soviet Union in 1991.
- Often described as Europe's "last dictator", he has tried to preserve elements of Soviet communism.
- He has been in power for 26 years, keeping much of the economy in state hands, and using censorship and police crackdowns against opponents.
- In 2020, after Lukashenko was announced as the winner in elections, protests broke out in the capital, Minsk which were met with a violent security crackdown.

85. Collaboration of India, Sri Lanka and Maldives on Security:

- India, Sri Lanka and the Maldives have agreed to work on "four pillars" of security cooperation, covering areas of marine security, human trafficking, counter-terrorism, and cyber security, in a recent virtual meeting of top security officials of the three countries.
- The meeting which was held under the Colombo Security Conclave, saw Bangladesh, Seychelles and Mauritius participating in the role of observers.

Geostrategic Dynamic:
- **Sri Lanka:** Earlier this year, India aired security concerns over China being awarded development projects in an island off Sri Lanka's northern province, close to India's southern border.
- The Maldives's engagement with members of the India-United States-Japan-Australia grouping, known as the 'Quad', has been growing over the last year, especially in the area of defence cooperation.

86. Major Dhyan Chand Khel Ratna Award:
- Recently, the Rajiv Gandhi Khel Ratna Award hs been remaned as 'Major **Dhyan Chand Khel Ratna Award'**. It is the country's highest sporting honour, after hockey wizard Major Dhyan Chand.
- This came a day after the Indian men's hockey team won the bronze medal in the ongoing Tokyo Olympics and hours after the women's team finished fourth.
- The Rajiv Gandhi Khel Ratna Award will hereby be called the Major Dhyan Chand Khel Ratna Award.
- The now renamed Major Dhyan Chand Khel Ratna award comes with a cash prize of Rs 25 lakh.
- Rajiv Gandhi Khel Ratna Award is the highest sporting award given by the Ministry of Youth Affairs and Sports for the spectacular and most outstanding performance in the field of sports by a sportsperson over a period of four years.
- The award comprises a medallion, a certificate, and a cash prize of Rs 7.5 lakh.
- The Khel Ratna award was instituted in 1991-1992 and the first recipient was Chess legend Viswanathan Anand. Among the other winners were Leander Paes, Sachin Tendulkar, Dhanraj Pillay, Pullela Gopichand, Abhinav Bindra, Anju Bobby George, Mary Kom and Rani Rampal in 2020.

Major Dhyan Chand:
- Known as The Wizard, Major Dhyan Chand, a field hockey player, played international hockey from 1926 to 1949, scoring over 400 goals in his career.
- Dhyan Chand, born in Allahabad, was part of the Olympic team that won gold medals in 1928, 1932 and 1936.
- Apart from the Khel Ratna award, the country's highest award for lifetime achievement in sports is known as the Dhyan Chand Award. It was instituted in 2002.
- The National Stadium in New Delhi was also renamed as the Dhyan Chand National Stadium in 2002.
- The National Sports Day is observed every year across India on 29th August to mark the birth anniversary of Major Dhyan Chand who was born on 29th August 1905.
- The President of India on this occasion honours the eminent athletes from various sports with the prestigious Khel Ratna, Arjuna Awards, Dronacharya Awards, and Dhyan Chand Award.

Bharat Ratna Award:
- The Bharat Ratna (Jewel of India) was instituted in 1954. The highest civilian award is given in recognition of exceptional service, performance of the highest order in any field of human endeavour.
- The recommendations for the Bharat Ratna are made by the Prime Minister to the President with a maximum of three nominees being awarded per year.

- Recipients receive a Sanad (certificate) signed by the President and a peepal-leaf–Shaped medallion; there is no monetary grant associated with the award.
- The award does not carry any monetary grant. The award cannot be used as a prefix or suffix to the recipient's name.However, should an award winner consider it necessary, he or she may use the following expression in their biodata or letterhead or visiting card etc. to indicate that he or she is a recipient of the award: 'Awarded Bharat Ratna by the President' or 'Recipient of Bharat Ratna Award'.
- Bharat Ratna recipients rank seventh in the Indian order of precedence.

Padma Awards:
- The Padma Awards are one of the highest civilian honours of India announced annually on the eve of Republic Day. The award seeks to recognize achievements in all fields of activities or disciplines where an element of public service is involved.
- The Padma Awards are conferred on the recommendations made by the Padma Awards Committee, which is constituted by the Prime Minister every year. The nomination process is open to the public. Even self-nomination can be made.
- The Government of India instituted two civilian awards-Bharat Ratna & Padma Vibhushan in 1954. The latter had three classes namely Pahela Varg, Dusra Varg and Tisra Varg. These were subsequently renamed as Padma Vibhushan, Padma Bhushan and Padma Shri vide Presidential Notification issued on January 8, 1955.
- Padma Awards is announced every year on the occasion of Republic Day **except** for brief interruption(s) during the years 1978 and 1979 and 1993 to 1997.
- **The award is given in three categories, namely:**
1. Padma Vibhushan for exceptional and distinguished service;
2. Padma Bhushan for distinguished service of a high order; and
3. Padma Shri for distinguished service.

87. Provincial Status to Gilgit-Baltistan: Pakistan:
- Gilgit-Baltistan is one of the disputed territories of India.
- It is a chunk of high-altitude territory located on the north western corner of the Union Territory of Ladakh.
- It is located strategically as it borders Pakistan, Afghanistan and China.

Current Status:
- Gilgit-Baltistan is an autonomous region now and after the bill is passed, it will become the 5th province of the country.
- Currently, Pakistan has four provinces namely Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh.
- At present, it has been ruled mostly by executive orders.
- Until 2009, the region was simply called Northern Areas.
- It got its present name only with the Gilgit-Baltistan (Empowerment and Self-Governance) Order, 2009, which replaced the Northern Areas Legislative Council with the Legislative Assembly.

88. Forum of the Election Management Bodies of South Asia (FEMBoSA):

- Recently, Indian Space Research Organisation (ISRO) suffered the loss of an important earth observation satellite (EOS-03) during launch when the GSLV rocket carrying it malfunctioned about five minutes from the lift-off.

Earth Observation Satellites:

- Earth observation satellites are the satellites equipped with remote sensing technology. Earth observation is the gathering of information about Earth's physical, chemical and biological systems.
- Many earth observation satellites have been employed on sun-synchronous orbit.
- Other earth observation satellites launched by ISRO include RESOURCESAT- 2, 2A, CARTOSAT-1, 2, 2A, 2B, RISAT-1 and 2, OCEANSAT-2, Megha-Tropiques, SARAL and SCATSAT-1, INSAT-3DR, 3D, etc.

Geosynchronous Satellite Launch Vehicle (GSLV):

- GSLV is a space launch vehicle designed, developed, and operated by the ISRO to launch satellites and other space objects into Geosynchronous Transfer Orbits.
- Geosynchronous satellites are launched into orbit in the same direction the Earth is spinning and can have any inclination.
- GSLV has the capability to put a heavier payload in orbit than the Polar Satellite Launch Vehicle (PSLV).
- It is a three-stage launcher with strap-on motors.
- A **geostationary orbit** occurs when an object (satellite) is placed approximately 37,000 km (23,000 mi) above the Earth's equator with the characteristic that, from a fixed observation point on the Earth's surface, it appears motionless.
- A satellite is in an inclined orbit when its orbital plane is tipped some number of degrees from the horizontal defined by the equator.
- In the case of an inclined geosynchronous orbit, although the satellite remains geosynchronous (that is, completing one orbit around the earth every 24 hours), it is no longer geostationary.

- From a fixed observation point on Earth, it would appear to trace out a small ellipse as the gravitational effects of other stellar bodies (Sun and Moon) exhibit influence over the satellite, as the effect accumulates over time the trace becomes an analemma with lobes oriented north-southward. The satellite traces the same analemma once each sidereal day.
- A geostationary orbit is not stable. It takes regular maneuvers to actively counteract the above gravitational forces. The majority of the fuel of the satellite, typically hydrazine, is spent for this purpose. Otherwise, the satellite experiences a change in the inclination over time.
- At the end of the satellite's lifetime, when fuel approaches depletion, satellite operators may decide to omit these expensive maneuvers to correct inclination and only control eccentricity. This prolongs the life-time of the satellite as it consumes less fuel over time, but the satellite can then only be used by ground antennas capable of following the north-south movement, Satellite Tracking earth stations. Before the fuel comes to an end, satellites can be moved to a graveyard orbit to keep the geostationary altitude free for subsequent missions.
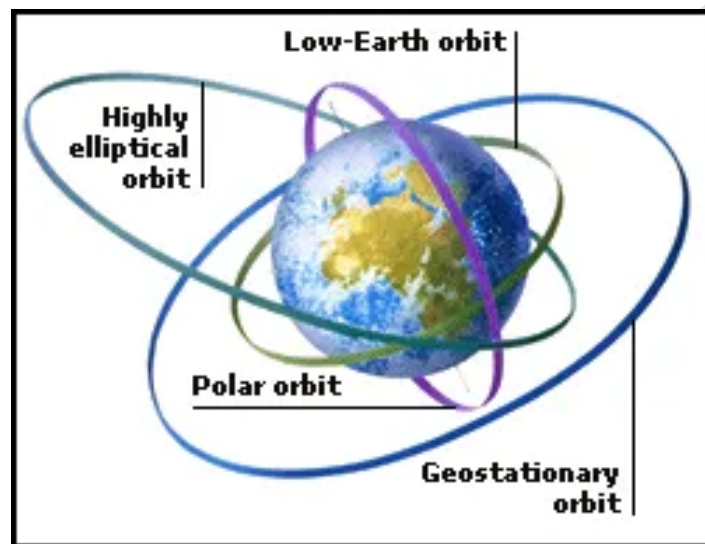
89. NASA's Boeing Starliner Spacecraft:
- The **Starliner**, which is supposed to carry more than 400 pounds of NASA cargo and crew supplies, will take roughly 24 hours to reach the ISS, after which it will dock there.
- The spacecraft has been designed to accommodate seven passengers or a mix of crew and cargo for missions to low-Earth orbit. The Boeing website says that for NASA service missions to the ISS, it will carry up to four NASA-sponsored crew members and time-critical scientific research.
- The main objective of NASA's **Commercial Crew Program** is to make access to space easier in terms of its cost, so that cargo and crew can be easily transported to and from the ISS, enabling greater scientific research.

90. Ashwagandha in Covid-19 Recovery:
- The Ministry of Ayush has collaborated with the U.K.'s London School of Hygiene and Tropical Medicine (LSHTM) to conduct a study on 'Ashwagandha' for promoting recovery from COVID-19.

About Ashwagandha:
- Ashwagandha (Withaniasomnifera) is a medicinal herb. It is reputed as an immunity enhancer.
- It is classified as an adaptogen, which means that it can help the body to manage stress.
- Ashwagandha also boosts brain function and lowers blood sugar and helps fight symptoms of anxiety and depression.
- Ashwagandha has shown clinical success in treating both acute and chronic rheumatoid arthritis.

- Rheumatoid arthritis (RA) is an autoimmune disease that can cause joint pain and damage throughout your body.
- An autoimmune disease is a condition in which your immune system mistakenly attacks your body.

91. Oil Spills:
- A new study has confirmed that Stimulating Bacteria (Bioremediation) with nutrients in the cold seawaters of the Canadian Arctic can help decompose diesel and Other Petroleum Oil after Oil Spills.

Major Causes:
- Oil spills have become a major environmental problem, chiefly as a result of intensified petroleum exploration and production on continental shelves and the transport of large amounts of oils in vessels.
- Oil spills that happen in rivers, bays and the ocean most often are caused by accidents involving tankers, barges, pipelines, refineries, drilling rigs and storage facilities, but also occur from recreational boats and natural disasters.

Environmental Impacts:
1. Threat to Indigenous people
2. Harmful to aquatic life
3. Hypothermia
4. Toxic
5. Threat to Mangroves

92. Four New Ramsar Sites: India's Wetlands:
- Four more wetlands from India – two from Haryana and two from Gujarat – have been recognised as Ramsar site of international importance, taking the number of such sites in the country to 46, covering a total area of 1,083,322 hectares. The Ramsar list aims to conserve an international network of wetlands that are important for sustaining biological diversity.

New Ramsar Sites:
- Bhindawas Wildlife Sanctuary, the largest wetland in Haryana is a human-made freshwater wetland.
- Sultanpur National Park from Haryana supports more than 220 species of resident, winter migratory and local migratory waterbirds at critical stages of their life cycles.
- Thol Lake Wildlife Sanctuary in Gujarat lies on the Central Asian Flyway and more than 320 bird species can be found here.
- Wadhwana Wetland from Gujarat is internationally important for its birdlife as it provides wintering ground to migratory waterbirds, including over 80 species that migrate on the Central Asian Flyway.

93. Ban on Single-Use Plastic:
- Recently, the Ministry Of Environment Forest And Climate Change has notified the Plastic Waste Management Amendment Rules, 2021.
- These rules prohibit specific single-use plastic items which have "low utility and high littering potential" by 2022.

New Rules:
- The manufacture, import, stocking, distribution, sale and use of the identified single-use plastic will be prohibited with effect from the 1st July, 2022.
- The ban will not apply to commodities made of compostable plastic.

- For banning other plastic commodities in the future, other than those that have been listed in this notification, the government has given industry ten years from the date of notification for compliance.
- The permitted thickness of the plastic bags, currently 50 microns, will be increased to 75 microns from 30th September, 2021, and to 120 microns from the 31st December, 2022.
- Plastic bags with higher thickness are more easily handled as waste and have higher recyclability.
- **Legal Framework for Banning Plastic:** Currently, the Plastic Waste Management Rules, 2016, prohibits manufacture, import, stocking, distribution, sale and use of carry bags and plastic sheets less than 50 microns in thickness in the country.
- Plastic Waste Management Amendment Rules, 2021 amend the 2016 rules.
- Implementing Agency: The Central Pollution Control Board, along with state pollution bodies, will monitor the ban, identify violations, and impose penalties already prescribed under the Environmental Protection Act, 1986.

Compostable Plastics:
- Instead of using plastic made from petrochemicals and fossil fuels, compostable plastics are derived from renewable materials like corn, potato, and tapioca starches, cellulose, soy protein, and lactic acid.
- These are non-toxic and decompose back into carbon dioxide, water, and biomass when composted.

What are te concerns about Single Use Plastics:
- Single-use plastics, or disposable plastics, are used only once before they are thrown away or recycled.
- Plastic is so cheap and convenient that it has replaced all other materials from the packaging industry but it takes hundreds of years to disintegrate.
- If we look at the data, out of 9.46 million tonnes of plastic waste generated every year in our country, 43% is single use plastic.

94. Skyglow: Light Pollution:
- A recent study has shown that the **Skyglow** forces dung beetles in the city to abandon the Milky Way as their compass, they rely instead on earthbound artificial lights as beacons.
- The Skyglow, is an omnipresent sheet of light across the night sky in and around cities that can block all but the very brightest stars from view.
- The brightening of the night sky over inhabited areas because of streetlights, security floodlights and outdoor ornamental lights cause the Skyglow.
- This light floods directly into the eyes of the Nocturnal (active at night) and also into the skies and misleads their path.
- 'Skyglow' is one of the components of light pollution.
- The inappropriate or excessive use of artificial light – known as Light Pollution (LP) – can have serious environmental consequences for humans, wildlife, and our climate.
- Components of light pollution include:
1. **Glare:** Excessive brightness that causes visual discomfort
2. **Skyglow:** Brightening of the night sky over inhabited areas
3. **Light trespass:** Light falling where it is not intended or needed
4. **Clutter:** Bright, confusing and excessive groupings of light sources.

95. New Frog Species: Minervarya Pentali:
- Recently, a new frog species was discovered in the Western Ghats and named after former DU Vice-Chancellor and plant geneticist Deepak Pental.
- The new frog species named MinervaryaPentali belongs to the family of Dicroglossidae.

- The family Dicroglossidae comprises 202 species of semiaquatic frogs distributed by the tropical and subtropical regions of Africa and Asia and Papua New Guinea.
- The family contains large-sized (e.g., genus Hoplobatrachus) and dwarf species, with a total length about 30 mm (e.g., genus Nannophrys).
- It was discovered from the Western Ghats biodiversity hotspot, extending along the southwest coast of the Indian Peninsula.
- This new species is endemic to the southern Western Ghats.
- This species is also among the smallest known Minervarya (genus) frogs.

96. Ozone Levels Exceeding Permitted Levels:

- A Centre for Science and Environment study has found that ozone levels are exceeding the permitted levels even during winter in Delhi-NCR, making the smog more "toxic".

Ozone:

- Ozone (composed of three atoms of oxygen) is a gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone can be "good" or "bad" for health and the environment, depending on its location in the atmosphere.
- The 'good' ozone present in the earth's stratosphere layer protects human beings from harmful Ultraviolet (UV) radiation whereas the ground level ozone is highly reactive and can have adverse impacts on human health.
- Ground level ozone is dangerous for those suffering from respiratory conditions and asthma.

Smog:

- Smog is air pollution that reduces visibility.
- The term "smog" was first used in the early 1900s to describe a mix of smoke and fog.
- The smoke usually came from burning coal. Smog is common in industrial areas, and remains a familiar sight in cities today. Today, most of the smog we see is Photochemical Smog.

97. Atlantic Ocean Current System: AMOC:

- According to the recently released IPCC's Report, Atlantic Meridional Overturning Circulation (AMOC) is losing its stability and is very likely to decline over the 21st century.
- The ocean has an interconnected current, or circulation, system powered by wind, tides, the Earth's rotation (Coriolis effect), the sun (solar energy), and water density differences.

About AMOC:

- It is a large system of ocean currents.
- It is the Atlantic branch of the ocean conveyor belt or Thermo Haline Circulation (THC), and distributes heat and nutrients throughout the world's ocean basins.

Working of AMOC:

- AMOC carries warm surface waters from the tropics towards the Northern Hemisphere, where it cools and sinks.
- It then returns to the tropics and then to the South Atlantic as a bottom current. From there it is distributed to all ocean basins via the Antarctic Circumpolar Current.
- The ACC is the most important current in the Southern Ocean, and the only current that flows completely around the globe.

98. INS Vikrant Begins Sea Trials:

- Recently, the Indigenous Aircraft Carrier (IAC) 1 named INS Vikrant, started sea trials (one of the last phases of trials).
- INS Vikrant is likely to be commissioned in 2022. At present, India has only one aircraft carrier, the Russian-origin **INS Vikramaditya**.

- Earlier, the Defence Acquisition Council (DAC) approved issuance of Request for Proposal (RFP) for six advanced submarines for the Indian Navy under Project-75I.
- The vessel, to be named Vikrant after the decommissioned maiden carrier of the Navy.
- India acquired the Vikrant from the United Kingdom in 1961, and the carrier played a stellar role in the 1971 war with Pakistan that led to the birth of Bangladesh.
- Over 76% of INS Vikrant's material and equipment on board IAC-1 is indigenous.

Significance:

- Adds Combat and Sea Control Capability, especially in the Indian Ocean Region.
- Increased Ability of Air Power: It would offer an incomparable military instrument with its ability to project air power over long distances, including air interdiction, anti-surface warfare, offensive and defensive counter-air, airborne anti-submarine warfare and airborne early warning.
- Self-Reliance: Only five or six nations currently have the capability of manufacturing an aircraft carrier-India joins this elite club now.

99. Red Tide:

- Recently, hundreds of sharks in West Florida have headed inland to escape the deadly red tide that's killed more than 600 tons of marine life in the region.
- Red tide is a phenomenon caused by algal blooms during which algae become so numerous that they discolor coastal waters.
- It is a global phenomenon found in Argentina, Australia, Brazil, Canada, Chile, Denmark, England, France, Guatemala, Hong Kong, India, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, New Guinea, Peru, the Philippines, Romania, Russia, Scotland, Spain, Sweden, Thailand, the United States, and Venezuela.
- The name 'red tide' comes from the fact that overgrowth of algae can cause the color of the water to turn red, as well as green or brown.

Causes of Red Tide:

- The species in the United States that release the harmful toxins include:
- Alexandrium fundyense - found along the Atlantic coast from the Canadian Maritimes to southern New England
- Alexandrium catenella - found along the Pacific coast from California to Alaska
- Karenia brevis - found in the Gulf of Mexico along the west coast of Florida
- The factors influencing red tide events include warm ocean surface temperatures, low salinity, high nutrient content, calm seas, and rain followed by sunny days during the summer months.
- The algae related to red tide can spread or be carried long distances by winds, currents, storms, or ships.
- Harmful algal blooms, or HABs, occur when colonies of algae (simple plants that live in the sea and freshwater) grow out of control while producing toxic or harmful effects.

Impact of Red Tide:

- The algal bloom may also deplete oxygen in the waters and/or release toxins that may cause illness in humans and other animals.
- The red tide algae make potent natural toxins.
- It is unknown why these toxins are created, but some can be hazardous to larger organisms through the processes of biomagnification and bioaccumulation.
- Large fish kills and several mammalian diseases and deaths have been attributed to consumption of shellfish during red tide algal blooms.

100. Handmade Paper:

- Recently, the Khadi and Village Industries Commission (KVIC) has secured Patent registration for its innovative Plastic-mixed Handmade Paper developed to reduce plastic menace from nature.
- The plastic-mixed handmade paper (which is recyclable and eco-friendly) was developed under Project REPLAN (REducing PLAstic from Nature).
- The project was launched in September 2018 as part of KVIC's commitment to Swachh Bharat Abhiyaan.
- It aims to make carry bags by mixing processed and treated plastic waste with cotton fibre rags in the ratio 20:80.
- This is the first of its kind project in India, where plastic waste is de-structured, degraded, diluted and used with paper pulp while making handmade paper and thus reduces plastic waste from nature.
- The invention is aligned with the Prime Minister's call for fighting the menace of single-use plastic.
- The production of waste-plastic mixed handmade paper is likely to serve the twin objectives:
1. Protecting the environment
2. Creating sustainable employment
- The technology developed by KVIC uses both high & low density waste polythene that not only adds extra strength to the paper but also reduces the cost by up to 34%.
- KVIC has developed products such as carry bags, envelopes, files/folders, etc. using plastic mixed handmade paper.

Khadi and Village Industries Commission (KVIC):
- KVIC is a statutory body established under the Khadi and Village Industries Commission Act, 1956.
- It mains to plan, promote, facilitate, organise and assist in the establishment and development of khadi and village industries.
- The KVIC is charged with the planning, promotion, organisation and implementation of programmes for the development of Khadi and other village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary.
- It functions under the **Ministry of Micro, Small and Medium Enterprises.**
- **Headquarters**: Mumbai