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CURRENT AFFAIRS MAGAZINE

DECEMBER 2023

News Analysis

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DECEMBER 2023

1. IMPORTANT TOPICS OF THE MONTH

1.1 Supreme Court Verdict on Article 370

Why in news?

A Constitution Bench of the Supreme Court unanimously upheld the power of the President to abrogate Article 370 of the Constitution, which granted special status to the former State of Jammu and Kashmir (J&K).

History of J&K's Accession to India

- **Pre-Independence**- Under British rule, from 1846 to 1858, J&K was a ***princely state*** in a subsidiary alliance with the British East India Company and subsequently came under the British Crown until 1947.

- The East India Company, which had annexed the Kashmir Valley from the Sikhs as war indemnity, sold it to the Maharaja of Jammu, Gulab Singh.

- J&K remained a part of the British Raj but enjoyed its ***sovereignty,*** except for matters of defence, foreign affairs, and communications.

- It also disallowed outsiders to own properties in the State.

- **Post-Independence**- During the time of Partition, J&K 's ruler, Maharaja Hari Singh, decided ***not to side*** with either India or Pakistan.

- An *invasion by tribal militias from Pakistan*, backed by the country's establishment, in 1947 made the Maharaja to call New Delhi for assistance in the fight against the invasion.

- The Indian government, led by then Prime Minister Jawaharlal Nehru, agreed to extend help but asked Maharaja to sign an ***Instrument of Accession (IoA).***

- The IoA was signed by Maharaja Hari Singh on ***October 26, 1947***, agreeing to accede to the newly independent India, but with a significant degree of autonomy.

What is Article 370?

- **Origin-** Article 370 is derived from ***Part XXI*** of the Constitution under the title *"Temporary, Transitional and Special provisions".*

- **Features** – Article 370 gave Kashmir its autonomy in internal administration and in all matters except for 3 subjects - ***defence, external affairs, and communication.***

- Except for ***Article 1*** (*India is a Union of States)* and ***Article 370*** (*Temporary provisions with respect to the State of J&K)* of the Constitution of India, other provisions do not apply to J&K.

- Clause (1) (d) of Art 370 empowered the President of India to extend other provisions of the Constitution through an executive order with the ***concurrence of the government of J&K.***
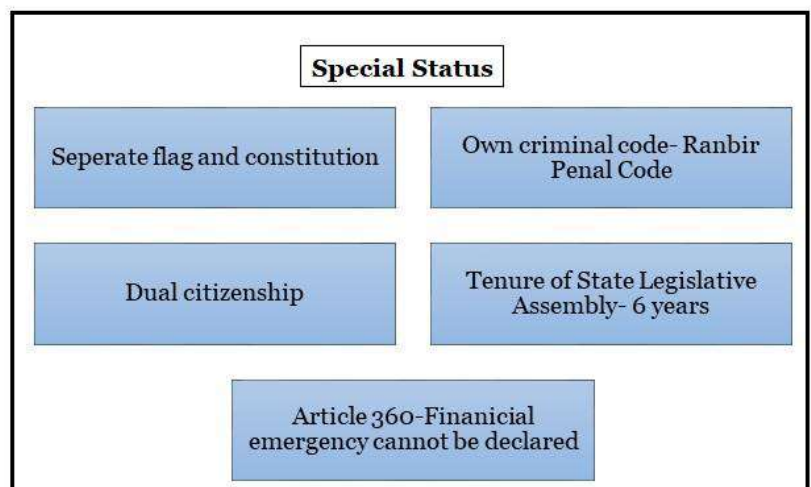
- Article 370(3) empowered the President to 'declare Article 370 shall cease to be operative' completely or partially but only if the **Constituent Assembly of J&K recommended** such an action.
- **Delhi agreement,** signed in 1952, extended the provisions of Indian Constitution regarding citizenship, fundamental rights to the State, in addition to the jurisdiction of the Supreme Court of India.

What is Article 35A?

- **Origin-** It was inserted as part of the amendments made through a **1954 Presidential order** imposed under Article 370.

- **Features-** It grants the J&K assembly complete freedom to decide or define the **permanent residents** of the State.

> *The permanent resident of J&K has been defined as a person who was a subject of the State on **May 14, 1954,** or a person who has been residing in J&K for **10 years,** and has acquired **immovable property** in the State under the ambit of law.*
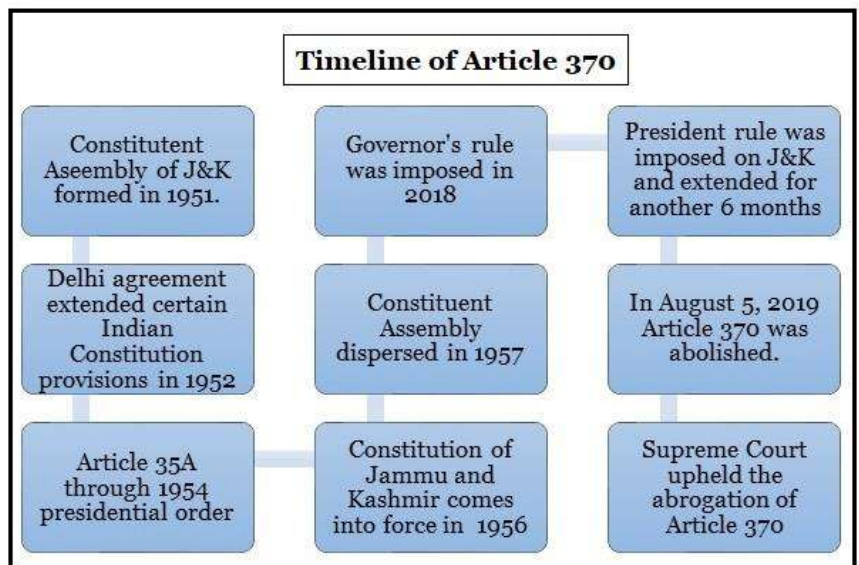
- It allows J&K to confer special rights and privileges to permanent residents in

   o Public employment

   o Acquisition of immovable property in the State

   o Settlement in different parts of the State

   o Access to scholarships

   o Other such aids that the State government might provide

- It exempts the legislation with respect to permanent residents from being annulled on the ground that they infringe on any of the fundamental rights.

- It also **bars female residents of J&K from property rights** in the event that they marry a person from outside the state.

- It **forbids outsiders** from permanently settling, buying land, holding local government jobs or education scholarships in the region.

Timeline of Article 370

- Constitutent Aseembly of J&K formed in 1951.
- Governor's rule was imposed in 2018
- President rule was imposed on J&K and extended for another 6 months
- Delhi agreement extended certain Indian Constitution provisions in 1952
- Constituent Assembly dispersed in 1957
- In August 5, 2019 Article 370 was abolished.
- Article 35A through 1954 presidential order
- Constitution of Jammu and Kashmir comes into force in 1956
- Supreme Court upheld the abrogation of Article 370

How was Article 370 scrapped?

- **Constitutional Order 272-** It amended Article 367 thereby stating that the reference to *Constituent Assembly* in Article 370 would mean *Legislative Assembly* of the State.

- During that time (2019), the State was under the President's rule and hence the President issued the orders instead of State Legislative Assembly.

> *Article 367 provides guidance on the interpretation of various provisions of the Constitution and set out the rules for determining the meaning of words and phrases used in the Constitution.*

- **Constitutional Order 273-** On the recommendation of Rajya Sabha, President announced the order effectively declaring that the *Article 370 would cease to operate*, thereby applying the provisions of Indian Constitution to J&K.

- **Jammu and Kashmir Reorganization Act, 2019-** The law bifurcated the State into two Union Territories (UTs)

THE PROPOSED NEW MAP OF JAMMU & KASHMIR

GOVERNMENT OF INDIA ON AUGUST 5 REVOKED ARTICLE 370 OF THE INDIAN CONSTITUTION BY WAY OF A PRESIDENTIAL ORDER

UT with Assembly

JAMMU & KASHMIR

LADAKH

UT with without Assembly

Constituent Assembly of Jammu and Kashmir will now be referred to as the Legislative Assembly

UT: Union Territories

IANS GRAPHICS

- o **Ladakh** (without Legislature) - Comprises Kargil and Leh districts
- o **J&K** *(*with Legislature) - Comprises all the remaining territories of the erstwhile State of J&K.

> *National Unity Day was observed on October 31, 2019, the day the two union territories (J&K and Ladakh) were established.*

Reaction of the International Community for Abrogation of Article 370

Pakistan	• Refused to acknowledge the supremacy of the Indian Constitution over J&K
China	• Did not recognise the "so-called UTof Ladakh set up unilaterally by India", and said that the western section of the China-India border has always belonged to China
The Organisation of Islamic Cooperation (OIC)	• Reiterated its call to reverse all unilateral measures taken since 5 August 2019 aimed at changing the internationally recognised disputed status of the territory
Islamic world	• The United Arab Emirates (UAE) said the decision was India's internal matter, and Saudi Arabia called for a "peaceful settlement in accordance with the international resolutions
Western nations	• Expressed concern over detentions and restrictions in J&K, but also called on all parties to maintain peace and stability along the Line of Control (LoC) to combat cross-border terrorism

What are the arguments in favour of abrogation?

- **Temporary nature**- The provision is temporary and its abrogation is the ultimate step towards integration of J&K with India.

- **Article 14** - Article 35A discriminates against women who marry outside the State and allows only the permanent residents to buy land in J&K, thereby violating the *Right to equality (Art 14)*.

- **Inclusiveness**- There is no separate flag and Constitution for J&K, meaning that the State is no longer a separate entity from India.

- **Promise of restoration-** It is converted into Union Territory owing to its *sensitive border State* for a temporary period and Statehood would be restored once normalcy was established in the State.

What are the arguments against abolition?

- **Unique nature** - The State had a unique relationship with the Union but the Maharaja of J&K *did not give up the internal sovereignty* to the dominion of India.

- **Violates the doctrine of colourable legislation-** The President *indirectly amended* Article 370, by substituting the Constituent Assembly of J&K with the Legislative Assembly.

> *The doctrine of colourable legislation means what cannot be done directly cannot also be done indirectly.*

- **Violation of democracy** - Not ascertaining the will of the people either through its elected Government or legislature or referenda, violates the basic principle of democracy, federalism, and fundamental rights.

- **Time of abrogation** - The J&K Reorganisation Act, 2019 was unconstitutional as the declaration had been made with the concurrence of Governor at a time when J&K was under *President's rule*.

- **Article 3-** The Centre's decision is also said to violate Article 3 of Indian Constitution.

> *Article 3 empowers the **Parliament** to form new States and alter the boundaries of existing State. It is mandatory for the President to refer any Bill proposing the reorganisation of a State to its **legislature** if the Bill "affects the area, boundaries or name of any of the States".*

What are the key takeaways from the Supreme Court verdict?

Key issues	SC verdict
Nature of Article 370	• The court ruled that Article 370 was always meant to be a *temporary provision*, considering its historical context, wording and placement in the Constitution under part XXI.
Internal Sovereignty of J&K	• The court said that J&K didn't have any internal sovereignty following the *proclamation of Karan Singh* (the ruler of J&K) made in 1949. • The Proclamation stipulated that the Indian Constitution would govern the relationship between J&K and the Union and had the effect of a '*merger' like any other princely state*. • However, one of the judges followed the decision of the 1959 judgement in *Prem Nath Kaul v Jammu and Kashmir,* where it was held that the States retained an element of internal sovereignty.
Federalism	• Article 370 was a feature of *asymmetric federalism.* • The special status granted to J&K was simply a higher degree of that autonomy, not a different kind of autonomy.
Constitution of J&K	• The Constitution of J&K was *always subordinate* to the Constitution of India. • Hence, Article 370 became inoperative after the Constitutional Orders 272 and 273.
President rule in J&K	• The court upheld the validity of the President's rule in J&K, and said that the actions taken by the President were not irrational referring to the landmark 1994 ruling in '*SR Bommai v Union of India'.* • The President can assume "all or any" roles of the State legislature and such action must be tested judicially only in extraordinary cases.
Parliament power under Article 356	• Article 356(1)(a) states that the President may declare that the *"powers of the State Legislature"* shall be exercised by or under the authority of Parliament. • The court held that allowing Parliament to exercise all constitutional powers of the Legislative Assembly would limit the power of the State. • However, the Constitution recognises such reduction of federal power when *Article 356 is in force*.
Reorganisation of the State under Article 3	• The court held that the Parliament had the power to reorganise J&K into 2 Union Territories under Article 3. • It also said that the *consent of the State legislature was not required* as the Parliament had assumed its role during President's Rule. • It also asked the Union to restore statehood at the earliest.
Truth and Reconciliation Commission (TRC)	• The court recommended the constitution of *TRC just like South Africa* did in its post-apartheid era to *address human rights violations* perpetrated in J&K both by State and non-State actors since the 1980s.
Elections	• The court asked the Election Commission of India to conduct elections to the J&K Legislative Assembly by *30th September 2024.*

Why election in the Union Territory of J&K is important?

- **Restore democracy-** Elections are a way of restoring democracy and representation to the people of J&K, who have been under President's rule since 2018.

> *The last Assembly election was in 2014, and the last elected administration fell in June 2018.*

- **Affirmative action-** As the Jammu and Kashmir bills increased the seats in the Legislative Assembly for SCs and STs, it provides a stronger political representation.

- **Boosts confidence** - Elections are a chance of building confidence and trust between the Centre and the people of J&K.

- **Grievance redressal**- Elections are a means of addressing the grievances and aspirations of the people of J&K, who have faced various challenges and hardships after the abrogation of Article 370.

- **Reduce terrorism-** Elections can also foster dialogue and reconciliation among the stakeholders and reduce the alienation and violence in the region.

- **Citizen engagement**- Elections are an opportunity of enhancing the governance of J&K, by ensuring the participation and accountability of the elected representatives and the administration.

- **Economic gain**- Elections can also attract more investment and infrastructure to the region and improve the quality of life of the people.

SR Bommai Case – Regarding Article 356

- **Article 356-** It allows the President to impose Central rule in States experiencing a "*failure of constitutional machinery."*

- **Legal precedents**- The President must have a "*reasonable satisfaction*" that the State government is unable to function according to the Constitution.

- There must be a failure of constitutional machinery, not just a political crisis.

- *The Governor's report* that recommends President's rule, must be based on objective facts and not mere speculation.

- The Central government's decision must be immediately communicated to both Houses of Parliament for approval.

- The proclamation of President's rule must be laid before each House of Parliament *within a month.*

1.2   UNFCCC COP-28

The Conference of Parties (COP-28) has been recently concluded in Dubai, United Arab Emirates (UAE) with the adoption of UAE Consensus.
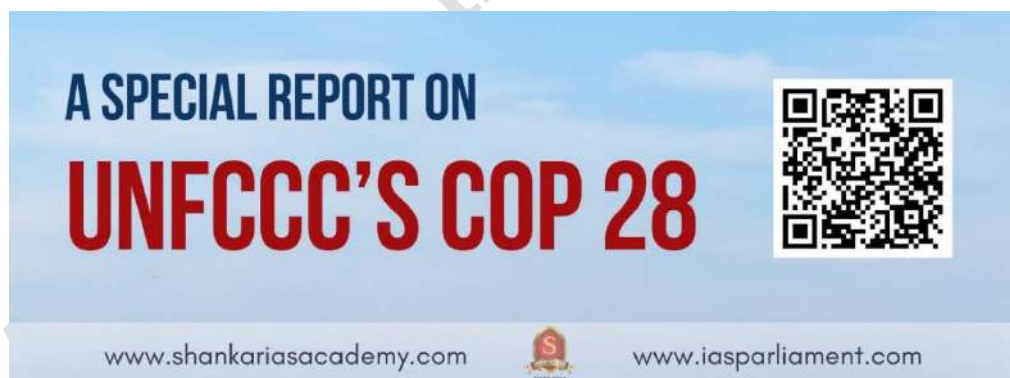
Click here to download the special report on UNFCCC's COP 28

G.S PAPER I

2. GEOGRAPHY

2.1   Cyclone Michaung

Why in news?

Recently the Cyclone Michaung made landfall over Nellore in Andhra Pradesh as a super-cyclonic storm.

Cyclone

- As per National Disaster Management Authority (NDMA), cyclones result from *atmospheric disturbances* surrounding a low-pressure area characterised by rapid and often destructive air circulation

- **Air circulation**- The air circulates inward in an anticlockwise direction in the Northern Hemisphere and clockwise in the Southern Hemisphere.

- **Occurrence**- Cyclonic winds move across nearly all regions of the Earth except the equatorial belt.

- **Conditions of the cyclone**-

  - Large and continuous supply of warm and moist air that can release enormous latent heat.

  - Strong *Coriolis force* that can prevent filling of low pressure at the centre (absence of Coriolis force near the equator prohibits the formation of tropical cyclone between 0 -5 latitude).

  - Unstable condition through the troposphere that creates local disturbances around which a cyclone develops.

  - Absence of strong vertical wind wedge, which disturbs the vertical transport of latent heat

- **Cause**- By atmospheric disturbances around a low-pressure area distinguished by swift and often destructive air circulation.

- **Eye of the cyclone-** Low-pressure center of the cyclone

- The lower the pressure in the eye, the more intense is the cyclone.

- **Eye-wall-** Surrounds the eye with the strongest winds and heaviest rain and is the most destructive part of the cyclone.

- **Storm surge-** The abnormal rise in sea level due to cyclonic storms.

- **Cyclone prone areas-** India's east and west coasts are affected by cyclones annually, mostly in pre-monsoon and post-monsoon seasons.

- **Indian tropical storms-** Climatologically, about 5 cyclones develop in the North Indian Ocean basin comprising the Bay of Bengal and the Arabian Sea every year.
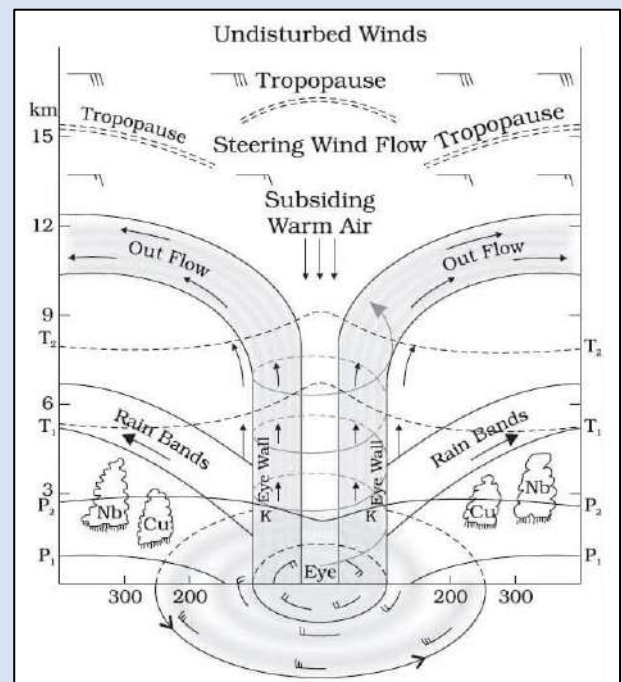
How the Cyclone Michaung formed?

- **Origin-** The cyclone developed from a *low pressure area* in the southwest Bay of Bengal. It gradually intensified into a deep depression, a cyclonic storm, and finally a super-cyclonic storm.

- **Intensification-** They were aided by warm sea surface temperatures and the *Madden-Julian oscillation*, a weather anomaly that influences rainfall patterns.

- **Course of action**- It moved northward towards the Andhra Pradesh coast, while bringing heavy rain and strong winds to north Tamil Nadu. It made landfall near Bapatla district, and weakened into a depression over land.

- **Naming convention**-The name Michaung was suggested by Myanmar symbolises *strength and resilience* following the list of names prepared by *World Metrological Organisation* and the United Nations Economic and Social Commission for the Bay of Bengal and the Arabian Sea.

- The name of each cyclone is picked from this list and cycles through each country's suggestion.

- **Super-cyclonic storm**- It was the 4th tropical cyclone of the year over the Bay of Bengal, and the *first super-cyclonic storm since 1999*. It reached a peak intensity of 90-100 km/hr winds gusting to 110 km/hr at the time of landfall.

> *Cyclogenesis, is the development or strengthening of cyclonic circulation in the atmosphere.*

Why did the Cyclone intensify?

- **Cyclone intensification events-** They are a source of uncertainty in cyclone models because they alter the storm's future course. They depend on several factors, such as sea surface temperature, vertical wind shear, upper-level divergence, etc.,

- **Global warming**- It has already resulted in a detectable increase in the number of higher intensity cyclones as well as their intensification.

- **Climate change**- It has increased the sea surface temperature, which is conducive to cyclone intensification. A study found that tropical cyclones with wind speeds above 185 km/hr had become 15% more likely since 1979.

- **Cyclone engine**-Cyclones are like engines that convert the heat and moisture from the ocean into kinetic energy of winds.

- The rising air cools and condenses, forming clouds and releasing latent heat, which makes the air lighter and causes it to rise further. The surrounding air moves in to fill the low pressure, creating surface winds.

- **Madden-Julian oscillation**- It throw seeds of rotational low-pressure systems over the Indian and the Pacific Oceans, this indicated favourable conditions for the cyclone.

- **Rapid intensification**- It is defined as an increase in maximum sustained winds by at least 55 kilometre / hour in a 24-hour period.

- **Unpredictable**- The cyclone spent more time over the water before landfall, as Cyclone Michaung did off the coast of north Tamil Nadu.

What is the consequences of the intensification?

- **Complicated forecast models**-Due to rapid intensification, the cyclone deviated from its expected track and speed increased the uncertainty and complexity of cyclone preparedness.

- **Prolonged rains**- It allows storms to make landfall with more energy, move further inland, survive longer, and extend their on-ground devastation to previously 'inaccessible' areas.

- **Heavy damage**- It brought heavy rain and winds with a sustained speed of 90-100 km/hr, in the process uprooting trees and electric poles. It caused heavy to extremely heavy rain in several parts of Andhra Pradesh, Tamil Nadu and southern Odisha.

Severe Tropical Cyclones in 2023	
Name of the cyclone	Location
Mawar and Bolaven	Western Pacific Ocean
Hurricane Lee	Atlantic Ocean
Hurricane Jova and Otis	Eastern Pacific Ocean
Cyclone Mocha	North Indian Ocean
Cyclone Freddy	Southern Indian Ocean

- **Stronger winds -**The wind speed of a cyclone is related to its central pressure, the lower the pressure, the stronger the wind.

- Cyclone Michaung reached a peak intensity of 90-100 km/hr winds gusting to 110 km/hr at the time of landfall.

- **Higher storm surge**- The cyclone generated storm surge and tidal waves up to 1.5 metres, along with flash floods in low lying areas.

- **Human impact**- It affected around 40 lakh people, many people stranded in flood without access to basic amenities like food, water etc.,

- **Economic impact**-It resulted in widespread damage to infrastructure, crops and livelihoods.

2.2	**Volcano and its Types**

Why in News?

Lava flows from a volcano in Iceland were slowing down recently, although new vents could open at short notice, according to the Icelandic Meteorological Office.

What are volcanoes?

- According to the US Geological Survey, volcanoes are ***openings, or vents*** where lava, tephra (small rocks), and steam erupt onto the Earth's surface.

- **Occurrence –** It can be on land and in the ocean in Earth.

- Scientific evidences also show their presence in other planets like Mars and Venus.

- **Formation –** They are formed when material significantly hotter than its surroundings is erupted onto the surface of the Earth.

- **Earth Core –** Earth's interior has outer crust, middle mantle and inner core layer.

- Mantle is denser than that of the crust and contains a weaker zone called asthenosphere from which the molten rock materials find their way to the surface.

- Liquid rock is known as magma when it is underground and called as lava when it breaks through the surface.

- **3 ways of magma rise**

  1. **Divergence of tectonic plates –** Here, the magma rises up to fill in the space and when this happens underwater volcanoes can form.

  2. **Convergence of tectonic plates –** When this happens, part of Earth's crust can be forced deep into its interior, which under high heat and pressure melts, and rise as magma.

  3. **At hotspots –** They are hot areas inside of the Earth, where magma gets heated up and it becomes less dense, leading to its rise.

- **Erupted material –** It includes lava flows, pyroclastic debris, volcanic bombs, ash and dust and gases (nitrogen, sulphur and minor amounts of chlorene, hydrogen and argon).

What are the different types of volcanoes?

- According to the British Geological Survey, the type of volcano depends

  o On the viscosity of the magma

  o On the amount of gas in the magma

  o On the composition of the magma

  o On the way the magma reaches the surface

  o On basis of their activity – Active dormant and extinct
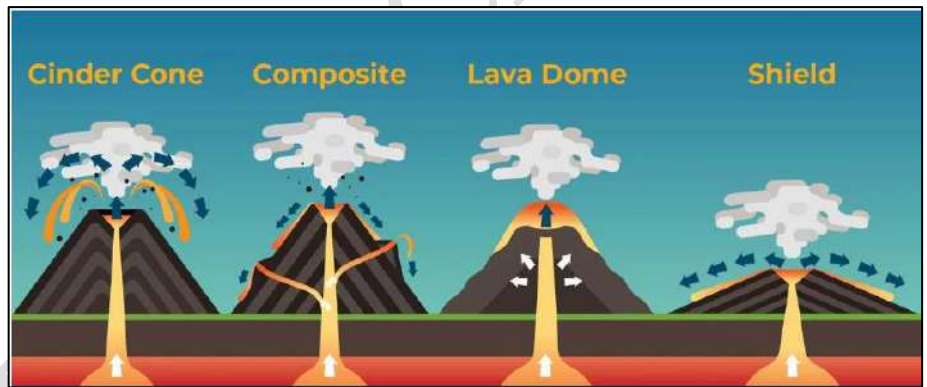
- **Shield Volcanoes** – They form very large, gently sloped volcanoes with a wide base. Example: Mauna Loa in Hawaii.

- **Cinder cones** – They are the smallest volcanic landform, formed from accumulation of many small fragments of ejected material.

- **Composite Volcanoes (Stratovolcanoes)** – They are characterised by eruptions of cooler and more viscous lavas than basalt and have steep sides and are more cone-shaped than shield volcanoes.

- **Caldera** – These are the most explosive of the earth's volcanoes.

- When they erupt, they collapse on themselves rather than building and this collapsed depressions are called calderas.

- **Flood Basalt Provinces** - They outpour highly fluid lava that flows for long distances. Example: The Deccan Traps from India.

- **Mid-Ocean Ridge Volcanoes** – They occur in the oceanic areas where the central portion of this ridge experiences frequent eruptions.

> *The **Pacific Ring of Fire** includes New Zealand, Southeast Asia, Japan and the western coast of the Americas, is a region in which about 90% of all earthquakes worldwide strike.*

- Active volcano – It is called so if the materials mentioned are being released or have been released out in the recent past.

  o ***Iceland***, a volcanically active regions on the Earth witnesses an eruption every 4 to 5 years but since 2021, it has spiked to almost 1 eruption per year.

What are impacts of volcanic eruptions?

Advantages	Disadvantages
• It leads to the formation of geysers which are sources of geothermal electricity. • They help to stabilize the heat of the core part of our planet. • They form new land forms after the drying process of liquid lava. • The lava contains different minerals which enriches existing soil. • It facilitate moderation of climate and receive higher rainfall than flat areas.	• It leads to lot of destruction to life and property. • It can create other natural hazards like Tsunami. • It can produce harmful gases and lava heat act as a booster for global warming. • The lava flow often cause wild fire in the nearby forestlands.

2.3 Arctic Research

Why in news?

India will have around-the-year manning of the Arctic with the launch of the first-ever winter expedition in this region.

> *Arctic region is the region, which is above the Arctic Circle and includes the Arctic Ocean with the North Pole at its centre.*

Why is the Arctic region being studied?

- **Polar studies**- The Polar Regions, Arctic and Antarctica, offer pristine environments for scientists to study a range of natural phenomena for atmospheric, oceanic, biological, geological, glaciological and earth sciences research.

- **Climate conditions**- It is unique in many ways and offers opportunity for many discoveries about how the physical and biologic environments function under extreme conditions

- **Unique fauna**-Several species of animals are unique to the Arctic (e.g., polar bear, walrus, musk ox) and many species of birds have their summer home.

- **Native communities**-The Arctic, unlike the Antarctic is inhabited by humans, including diverse Native communities with a longer history than many of the southerly societies.

- **Anthropological studies**- The study of the Native culture is important for its preservation, and it can give insights about long-term human survival in the Arctic.

- **Economic value**-The Arctic has many natural resources that could be exploited for economic benefit.

- Crude oil, gold and industrial metals, and diamonds are presently being extracted now, yet much of the Arctic's potential for natural resources is unknown

- **Human impact**- Arctic is not as isolated from heavily populated areas and modern civilization is having impact on the Arctic.

- **Global warming-** Arctic is witnessing a series of unusual changes over past two decades due to release of greenhouse gases into the atmosphere by industrialized nations

Scientific research in Arctic region
• **UN Convention on the Law of the Sea (UNCLOS)-** It allows for the freedom of marine scientific research in the high seas of the central Arctic Ocean. • **Arctic Council-** It is an intergovernmental forum for cooperation and coordination on Arctic issues, including scientific research. • **Svalbard Treaty, 1920-** It recognizes the sovereignty of Norway over Svalbard, but also grants equal rights to all parties to engage in economic activities, such as mining and fishing. • **Individual jurisdictions**- The Arctic region is divided into different zones of sovereignty and jurisdiction, depending on the location and nature of the activities.

- **Warming trend**- It has warmed by 4°C in 100 years and is losing sea ice at 13% per decade, which could make the Arctic Ocean ice-free by 2040.

- **Climate change**- The Arctic sea-ice loss could increase tropical temperature, precipitation and extreme rainfall events, and shift the Inter Tropical Convergence Zone

- **Scientific evidence**- It has shown that the Arctic ice and the sea ice have the potential to affect humans outside the Arctic region, as sea levels rise, and to influence atmospheric circulations.

How India is engaged in the Arctic region?

- **Impact on India-**The vulnerability of the Arctic region may have an impact on India in terms of economic security, water security and sustainability.

- India signed the Svalbard Treaty in 1920 and is an observer state in Arctic Council.

- **Himadri -** India's 1st permanent Arctic research station is located at Spitsbergen, Svalbard, Norway.

- It is located at the *International Arctic Research base, Ny-Alesund*.

- [**Arctic Policy of 2022**](#)- It mentions that the country's approach to economic development of the region is guided by UN Sustainable Development Goals.

- **Potential for minerals**- The region constitutes the largest unexplored prospective area for hydrocarbons remaining on the earth, it may have significant reserves of coal, zinc and silver.

Himadri Research Station
- **1st winter expedition**- It will give a major boost to the country's research around global climate, sea levels and biodiversity.
- **Aim**- To maintain a year long presence at the Himadri research station in Svalbard, Norway.
- **Data collection**- It will collect data on atmospheric processes, aurora borealis, atmospheric electricity, and space physics studies.
- **Study cosmic dawn**- For the 1st time researchers will undertake the characterization of the *radio frequency environment* in the Svalbard region.
- **Unique study**- It will allow researchers to conduct unique *scientific observations during polar nights*, where there is no sunlight for nearly 24 hours and sub-zero temperatures (as low as -15°C).
- **Significance-** It will be only the 4th research station in the Arctic to be manned around the year.

- **Institutional support**- In 2018 India renamed National Centre for Antarctic and Ocean Research to National Centre for Polar and Ocean Research.

- **Infrastructural base-**

  o   Multi-sensor moored observatory was inaugurated in 2014

  o   Northernmost atmospheric lab was launched in 2016.

What lies ahead?

- The 1st winter expedition realises the India's vision of making it a developed nation by 2047, as it is committed to expanding scientific activities and international cooperation and collaboration.

- Arctic is an area of scientific, climatic, and strategic importance hence Indian scientists will play a vital role in addressing areas that affect life and survival on this planet.

2.4   Extreme December rainfall in Tamil Nadu

Why in news?

Tamil Nadu has witnessed heavy rainfall in December 2023.

What is the rainfall pattern in Tamil Nadu?

- **Weather conditions** – The state is *vulnerable to extreme weather conditions*, while coastal districts experience flooding, other areas experience severe droughts.

  o   According to IMD, from the *year 1951 to 2013*, Tamil Nadu has received *47 normal, 8 excess, 6 deficient, and 2 scanty rainfall* over a period of time.

- **Annual rainfall** – *About 987mm* with a range varying from 317.4 mm to 1890.5 mm over the 63 years period (1951-2013).

  o   While *Nilgiris receives the maximum* average annual rainfall, *Thoothukkudi and Karur receive the least*.

Seasonal Rainfall share
4.00% | 12.00% | 34.00% | 50%
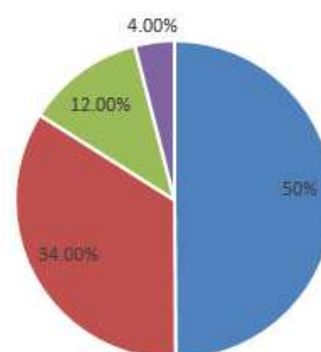
- **Coefficient of variation in annual rainfall** – It lies in the range of *0.21 to 0.37 (21 to 37%)* across the districts of Tamil Nadu.

- **Rainfall share** – Tamilnadu receives the maximum rainfall (around 443.3mm) during post-

■ Post-monsoon (October, November, December)	■ Monsoon (June, July, August, September)
■ Pre-monsoon (March, April, May)	■ Winter (January, February)

monsoon (October, November, and December) mainly due to cyclones formation in Bay of Bengal.

What is the rainfall scenario in December 2023?

- Since October 1, Tamil Nadu has received 450mm of rainfall.

- **Surplus rainfall** – Many coastal districts have already received their surplus rainfall.

  o The annual rainfall of Kanyakumari is 760mm, whereas the district has already recorded 1050.7mm during October 1 – December 20, 2023.

- **Deficient rainfall** - During the ongoing season (till December 20), only 14 districts out of total 38 have deficient rainfall.

- **Exceptionally heavy rainfall** – It occurred in 3 districts of southern Tamil Nadu during December.

> *Unlike Tamil Nadu, the rest of India receives the maximum rainfall in the months of June, July, August, and September months*

- **24-hour time span exceptional rainfall** – It was reported by nearly 40 meteorological stations across Thoothukudi (Tuticorin), Tirunelveli and Kanyakumari districts.

What caused the record rainfall over southern TN?

- **Strong northeast monsoon** – It remained vigorous over Tamil Nadu since mid-December, bringing in steady rain bands, especially over the south Tamil Nadu and neighbouring Kerala.

- **Movement of cyclonic circulation** – It was developed in the southwest Bay of Bengal in December 16, located off the western Sri Lankan coast.

- As this system moved westwards and reached southern Tamil Nadu, it gave impetus to the northeast monsoon winds, persisted over the southern Tamil Nadu region on December 18 and 19.

- A **heavy cloud convection** was observed here, resulting in exceptionally heavy rainfall (more than 200mm in 24 hours) over Thoothukudi, Tirunelveli and Kanyakumari districts of Tamil Nadu and Idukki district of Kerala.

3. SOCIAL ISSUES

3.1   Crime in India 2022

Why in news?

As per the recent National Crime Records Bureau (NCRB) report on the crime situation in India, there was an increase in various types of crimes in 2022 compared to 2021.

What are the key highlights of the report?

- **Data source-** The report is a compilation of data on reported crime from across the country, obtained from the police forces of 36 States and Union Territories.

- **Data validation**- The information is entered by State/UT police at the level of the local police station, and is validated at the levels of the district and State, and finally, by the NCRB.

- **Registration of cases-**The report shows a *decline* of 4.5% in the registration of cases over the second pandemic year, 2021.

> ### Crime in India 2022
>
> - **Released by-** National Crime Record Bureau.
>
> - **Increase in crime-** The report indicates 4% rise in crimes against women which corresponds to roughly 51 FIRs each hour.
>
> - **Majority of cases-** Cruelty by spouses or relatives accounted for the highest number of cases in crime against women, followed by Kidnapping and abduction, Assault with intent to outrage modesty, and Rape.
>
> - Around 13,000 cases were registered under *Dowry Prohibition Act.*
>
> - **States-** Uttar Pradesh, Maharashtra, Rajasthan, West Bengal, and Madhya Pradesh were responsible for around half of all cases filed in the country in 2022.
>
> - Delhi registered highest rate (144) of crime against women in the country, far higher than the national average of 66.4

- **Crime rate-** Crimes registered per lakh population, has declined from 445.9 in 2021 to 422.2 in 2022.

- **Safest city -** Kolkata for the 3rd consecutive year has been recognised as the safest city in India, it recorded the least number of cognisable offences per lakh population among other major cities in India.

- **Increase in crime**- Highest surge in crimes is seen in crimes against foreigners with 28% increase compared with 2021.

Category	States affected/ Major reason behind the crime
Crimes against women	- Cruelty by spouses or relatives, kidnapping and abduction, assault "with intent to outrage modesty", and rape. - Delhi registered highest rate of crime against women in the country.
Offences against the state	Jammu and Kashmir, Chhattisgarh, Manipur, Assam, and Nagaland
Cybercrimes	- Fraud, extortion and sexual exploitation - Maharashtra, Karnataka, Uttar Pradesh, Telangana and Kerala
Economic offences	FCF (Forgery, cheating and fraud), criminal breach of trust and counterfeiting
Murder	Disputes, personal vendetta or enmity and gain.
Cognizable crimes	- Major decline is seen in the cases registered under disobedience or order duly promulgated by public servant' (Section 188 of the Indian Penal Code (IPC)). - Highest charge sheeting rate under IPC crimes are Kerala, Puducherry and West Bengal.
Crime against foreigners	Theft and rape, with most of the victims are from Asian continent followed by African countries.
Suicides	- Family problems, marriage related problems and illness. - Overall male tend to be suicide victims than female.

What are the limitations of the report?

- **Data collection-** The report only shows registered crime, not actual crime. For example, more reports of crimes against women may mean more awareness, not more violence.

- **Principle Offence Rule-** The report follows a rule that counts only the most severe crime in a single FIR.

- This can lead to undercounting of some crimes, such as rape, if they are accompanied by murder.

- **Data inaccuracy-** The data is collected from local police, which may not reflect the true causes or extent of crimes.

- **Lack of wider focus**-The NCRB itself notes that the *socio-economic causative factors* or reasons of crimes are not being captured by the Bureau.

- **Lack of trust**- Some groups may not report crimes due to

- *fear* or lack of trust in the police.

- **Manpower shortage**- Some of the police stations may have staff shortages or vacancies that affect data quality.

National Crime Record Bureau

- **Established-** 1986; **Headquarters-** New Delhi

- **Nodal agency-** Ministry of Home Affairs

- **Mandate-** To compile and keep records of crime.

- **National warehouse**- Fingerprint records of Indian & foreign criminals.

- **National Cybercrime Reporting Portal-** NCRB has been appointed as Central Nodal agency to manage online cyber-crime reporting portal and associated work of Cyber Crime Prevention against Women & Children (CCPWC) scheme.

- **Crime Multi-Agency Centre (Cri-MAC)-** NCRB has recently launched this application for flashing alerts or crime bulletins on important matters of crime and for inter-unit communication among disjointed police units across the country.

- **Publications**

Crime in India | Accidental Deaths & Suicides in India | Prison Statistics India | Report on Missing Women & Children | Finger Prints in India

What lies ahead?

- The surge in cybercrimes indicates that the online world requires a secured architecture and proper awareness among the people.

- There is a need to

  o Strengthen support services for victims, providing safe shelter homes, and making legal aid more accessible.

  o Optimise the full potential of technology to create safer environments, such as panic buttons in public spaces and enhanced surveillance systems.

3.2	Rise of Crimes Against Women

Why in news?

As per annual report of National Crime Record Bureau the crimes against women rose 4% in 2022 compared to 2021.

What are the causes for rise in crimes against women?

- **Patriarchal prisoners-** The root cause of crimes against women is the patriarchal society that does not value women's rights and dignity.

- **Regressive value system**- It undermine women's movements and empowerment which promote conservative, traditional, or backward views on gender roles, sexuality, and morality.

- **Gender based violence**- Child marriage, female genital mutilation, honour killings, dowry violence etc., and increase the crime rate against women.

- **Women as commodity**- Dowry system has tragically transformed the sacred institution of marriage into a cold business transaction.

- It is associated with various forms of violence and abuse against women, such as domestic violence, dowry deaths, and bride burning.

- **Policy paralysis**- India has women specific laws and schemes but the gap between the formulation of policies for protection of women and their implementation remains a key challenge.

> *As per World Health Organization (WHO) report 1 in 3 women in India face gender-based violence*

- **Shock absorbers** - Women bear the brunt of the social and economic hardships caused by inequality, discrimination, and lack of opportunities.

- **Inequality**-The high crime rate reflects the persistent discrimination and oppression faced by women and girls in India, across different social and economic groups.

Legal framework for women safety	
Laws	**About**
Immoral Traffic Act, 1956	Aims to prevent trafficking for commercial sexual exploitation of women and girls.
Dowry Prohibition Act, 1961	Prohibits the giving or taking of dowry.
Indecent Representation of Women Act, 1986	Prohibits the advertisement or publication or any kind of indecent representation of women including writings, paintings, figures, etc.
Commission of Sati Act, 1987	Prohibits the commission of sati, which is the act or rite of burning or burying alive of any widow or woman along with the body of her deceased husband.
Sexual Harassment of Women at Workplace Act, 2013	Enacted based on the *Vishaka guidelines* framed by the Supreme Court that provides measures to protect the working women form evil of sexual harassment.
Protection of Women from Domestic Violence Act, 2005	Recognizes *domestic violence as a human rights violation* and provides the right to every woman to live in a violence free home according to their wish.

What are the challenges in the implementation of law?

- **Low representation**- In India, women police officers is only 11.7% against the global average of 24.7%.

- **Investigation hurdles**- Due to dismal proportion of women police officers the investigation and prosecution is affected, this leads to disproportionate levels of workload on women police personnel and slower rates of charge-sheeting and convictions.

- **Huge workload**- The low representation of women in police force causes disproportionate levels of workload on them and leads to slower rates of charge-sheeting and convictions.

- **Policing issues**- There is a severe lack training for investigations, with most of the investigating officers are juniors with a poor pay scale.

- **Delay in cases disposal**- Due to policing and investigation hurdles the case takes long time to resolve increasing the pendency of cases.

What lies ahead?

- There is a need for more _gender sensitive policing_ which would require increasing the recruitment and retention of women police officers as well as providing with adequate training and support.

- A study by Commonwealth Human Rights Initiative recommended measures to improve the working conditions and opportunities for women police officials.

3.3   Sri Krishna Janmabhoomi Case

Why in news?

Recently Supreme Court declined to stay an order issued by the Allahabad High Court allowing a survey of the Shahi Idgah mosque in Mathura, believed to have been built at Krishna Janmasthan, the site where Lord Krishna was born.

What is the history of the Mathura Krishna Janmasthan site?

- **Mathura significance**- It is a city in northern India located on the banks of river _Yamuna_, a prominent centre of commerce under the **_Mauryan Empire_**.

- Mathura was also a major centre for Buddhism and Jainism, with many stupas and monasteries.

> _A grandeur temple was constructed during the reign of Chandragupta II, also known as Vikramaditya, around 400 CE._

- Chinese pilgrims _Fa Hien_ and _Hiuen Tsang_ and even later Muslim chroniclers described stupas and monasteries in Mathura.

- **Krishna Janmasthan**- It is the birthplace of Lord Krishna.

- _Alexander Cunningham,_ the first archaeologist of British India believed that the site originally contained Buddhist structures that were destroyed.

- Some of the remains have been used to build Hindu temple, excavations in the area have uncovered remains of a large Buddhist complex.

- **Invasion by Mahmud of Ghazini**- The ruler of Ghaznavid empire raided India in the early 11th century and attacked Mathura, causing fire and pillage for 20 days.

- The devotees of Krishna, called Vasudeva by _Al-Biruni_, remained steadfast in their faith and made Mathura a prominent pilgrimage site.

- **Katra Keshadev temple**- It was built around 1150 CE in Krishna Janmasthan, it is described by Sanskrit inscription as brilliantly white and touching the clouds.

- **Sikandar Lodhi's destruction of the site**- The Keshavdev temple at the Krishna Janmasthan site in Mathura was demolished by the Delhi Sultanate ruler Sikandar Lodhi in the 16th century, along with many other Buddhist, Jain, and Hindu structures.

- **Emergence of a new form of Vaishnavism-** The decline of the old religious centres in Mathura and nearby Vrindavan led to the rise of a new devotional movement of Vaishnavism.

- It is inspired by saints like Nimbarka, Vallabha, and Chaitanya, who emphasised a personal and emotional relationship with Lord Krishna.

- **Mughal dynasty**- Many small shrines dedicated to Lord Krishna were built in Mathura and Vridhavan.

- Akbar, the most powerful and tolerant Mughal emperor, supported the temples of different Vaishnavite sects in Mathura. He was interested in different faiths and visited the holy sites of Vaishnavism.

- **Raja Veer Singh Deo's temple-** It was built in 1618 during the reign of Jahangir at Katra site by the Orchha King, who was a Mughal vassal, built a magnificent temple.

- French traveller *Jean-Baptiste Tavernie*r described that the temple was octagonal in shape, and built with red sandstone.

- Venetian traveller *Niccolao Manucci* wrote that the temple was of such a height that its gilded pinnacle could be seen from Agra.

- The Mughal prince Dara Shikoh, who was tolerant of other religions, added a stone railing around the temple site in the mid-17th century.

- **Aurangzeb rule**- Abdul Nabi Khan, the governor of Mathura built the Jama Masjid at the location of the temple that had been destroyed by Sikandar Lodhi.

    o In 1666, he destroyed the railing built by Dara Shikoh around the Keshavdev temple.

- The Mughal emperor Aurangzeb ordered the demolition of Hindu schools and temples across his empire, including the Keshavdev temple in Mathura, which was replaced by the Shahi Idgah mosque.

- **British India**- The land where the temple once stood was auctioned by the British East India Company in 1815 to a Hindu banker Raja Patnimal, who wanted to rebuild the temple but faced legal challenges.

- **Post-independence**- Raja Patnimal sold the land to Jugal Kishore Birla in 1944 who formed the Shri Krishna Janmabhoomi Trust in 1951 to build a temple, it was built next to the mosque.

- This piece of land is the subject of the ongoing litigation, with the Hindu side claiming that it included the Shahi Idgah mosque while the Muslim side saying that it did not.

What is the Allahabad High Court ruling in Sri Krishna Janmabhoomi case?

- The Court ordered the scientific survey of the Shahi Idgah mosque, which is believed to be built on the birthplace of Lord Krishna.

- The ruling is similar to the one in Varanasi's Gyanvapi Mosque, also built adjacent to a venerated Hindu temple.

- Hindu parties to the litigation claim that the 17th-century Mughal-era Mosque was built after demolishing a temple at the birthplace of the Lord Krishna.

- Muslim side's claim that he Shahi Idgah Mosque does not fall within the ambit of land at Katra Keshav Dev.

- They counterclaimed that Hindu's belief is based on guess work and is not substantiated by any documentary evidence.

- The Supreme Court declined to halt the Allahabad High Court's order permitting the survey of Mathura Shahi Idgah complex near the Shri Krishna Janmabhoomi Temple

Decoding the dispute

1968
The Sri Krishna Janmasthan Seva Sangh and Shahi Eidgah mosque sign an agreement for the 13.37-acre land

Sept 25, 2020
First of the dozen cases filed in Mathura court, seeking removal of the mosque and challenging the 1968 pact.

2022

May 9
An application to have survey of the disputed site in case number 950 of 2020 is filed in Court of Civil Judge Senior Division in Mathura

May 12
A petition is moved in the Allahabad high court, seeking early disposal of matter pending in Mathura court. The HC subsequently directs the Mathura court to decide on the matter in four months.

May 17
A Lucknow-based lawyer files petition in Court of District Judge, seeking permission to file a suit in representative capacity. The plea is dismissed

May 19
Mathura district judge allows a revision plea, holding that The Places of Worship Act 1991 was not applicable in the case seeking removal of Shahi Eidgah mosque. The high court later stays the order

December 06
Akhil Bharat Hindu Mahasabha gives a call for reciting Hanuman Chalisa inside the Shahi Eidgah mosque to mark the anniversary of the demolition of Babri Masjid. Police foils the call.

December 08
Court orders an 'amin' (designated court staff) survey of the disputed mosque in a fresh petition.

December 12
District Judge Mathura rejects the application to create a Special Court to hear all the cases related to Sri Krishna Janmbhoomi issue.

G.S PAPER II

4. INDIAN POLITY

4.1   Suspension of MPs

Why in news?

Recently 78 opposition MPs have been suspended for disrupting Parliamentary proceedings over the Parliament security breach issue.

What is the issue?

- Presiding officers of the Lok Sabha and Rajya Sabha suspended the opposition lawmakers for disrupting the parliamentary proceedings.

- They were suspended as the legislators demanded a discussion and a statement from the Home Minister regarding last week's security breach.

    o This was the **highest number of MPs suspended in a single day** in the history of Indian Parliament.

- The opposition accused the government of failing to provide security on the 22nd anniversary of a deadly attack on the parliament.

- The speaker of the Lok Sabha, has blamed the MPs for breaking the rules of the House.

- At least 149 suspensions have been meted out, both Houses included, since 2019, compared with at least 81 in 2014-19, and at least 36 in 2009-14.

- Over the years, 4 broad reasons have been identified for disorder in legislatures.

    o The lack of time available to MPs for raising important matters,

    o The unresponsive attitude of the government and retaliatory posture by Treasury benches,

    o Deliberate disruption by parties for political or publicity purposes, and

    o The absence of prompt action against MPs disrupting Parliamentary proceedings.

- Parliamentary processes can carry on, following the suspension of the opposition MPs, as the quorum of 10% will be met by the governing party and its allies with an overwhelming majority.

What are the rules and procedures for suspension of MPs?

About	Lok Sabha	Rajya Sabha
Power to suspend	Speaker	Chairman
Rules of procedure and conduct of business	Rules 373, 374, and 374A	Rules 255 and 256
Procedure for suspension	Rule 374A allows the Speaker to automatically suspend an MP for five days or the remaining part of the session	Automatic suspension is not available here, a motion has to be moved and adopted by the House to suspend an MP
Authority of presiding officers	To direct, name, and suspend MPs for disorderly conduct, as per the rules of procedure and conduct of business in each House	
Mild offences	• **Admonition** - milder form of reprimand, given by the Presiding Officer of the House. • **Reprimand** - severe form of admonition given by the President or the Vice-President of India in the Central Hall of Parliament, in the presence of both Houses.	
Punishment of withdrawal	• If the Presiding officers is of the opinion that the conduct of any member is grossly disorderly, may direct such Member to withdraw immediately from the House.	

	• The member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting.
Punishment of suspension	• Continuing to disregard the Presiding Officer's directions can invite the punishment of suspension. • A member can be suspended, at the maximum, for the remainder of the session only.
Reinstate suspended member	The house at any time can reinstate a suspended member by passing a motion.
Extreme misconduct	The House may expel a member "to rid the House of persons who are unfit for membership."

What are the consequences of suspension of MPs?

- **Prevent debates-** It can prevent opposition parties from raising crucial issues and can lead to the *government's unresponsiveness* and the Treasury benches' retaliatory posture.

- **Lack of representation-** The bills in the parliament will be introduced without two-thirds of the opposition members present in the House.

- **Dysfunctional-**MPs have all the right to seek answers and hold the government accountable to the parliament, suspension of MPs dilutes the spirit of accountability.

Court intervention in matter of suspension of MPs
• **Article 122-** It protects the parliamentary proceedings from judicial scrutiny and grants immunity to the presiding officers and MPs from any legal action for their conduct in Parliament. • **Exceptions to Article 122-**The courts can intervene in some cases where the procedural rules of the legislature are violated or the fundamental rights of the legislators are infringed.   o For example, courts can review the validity of <u>anti-defection law</u> or the expulsion of MPs from the House. • **Maharashtra Legislative Assembly case-** The Supreme Court stayed the suspension of 12 MLAs and observed that it was disproportionate and arbitrary, and violated the principles of natural justice.

4.2   Special Provisions of States

Why in news?

After Supreme Court upheld the validity of abrogation of Article, certain features of asymmetric federalism like Article 371 and Article 239A in Indian Constitution have come to limelight.

What is the nature of relationship between the centre and states in India?

- **Quasi-federal** – While *states do have autonomy*, the Constitution *tilts towards the Centre on certain areas*.

- **7th Schedule of the Constitution** – It contains the ***Union, State and Concurrent lists*** that prescribe subjects that the Centre and states are empowered to legislate upon.
  - o Both the Centre and state can legislate upon those in the concurrent list, the Union law would prevail in case of a conflict between the law made by Parliament and the state legislature.

- **Asymmetric federalism** – ***All Indian states are not given equal status*** considering various factors, ranging from the fiscal, political and the administrative features.

- Several states enjoy ***varying degrees of autonomy and relationship*** with the Centre.
  - o **Article 371** – It deals with *12 states* for better governance and political administrations.
  - o **Article 239A** – It deals with the creation of *local legislature for Union territory of Puducherry*.
  - o **Article 239AA** – It deals with *national capital territory of New Delhi (NCT)* which has the powers to *legislate upon subjects in the state and concurrent lists* in the 7th Schedule.

What are the special provisions under Article 371?

- **History** – It did ***not exist in the original constitution*** but was incorporated by amendments.

- **Incorporation** – Like Article 370, _**Article 371**_ also became a part of the Constitution _since January 26, 1950_.

- Articles 371(A-J) were incorporated through amendments under Article 368, which lays down the power of the Parliament to amend the Constitution and procedure therefor.

- **Constitution** – _**Article 371 to 371-J in Part XXI**_ of the constitution titled _'Temporary, Transitional and Special Provisions'_.

- **Objective**
    - To _meet the aspirations of the people of backward regions_ of the states.
    - To _protect the cultural and economic interests_ of the tribal people of the states
    - To _deal with the disturbed law and order_ condition in some parts of the states

- **Validity** - All these exceptions would be operable till the crisis, either secessionist sentiments or war ceases.

- Despite the 'temporary' tag, there _**isn't any explicit expiry date**_.

What are the states that have special provisions under Article 371(A-J)?

Article	State	Provision
Article 371	Maharashtra and Gujarat	Governor has special responsibility to establish separate development boards for Vidarbha, Marathwada, and the rest of Maharashtra, and Saurashtra and Kutch in Gujarat.
Article 371A (13th Amendment Act, 1962)	Nagaland	No act of Parliament would apply in matter relating to religious and social practices, ownership and transfer of resources unless the state government pass a resolution of the same and the governor has special responsibilities with respect to law and order.
Article 371B (22nd Amendment Act, 1969)	Assam	The President may provide for the constitution and functions of a committee of the Assembly consisting of members elected from the state's tribal areas.
Article 371C (27th Amendment Act, 1971)	Manipur	The President may provide for the constitution of a committee of elected members from the Hill areas in the Assembly, and entrust "special responsibility" to the Governor to ensure its proper functioning.
Article 371D (32nd Amendment Act, 1973)	Andhra Pradesh and Telangana	• It is substituted by The Andhra Pradesh Reorganisation Act, 2014. • President must ensure equitable opportunities and facilities in public employment and education to people from different parts of the state.
Article 371E	Andhra Pradesh	Allows for the establishment of a university in Andhra Pradesh by a law of Parliament but this is not a "special provision" in the sense of the others in this part.
Article 371F (36th Amendment Act, 1975)	Sikkim	The members of the Legislative Assembly of Sikkim shall elect the representative of Sikkim in the House of the People and parliament may provide for seats in the Assembly, which may be filled only by candidates from certain sections of people.
Article 371G (53rd Amendment Act, 1986)	Mizoram	Parliament cannot make laws on religious or social practices, customary law, and administration of justice, ownership and transfer of land unless the state Assembly so decides.
Article 371H (55th Amendment Act, 1986)	Arunachal Pradesh	The Governor has a special responsibility with regard to law and order, and "he shall, after consulting the Council of Ministers, exercise his individual judgment as to the action to be taken".
Article 371J (98th Amendment Act, 2012)	Karnataka	A provision for a separate development board for the Hyderabad-Karnataka region and there shall be equitable allocation of funds and equitable opportunities and facilities for people in government jobs and education.

4.3 All India Judicial Services (AIJS)

Why in news?

In the inaugural session of Constitution Day celebrations at the Supreme Court, President Droupadi Murmu put forth a proposal for the establishment of an All India Judicial Service examination.

What is All India Judicial Service (AIJS)?

- It is a proposal to create a centralised service for recruiting judges at the level of additional district judges and district judges for all States, similar to the UPSC civil service exam.

- **Article 312-** *42nd Constitutional Amendment*, amended this article to confer power on the Rajya Sabha to initiate the process for setting up an AIJS.

- **Creation of AIJS-** Rajya Sabha passes a resolution by *two-thirds majority* to declare it necessary or expedient in national interest1.

- **Parliament's role-** It makes a law to create one or more all India services, including AIJS, and regulates their recruitment and service conditions.

- **Scope-** AIJS covers posts of district judge and above, as defined in *Article 236*.

- **Centralisation-** It will centralise the recruitment of judges at the level of additional district judges and district judges for all States.

History of AIJS
• **1st Law Commission, 1958-** In its 14th Report on Reform of Judicial Administration recommended creating a separate all-India service for judicial officers.
• **42nd Amendment Act, 1976-** It provided for AIJS in Article 312 which empowers the Parliament to create one or more all-India services common to the Union and the States.
• **Chief Justices Conferences-** In 1961, 1963, and 1965 favoured the creation of an AIJS.
• **Law Commission Report, 1978-** It discussed delays and arrears of cases in the lower courts and proposed the idea of AIJS.
• **Parliamentary Standing Committee, 2006-** The Committee on Personnel, Public Grievances, Law and Justice in its 15th Report backed the idea of a pan-Indian judicial service, and also prepared a draft Bill.
• **All India Judges Association vs Union of India-** In 1992 the Supreme Court directed the Centre to set up an AIJS.
• In a 1993 review of the judgment, however, the court left the Centre at liberty to take the initiative on the issue.
• **Centralized recruitment-** In 2017, the Supreme Court took Suo moto cognizance of the issue of appointment of district judges, and mooted a "*Central Selection Mechanism*".

What is the present system of selection?

- **Constitutional provision-** Articles 233 and 234 of the Constitution of India deal with the appointment of district judges and place it in the domain of the States.

- **Selection procedure-** It is conducted by the State Public Service Commissions and the concerned High Court, since High Courts exercise jurisdiction over the subordinate judiciary in the State.

- Panels of HC judges interview candidates after the exam and select them for appointment.

- **Provincial Civil Service (Judicial) exam-** It is commonly referred to as the judicial services exam, all judges of the lower judiciary up to the level of district judges are selected through this exam.

Why there is a need of AIJS?

- **Huge backlog-** As of 2021, there are around 5,400 vacant positions and pendency of 2.78 crore cases in lower judiciary primarily due to *inordinate delay* in holding regular exams by States.

- **Skilled workforce-** It will give an opportunity for induction of suitably *qualified fresh legal talent* selected through a proper all-India merit selection system.

- **Lack of incentives-** State judicial offerings aren't appealing because of low salaries, rewards, and reimbursement from State governments.

- **Timely recruitment**- It will allow a large number of judges to fill those vacancies in the lower judiciary through a trial across India.

- **Efficiency**- AIJS would attract the best talents in the country and therefore could maintain high standards of judicial administration.

- **Judicial diversity**- It will address the issue of _social inclusion_ by enabling suitable representation to marginalized and deprived sections of society through reservation.

- **Improve governance**- AIJS will lead to the appointment of quality judges, this would remove corruption, favouritism etc., and public faith in the judiciary will be restored.

What are the challenges with AIJS?

- **Against federalism**- Several States oppose the idea of a centralised recruitment process for district judges, as encroachment on the powers of States granted by the Constitution.

- **Opposition from High Court**- They perceive it as an encroachment on their autonomy and authority over the subordinate judiciary.

- **One size fits all approach**- States argue that central recruitment would ignore the unique needs of each State, such as language, representation, and reservations for different groups.

- **Language issue**- Judicial business is conducted in regional languages, which could be affected by central recruitment.

- **Underrepresentation**- Reservation based on caste dilutes the representation of rural candidates or linguistic minorities in the state.

- **Separation of powers**- States also fear that central recruitment would give the executive more influence over the appointment of district judges, and reduce the role of High Courts which is against _Article 50_.

- **Structural issues**- Legal experts contend that AIJS would not solve the problems of the lower judiciary, such as vacancies, delays, and quality, this can be solved by increasing pay and promoting lower judges to High Courts.

What lies ahead?

- AIJS should overcome its flaws and become an effective way to fill the judicial vacancies.

- There should be a proper consensus from the States and High Courts on the proposal for setting up AIJS.

- A _meritocratic judiciary_ is the want of the hour that is viable with rigorous recruitment process.

4.4   Postal Ballot

Why in news?

Recently, in Madhya Pradesh, an opposition party confronted election officials for opening the strong room where postal ballots had been stored.

What options are available for voting in India?

- **Visiting the poll booth** - A person will visit the polling booth to exercise his/her franchise.

- **Postal ballots** - A voter exercises his/her franchise through post.

- **Proxy voting** - The person can authorize another residing in the same polling booth area to cast a vote on his/her behalf.
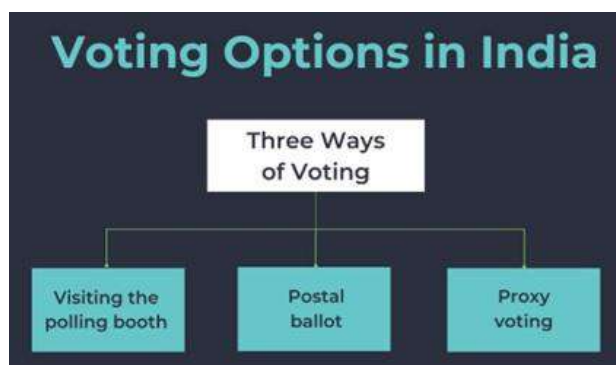
What is postal vote ballot?

Features	Postal Vote Ballot
Postal ballot voting	• It refers to the _distribution of ballot papers to registered voters by post_ instead of people coming to the polling booth directly to vote. • These votes are returned in the post or handed in person in the elections office or at a polling station

Applicable to	• Service voters • Special voters • Absentee voters • Voters on election duty • Electors under preventive detention
Service voters	• Service voter includes a member of the Armed Forces of the Union, Armed Police Force of a State or employed under the Government of India. • They can cast their votes either through postal ballot or through a proxy voter. • A voter who opts to vote through a proxy is called a *Classified Service Voter*.
Special voters	• It includes President of India, Vice President, Governors, Union Cabinet ministers, Speaker of the House and government officers on poll duty.
Absentee voters	• These are voters employed in *essential services* and unable to cast their vote due to their service conditions. • **Notified voters**- Delhi Metro Rail Corporation, Northern Railway (Passenger and Freight) Services and media persons. • Senior citizens *above 80 years of age* and those belonging to the category of physically disabled *(PWD)*. • COVID-19 infected or suspected patients.
Electronically Transmitted Post Ballot System (ETPBS)	

- Through this system, the service voters cast their vote on an electronically received postal ballot, from anywhere outside their constituency.
- It is a fully secured system, having 2 security layers - *OTP and PIN*.
- **Launched by** - ECI with the help of Centre for Development of Advanced Computing (C-DAC).
- **Applicable for** - Service voters
- **Motto** - "No voter to be left behind"

What is the procedure for storing postal voting ballot system?

- **Casting of votes**- Voters who are eligible for postal ballots can cast their votes at facilitation centres or by post.
- The ballots are collected daily and stored in a strong room by the Returning Officer (RO).
- **Transfer of ballots**- The RO informs the candidates when the postal ballots will be moved from one strong room to another.
- The postal ballots are taken out of the strong room in front of the candidates or their agents, put in a steel box and sealed.
- **Opening of ballots** - The steel box is escorted by armed CPF to the strong room at the counting centre a day before counting and opened in the presence of candidates or their representatives.

What are the issues with postal ballot?

- **Tampering of votes**- They are vulnerable to being altered, stolen, or forged by malicious actors.
- **Time constraints-** They may cause delays in counting and declaring the results due to the time required to process and verify them.
- **Violates privacy-** They may violate the voting confidentiality and expose the voters to undue influence or coercion by others.
- **Complexity-** They may impose unequal burdens and consequences on different groups of voters depending on their literacy, accessibility, and availability of postal services.

Electronic Voting Machine (EVM)
- It is an electronic device for recording votes that consists of 2 units – a Control Unit and a Balloting Unit.   - It was introduced in *Parur Assembly Constituency* of Kerala in the year 1982.   **Developed by-** State-owned Electronics Corporation of India and Bharat Electronics Limited

Voter Verifiable Paper Audit Trial (VVPAT)
- It is an independent system attached to an EVM.   - It acts as a second line of verification and allows the voters to verify that their votes are cast as intended.   - When a vote is cast, a slip is printed on the VVPAT printer containing the *serial number, name and symbol* of the candidate voted.   - This remains visible through a *transparent window* for **7 seconds.**   - The printed slip automatically gets cut and falls into a sealed drop box which can be counted if needed.

Related links – Transfer of EVMs

5. GOVERNMENT ACTS & POLICIES

5.1 PM JANMAN Scheme

Why in news?

Recently, India has launched the PM Janjati Adivasi Nyaya Maha Abhiyan a campaign for the tribals.

Particularly Vulnerable Tribal Groups (PVTGs)
- There are 75 PVTGs out of 705 STs, spread over 18 states and 1 Union Territory (A&N Islands) with around 27.6 lakh as per 2011 Census.   **Dhebar commission-** In 1973, it created Primitive Tribal Groups (PTGs) as a separate category, who are less developed among the tribal groups.   **PVTGs-** In 2006, the Government of India renamed the PTGs as Particularly Vulnerable Tribal Groups (PVTGs).   **Features-**They are mostly homogenous, with a small population, relatively physically isolated, social institutes cast in a simple mould, absence of written language, relatively simple technology and a slower rate of change etc.,

Characteristics of PVTGs: Pre-agricultural level of technology, Low level of literacy, Economic backwardness, Declining or stagnant population

- **Statistics**- Highest PVTGs is present in Odisha (13) followed by Andhra Pradesh (12).
- **Chhattisgarh**- It has 7 PVTGs namely Kamar, Baiga, Pahadi Korba, Abujhmadiya, Birhor, Pando and Bhujia.
- **Scheme for Development of PVTGs**- It was established in 2008 to adopt a holistic approach to the socio-economic development of PVTGs.
- **Pradhan Mantri PVTGs Development Mission-** It was introduced in the Union Budget 2023-24 to improve the socio-economic status of PVTGs and bridging gaps in health, education, livelihoods, and basic infrastructure.
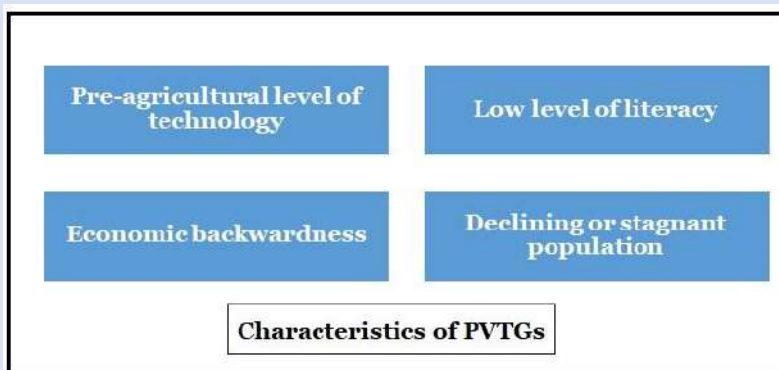
What is PM-JANMAM scheme?

- **Launch-** On Janjatiya Gaurav Diwas (Birth anniversary of Birsa Munda) in Jharkhand.
- **Objective**- To provide essential amenities (road connectivity, electricity, secure housing, clean drinking water, sanitation) and improved access to education, health, nutrition, sustainable livelihood opportunities.

- The government will showcase and spread awareness of various government schemes made for the tribals.

- The scheme will be implemented by 9 ministries with *Ministry of Tribal Affairs* playing the key role.

- **Beneficiary-** Government has identified *75 tribal communities and primitive tribes* with a population of lakhs who reside in more than 22 thousand villages in the country.

- **Focus-** 11 critical interventions for Particularly Vulnerable Tribal Groups (PVTG).

Provisions	About
Housing	To provide 4.90 lakh pucca homes
Connectivity	Construct 8,000 kilometers of roads and Installation of mobile towers
Drinking water supply	Piped water supply for all Particularly Vulnerable Tribal Group (PVTG) habitations.
Community water supply	It will be provided in 2,500 villages/habitations with a population of less than 20 households.
Bandhan Vikas Kendra	- It is a unit of 15 to 20 tribal self-help groups (SHGs) that collect and process minor forest produce (MFP) such as honey, tamarind, gum, etc. - The SHGs are trained and provided with equipment, working capital, and marketing support to add value to the products and sell them at higher prices.
Hostel facility	To provide 500 hostels
Health infrastructure	To provide 1000 mobile medical units for 10 districts.
Education and training	To provide vocational education and skilling centres in 60 Aspirational PVTG block.
Infrastructure	Multipurpose centres, Anganwadi centres.
Renewable energy	To provide solar off-grid system and solar lighting in streets.
Electricity	Last mile electricity connection for 57,000 households.

- **Ayush Wellness Centres-** It will be set up by the Ministry of AYUSH and AYUSH facilities will be extended to PVTG habitations through mobile medical units.

- **Skill enhancement-** Ministry of Skill Development and Entrepreneurship will facilitate skill and vocational training in PVTG habitations, multipurpose centres and hostels according to suitable skills of these communities.

What are the challenges in implementation of the scheme?

- **No data-**There is lack of current data on PVTGs, as no census since 1951 has accounted for them separately.

- **Opaque-** The current project is going ahead with the baseline surveys but the results are not made public.

- **Lack of accountability-** The scheme involves multiple ministries, this may lead to issue of overlapping or conflicting mandate, gaps in service delivery etc.,

- **Loss of ecological diversity-** Some of the interventions such as road construction may affect the availability and quality of natural resources.

- **Loss of cultural heritage-** The scheme provides education, health, skill development etc., this may result in loss of their intellectual and cultural heritage, and reduce their resilience and adaptability.

- **Lack of autonomy-** Mobile connectivity, Anganwadi centres and Bandhan Vikas Kendra may bring the PVTGs under the purview of state and market forces and compromise their sovereignty and rights.
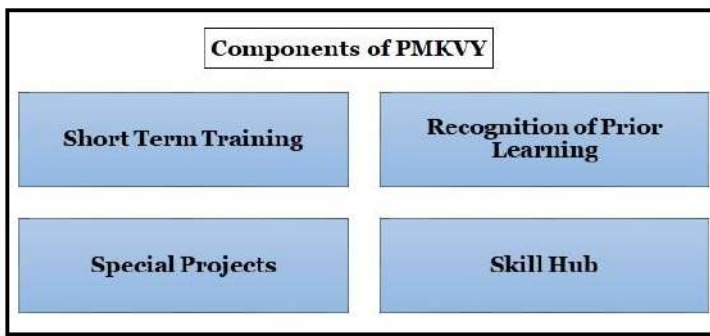
What lies ahead?

- *National Advisory Council (NAC) 2013* report on the state of PVTGs had recommended that the Ministry of Tribal Affairs should design and conduct a Census specifically for the PVTG communities.

- The Census should not just enumerate but also find out the status of education, health, and housing.

## 5.2   Pradhan Mantri Kaushal Vikas Yojana

Why in news?

Recently the Lok Sabha standing committee has found that the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) has trained 13.7 million candidates, but only 18% of them have secured a job.

Features	Description
Pradhan Mantri Kaushal Vikas Yojana	
Launch year	• 2015
Ministry	• Ministry of Skill Development and Entrepreneurship
Aim	• To provide industry-relevant training and certification to Indian youth.
Implemented by	• National Skill Development Corporation (NSDC)
Components	
PMKVY 1.0	• To encourage and promote skill development in the country by providing _free short duration skill training._ • To boost employability of youth corresponding to the industrial demand.
PMKVY 2.0	• It intended to cover 10 million youth during the period 2016 -2020. • Skill training would be done based on the _National Skill Qualification Framework (NSQF)_ and indstry led standards.
PMKVY 3.0	• It would make skill development more demand-driven and decentralised in its approach, with focus on digital technology and Industry 4.0 skills. • It will be more _trainer centric_ and _learner centric_.
PMKVY 4.0	• It is launched to skill lakhs of youth in new age courses for Industry 4.0 like coding, AI, robotics, mechatronics, IOT, 3D printing, drones, and soft skills.within the next 3 years. • _Skill India Digital_ will form the backbone for implementation of PMKVY 4.0 by providing end to end digitalization of training lifecycle

What are the challenges in implementation of PMKVY?

- **Underutilised funds**- As per government's data, the programme's fund utilisation was poor in 2016-17, with only 56% of the allocated funds being used

- **Limited coverage**- Currently only around 2.4% of India's strong workforce has received formal vocational education or training.

- **Infrastructural deficit-** The scheme relies on the training centres set up by the NSDC and its partner trainers, many of them lack adequate infrastructure, equipment, and trainers to provide quality and practical training.

- **Incompatible**- The current skill development programmes do not match the actual regional demand for skills, creating a mismatch between the training and the market requirements.

- **Poor productivity**- Disconnect with the industry has led to a gap between the skills imparted and the skills needed, resulting in low employability and productivity

- **Dropouts**- It has high dropout rate, with 20% of the enrolled candidates leaving the training before completion.

- **Limited impact**- It is due to medical issues, family obligations, social challenges, lengthy commutes, marital status changes, increased livelihood demands, limited job opportunities, and perceived skill stagnation.

Timeline of PMKVY

- **Ministry of Skill Development established** — 2014
- **PMKVY 1.0** 19.86 lakh candidates trained — 2015
- **PMKVY 2.0** 1.10 crore candidates trained — 2016
- **PMKVY 3.0** 7.37 lakh candidates trained — 2020
- **Customised Crash Course Programme for COVID Warriors** 1.20 lakh candidates trained — 2021
- **Skill Hub Initiative** Utilizing infrastructure in educational institutions 1.97 lakh trained — 2022
- **PMKVY 4.0**

- **Regional disparity**- The placement rate varies across different states, with Telangana having the highest rate of 35.1% and Maharashtra having the lowest rate of 9.3%.

- **Low placement rate**- Only a small fraction (18%) of trained candidates have been able to find a job after training.
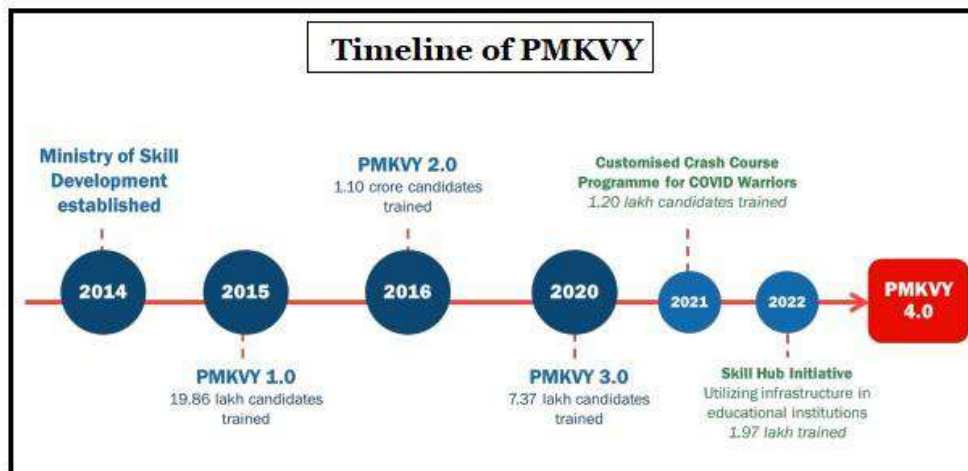
What lies ahead?

- **Quality improvisation**- This can be done by ensuring adequate infrastructure, equipment and trainers at the training centres and by providing regular training.

- **Capacity building**- The government must create a pool of _National Assessors and Trainers_ under PMKVY 4.0 to reduce the dropout rates.

- **Better representation of industry**- The standing committee has su ggested conducting a survey of industry representatives to better understand their needs and expectations.

- **Adopt localised approach-** It is important to adopt localised, demand-driven approaches that cater to the specific regional challenges and opportunities.

- **Effective collaboration**- The scheme needs to involve the State governments and the _District Skill Committees_ more actively in the planning, implementation, and monitoring of the skill development programmes.

- **Accountability**- The scheme should enhance the monitoring, mentorship, evaluation, and grievance redressal mechanisms, by using technology-driven platforms, innovative financing, and digitalisation, and by ensuring transparency and accountability at all levels.

- **Extensive support**- Provide post training support and guidance, by facilitating placement opportunities, entrepreneurship development and career counselling and by offering additional support for vulnerable groups such as women, persons with disabilities and minorities.

| 5.3 | Revised Criminal Reform Bill |

Why in news?

The Centre withdraws all three criminal law Bills and introduces new set of draft legislations.

Why the criminal Bills are revised?

Introduced bills	Replaced
Bharatiya Nyaya Sanhita Bill, 2023 (BNSB)	Indian Penal Code (IPC), 1860
Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS)	Criminal Procedure Code (CrPC), 1973
Bharatiya Sakshya Bill, 2023 (BSB)	Indian Evidence Act 1872

- In August 2023, three Bills were introduced in Lok Sabha.

- **Aim**- To overhaul the existing criminal laws and make them more contemporary and comprehensive.

- The three Bills were referred to the standing committee, they proposed key changes to the Bills.

- Subsequently, the centre revamped criminal law Bills.

What were the revised reform Bills key changes?

About	First draft of the Bill	Revised Bills
Handcuffs	- It was introduced to prevent the escape of individuals accused of serious offences. - To ensure the safety of police officers and staff during arrests.	- The term economic offences has been removed from handcuff provision. - The use of handcuffs is extended to the persons who are produced before the court.
Mercy petitions	- It allowed convicts undergoing death sentences/their legal heirs/relatives to file mercy petitions to the Governor within 30 days after the jail authorities inform them about the disposal of their petition. - If the Governor rejects it, they can appeal to the President within 60 days. - The President's order is final and cannot be challenged in any court. - They can also submit their plea to the Home Department of the Centre/State government before approaching the Governor/President.	- It deleted the provision that allowed mercy petitions to be forwarded to the Home Department of the state government or the Centre for review. - It is based on the committee's suggestion that the judicial functions should not be left with Executive's discretion.
Preventive detention	- It allowed police officers to detain or remove persons resisting to conform to any direction given by them and taken them to Judicial Magistrate. - In petty cases release them when the occasion is past.	- The person detained may be taken to magistrate or in petty cases be released as soon as possible within 24 hours. - Judicial magistrate is replaced b Magistrate.
Community service	- It has included community service as a penal measure for offences like attempting suicide, restraining exercise of lawful power theft, defamation of public functionaries, and appearing in public places while intoxicated and causing annoyance. - There is no clear cut definition for community service.	- It defines community service to mean work which the Court may order a convict to perform as a form of punishment that benefits the community, for which he shall not be entitled to any remuneration. - It also adds community service as punishment for unlawfully engaging public servants in trade and non-appearance in response to a proclamation
Terrorism	- It expanded the definition of terrorism beyond the Unlawful Activities (Prevention) Act, 1967 (UAPA). - It included non-violent speech and acts that could intimidate, disturb or destabilise the public order or the political, economic, or social structures of the country as terrorism.	- It removed the broad and vague definition of terrorism. - It adopted the existing definition of UAPA 1967. - UAPA defines terrorism as any act that threatens or strikes terror in people or the sovereignty of India or any foreign country.
Mental unsoundness	It used the term "mental illness" to replace the concept of "mental unsoundness" in the existing laws, without acknowledging the difference between them.	- It restored the concept of mental unsoundness. - The government has recognised the importance and ensuring consistency with the existing laws and the Mental Healthcare Act, 2017.

5.4 Bharatiya Nyaya Sanhita Act, 2023

Why in news?

President gives assent to 3 Criminal Law amendment bills, the Bharatiya Nyaya Sanhita, the Bharatiya Nagarik Suraksha Sanhita and the Bharatiya Sakshya Adhiniyam.

To know more about criminal law reforms, click here.

What are the significant takeaways from the new act?

- **Addition** – 20 new offences have been added.

- **Deletion** – 19 provisions that existed in IPC have been deleted.

- **Punishment of imprisonment** – It has been increased in 33 offences.

- **Punishment of fine** – It has been enhanced in 83 offences.

- **Punishment of 'community service'** – It has been introduced in 6 offences.

- **Mandatory minimum punishment** – It has been introduced in 23 offences.

- Reorganization of offences are made wherein similar provisions have been clubbed together.

What are the major changes in the new act?

- **New definitions** – It defines 'child' and also defines 'beggary' as a form of exploitation for trafficking.

- **Modifications** – The definition of 'movable property' is widened to include property of every description.

- In the definition of grievous hurt, the number of days has been reduced from 20 days to 15 days.

- **New chapter** - On offence against woman and child and on 'inchoate offences' (attempt, abetment and conspiracy).

- **Sedition** – Under new name '***deshdroh'*** with wider definitions.

  o It covers acts of subversive activities, and those encouraging feelings of separatist activities.

> *In 2018, the Supreme Court has struck down the section 377 of the IPC which criminalised homosexuality and the offence of adultery as unconstitutional.*

- **Gender neutrality** – While rape laws continue to operate only for women, some children related laws were modified.

  o For the offences dealing with illicit intercourse.

  o For the offence dealing with kidnapping of minors, it is 18 years for both the genders.

- For adults, the offence of outraging the modesty of women (354A of the IPC) and voyeurism (354C) now has gender neutrality for the accused, which means that women can also be booked.

- **Inclusion** – It includes transgender in the definition of 'gender' and includes electronic and digital records in the definition of 'document'.

- **Deletion** – Unnatural sexual offences under Section 377 of IPC, the provisions related to thugs and adultery.

- **Community service** – It is introduced as a punishment for theft of less than Rs 5,000.

- **Attempt to suicide** – It criminalises 'suicide attempts with the intent to compel or restrain any public servant from discharging his official duty".

  o Jail term which may extend to 1 year with community service.

  o It could be invoked to prevent self-immolations and hunger strikes during protests.

- **Damage to public property** - It now carry a graded fine, which means the fine corresponds to the amount of damage caused.

- **Mob Lynching and hate-crime murders** – It is for cases when a mob of 5 or more individuals commits murder based on factors such as race, caste, community, or personal belief.

  o Punishment extends from life imprisonment to death.

- **Organised crime** – It prescribe vast powers of surveillance and relax standards of evidence and procedure in favour of the state.

  o The punishment for attempt to commit and for committing is the same, but a distinction is based on whether a death is caused or not by the alleged offence.

- A separate category of petty organised crime criminalises 'theft, snatching, cheating, unauthorised selling of tickets, unauthorised betting or gambling, selling of public examination question papers'.

- **Terrorist act** – While it imports larger parts from UAPA act, the offence involving terror financing is broader than in UAPA.

- False Promises to Marry - Clause 69 seems to ostensibly tackle the "love jihad" narrative by criminalising "deceitful" promise to marry.

  o It also essentially criminalises consensual sexual activity too.

What are the minor changes in the new act?

- **Removal of archaic expressions** – At 9 places, expressions like 'lunatic', 'insane' and 'idiot' have been done away with.

- **Deletion of colonial remnants** – Terms like 'British calendar', 'Queen', 'British India, 'justice of the peace' have been deleted.

- **Replacement of terminologies**

  o At 44 places 'Court of Justice' has been replaced with 'Court'.

  o At 12 places 'denotes' has been replaced with 'means'.

  o At 3 places and 'that is to say' is replaced with 'namely'.

- **Uniformity** – The expression 'child' is same throughout the BNS.

- Contemporary style of drafting has been used.

> **New offences included under Bharatiya Nyaya Sanhita (BNS)**
>
> - Organised crime
> - Petty organised crime
> - Mob lynching
> - Terrorism acts
> - Hit and run
> - Hiring child to commit offence
> - Snatching
> - Abetment outside India
> - Acts endangering the sovereignty, integrity and unity of India.
> - Publication of false or fake news etc.

5.5   Jammu and Kashmir Bills

Why in news?

Recently Lok Sabha has passed the Jammu and Kashmir Reorganisation (Amendment) Bill and Jammu and Kashmir Reservation (Amendment) Bill.

What is Jammu and Kashmir Reorganisation (Amendment) Bill?

- It amends the Jammu and Kashmir Reorganisation Act, 2019.

- **J&K Reorganisation Act, 2019-** It provides for the reorganisation of the state of Jammu and Kashmir into the union territories of Jammu and Kashmir (with legislature) and Ladakh (without legislature).

- **Number of seats in Legislative Assembly-** 2019 Act amended the 2nd Schedule of the 1950 Act to specify the total number of seats in the Jammu and Kashmir Legislative Assembly to be 83.

- It reserved six seats for Scheduled Castes. No seats were reserved for Scheduled Tribes.

> *The 2nd Schedule of the Representation of the People Act, 1950 provides for the number of seats in legislative assemblies.*

- **Increase in seats-** The bill increases the total number of seats to 90. It also reserves 7 seats for SC and 9 seats for ST.

- **Nomination-** *Lieutenant Governor* may nominate two members from the *Kashmiri migrant community* and one representing the displaced persons from Pakistan-occupied Kashmir (PoK) to the legislative assembly.

- **Social inclusion-** One of the nominated members must be a woman.

What is Jammu and Kashmir Reservation (Amendment) Bill?

- It amends the Jammu and Kashmir Reservation Act, 2004.

- **J&K Reservation Act, 2004-** It provides for reservation in jobs and admission in professional institutions to members of Scheduled Castes, Scheduled Tribes, and other socially and educationally backward classes.

- **SEBC-** Under the Act, Socially and Educationally Backward Classes (SEBCs) include

  o People residing in villages declared as socially and educationally backward by the Union Territory of Jammu and Kashmir.

  o People residing in areas adjoining the Actual Line of Control and International Border, and

- o Weak and under-privileged classes (social castes)

- **Amendment-** It seeks to change the nomenclature of a section of people who are eligible for quotas in appointments and admissions.

- **Power of the government**- It may make *inclusions or exclusions* from category of weak and under-privileged classes, on the recommendations of a Commission.

- **Substitution-**The Bill substitutes weak and under-privileged classes with other backward classes as declared by the UT of Jammu and Kashmir. The definition of weak and under-privileged classes are deleted from the Act

> *The Constitution (Jammu and Kashmir) Scheduled Tribes Order (Amendment) Bill, 2023- It seeks to revise the list of Scheduled Tribes in J&K to include the <u>Pahari community</u>.*
>
> *The Constitution (J&K) Scheduled Castes Order (Amendment) Bill, 2023- It seeks to include the <u>Valmiki community</u> in J&K's Scheduled Castes list by adding it as a synonym to Chura, Bhangi, Balmiki, & Mehtar.*

What is the significance of the Bills?

- **Inclusive India-** It reflects a commitment to inclusivity and justice, it also represent a broader strategy to integrate Jammu and Kashmir more fully with the rest of India.

- **Affirmative action-** It ensures equal opportunities for marginalised communities in education and employment by replacing weak and under-privileged with other backward classes.

- **Strong representation-** Increasing seats in the Legislative Assembly for SC & STs will provide a strong political representation.

- **Abrogation of Article 370-** It has significantly impacted the region's security dynamics, leading to a notable reduction in terrorism-related activities.

What are the challenges in reservation of assembly seats?

- **Non-inclusive**- The Bill provides for nomination rather than elected representatives which may fail to foster reconciliation.

- **Favouritism-**Lieutenant Governor is given too much power to nominate Kashmiri Pandits. This could lead to corruption and favouritism that overshadow the community's true aspirations and needs.

- **Issues with nomination**- The Bill differs from the past practice of nominating members by elected governments, which weakens the credibility and effectiveness of the nominated members, raising questions about their validity and acceptance by the people.

- **Vote bank politics**- Community can be used as a political card, without addressing their real needs.

- **Definition of Kashmiri Pandits**- It is flexible and could exclude certain categories from the nomination.

What lies ahead?

- The journey toward genuine empowerment necessitates embracing democratic norms, fostering meaningful engagement, and creating pathways that bridge communities rather than perpetuating divisions.

- Inclusive measures through which political representation can truly catalyse reconciliation is the instant need.

5.6 Election Commissioners Bill 2023

Why in news?

Recently Rajya Sabha passed The Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Office and Terms of Office) Bill, 2023.

Constitutional Provisions for Election Commission	
About	**Description**
Election Commission	It is a permanent and an independent body established by the Constitution of India directly to ensure free and fair elections in the country.

| Article 324	It provides the power of superintendence, direction and control of elections to parliament, State legislatures, the office of President of India and the office of Vice-President of India shall be vested in the Election Commission.
Composition	It consists of the Chief Election Commissioner (CEC) and two other Election Commissioners (ECs)
Appointment	The CEC and EC appointment is subject to the provisions of any law made by Parliament, be made by the _President_.

What are the key features of Bill?

- **Election Commission**- It will consist of a Chief Election Commissioner (CEC) and other Election Commissioners (ECs). The President will periodically fix the number of ECs.

- **Appointment of the Commission**- The Commission will be appointed by the President, upon the recommendation of the _Selection Committee_.

- **Search Committee**- It is headed by the Cabinet Secretary, it will suggest five names to the Selection Committee.

- The Selection Committee may consider any person other than those suggested by the Search Committee.

- **Eligibility criteria**- The CEC and ECs must

    o Be a persons of integrity,

    o Have knowledge and experience in the management and conduct of elections, and

    o Be or have been Secretary (or equivalent) to the government.

- **Tenure**- Members of the Election Commission will hold office for six years, or until they attain the age of 65 years, whichever is earlier.

- **Reappointment-** Members of the Commission cannot be re-appointed. If an EC is appointed as a CEC, the overall period of the term may not be more than six years.

- **Salary, allowances and other conditions-** It will be equivalent to that of the Cabinet Secretary.

- **Pension provisions-** They will have an option to draw pension and other retirement benefits from the service that they belonged to previously.

- **Removal-** It retains the manner of removal of CEC and ECs as specified in the Constitution.

    o **CEC-** He/She may be removed in the same manner and on the same grounds as a Supreme Court Judge.

    o **EC-** They may be removed only upon the recommendation of CEC.
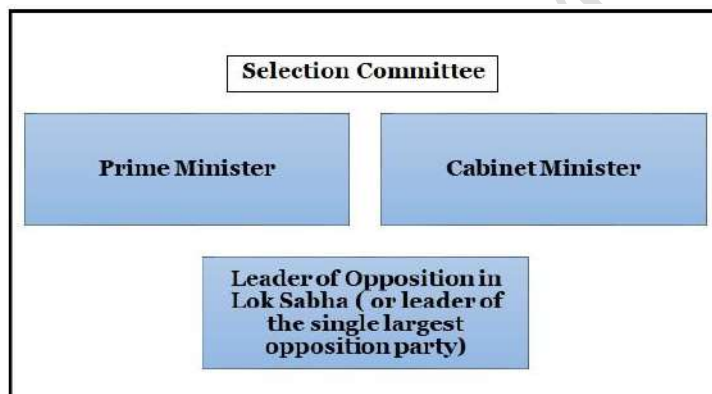
What is the issues with the Bill?

- **Lack of autonomy-** The Selection Committee may be dominated by the government and compromise the independence of the Election Commission.

- The Supreme Court had suggested to include Chief Justice of India instead of a Cabinet Minister, to ensure more balance and impartiality.

- **Government interference-** The Bill allows the Selection Committee to make recommendations even when there is a vacancy in the Committee, this may result in the monopoly of the government in selection of candidates.
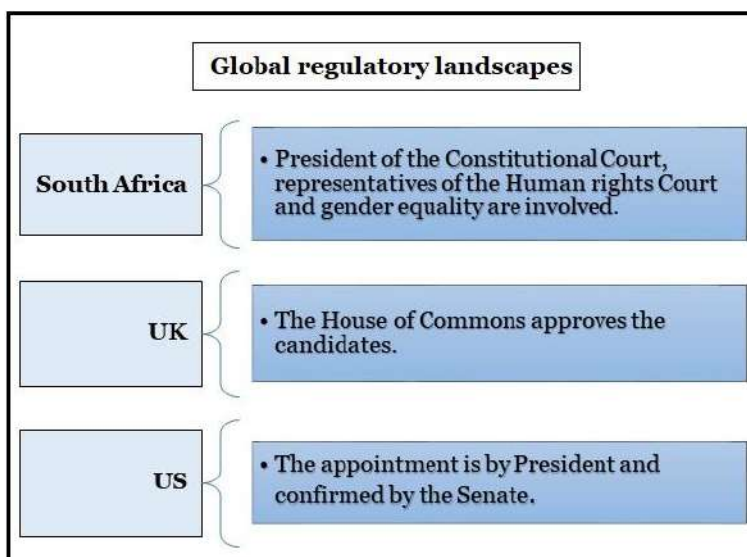
- **Salary provisions-** It is equivalent to Cabinet Secretary, which may lead to government influence as it is fixed by the government, it should be equivalent to salary of Supreme Court judge, which is fixed by an Act of Parliament and requires more consensus.

- **Eligibility criteria**- It limits to senior bureaucrats, who have been or are at rank equivalent to Secretary to the government. This may exclude other suitable candidates especially those who have judicial experience or expertise.

What is the Supreme Court ruling regarding the appointment of CEC and EC?

- **Anoop Baranwal case, 2023** - It held that there has been a legislative vacuum due to the absence of any law by Parliament in the last 73 years (since the adoption of the Constitution) with respect to the appointment of the CEC and EC.

- The independence of the ECI is essential for ensuring free and fair elections that is paramount for a vibrant democracy.

- It drew reference to various other institutions supporting constitutional democracy that have independent mechanisms for the appointment of its head/members like the National and State Human Rights Commission, the Central Bureau of Investigation (CBI),etc.,

- **Committee recommendations**- *Dinesh Goswami Committee* and the *Law Commission report* on Electoral Reforms suggested that the CECs and ECs should be appointed by a committee consisting of the Prime Minister, the Chief Justice of India (CJI) and the Leader of the Opposition or the largest Opposition party in the Lok Sabha.

> *Article 142 grants special powers to the Supreme Court to provide complete justice in any cause or matter pending before it.*

- **Interim arrangement**- The Court exercised its power under *Article 142* laid down that the CEC and ECs shall be appointed by a committee consisting of the Prime Minister, the CJI and the Leader of the Opposition or the largest opposition party in the Lok Sabha.

- The Bill removes Chief Justice of India from the selection process that was laid under Anoop Baranwal case.

5.7 Advocates Amendment Bill, 2023

Why in news?

Recently, Advocate amendment bill 2023 was passed in Lok Sabha which amends the Advocates Act 1961 and Legal Practitioners Act 1879.

What is Legal Practitioners Act 1879?

- **Aim-** To consolidate and amend the law relating to Legal Practitioners in certain provinces.

- **Application-** The Act initially extended to areas in West Bengal, Uttar Pradesh, Punjab, Bihar, Madhya Pradesh, Assam, Orissa, and Delhi.

- Any state government could, by notification in the Official Gazette, extend it to their States.

> *A tout is someone who procures clients for a legal practitioner in exchange for payment. The definition also included people who frequented civil or criminal courts, revenue offices, railway stations, etc. for such procurement purposes.*

- **Legal practitioner**- Section 2 of the 1879 Act defined the term "legal practitioner" to include advocates, vakils, or attorneys of any High Court.

- **Tout-** It also introduced a new definition of the term "tout".

What is Advocates Act 1961?

- **Aim-** To create a single class of legal practitioners known as "advocates."

- **All India Bar Council-** It established the council consisting of the Attorney General of India, the Solicitor General of India, and one representative from each State Bar Council, elected by its members.

- **Bar Council of India-** It empowers the body to make rules on matters such as legal education, professional conduct, legal aid, and recognition of foreign qualifications.

- **Advocates-** It defines an advocate as a person who is enrolled in any State Bar Council and who is entitled to practice law before any court or authority in India.

- **Tout provisions**-The Act repealed a majority of the 1879 Act but left behind provisions relating to its extent, definitions, and powers to frame and publish lists of touts.

Why there is a need to amend the bill?

- **Aim-** To amend the Advocates Act, 1961 and To repeal obsolete provisions of the Legal Practitioners Act, 1879.

- **Tout as offence-** The bill seeks to make the offence of touting as punishable and empowers judges to publish a list of offenders.

- **Efficiency-** It is amended to reduce the number of superfluous enactments in the statute book and repeal all obsolete laws.

- **Productiveness-** To keep in line with the government's policy of repealing all obsolete laws or pre-independence Acts that have lost their utility,

- **Ethical regulation-** The bill aims to ensure the regulation of legal profession and protect the interests of advocates and public.

- **Consultation-**The bill provides provision to consult with the Bar Council of India on the regulation of legal profession.

What are the key provisions of the bill?

- **Touts-** The Bill provides that every High Court, district judge, sessions judge, district magistrate, and revenue officer (not below the rank of a district collector) may frame and publish lists of touts.

- **Conduct inquiry**- The authorities empowered to frame and publish the list of touts may order subordinate courts to hold an inquiry into the conduct of persons alleged or suspected to be touts.

- **Publish the list-** If proven to be a tout, such person's name will be included in the list of touts that will be published by the authority and hung in every court.

- **Exclusion-** The court or judge may exclude from the premises of the Court any person whose name is included in the list of touts.

- No person will be included in such lists without getting an opportunity of showing cause against his inclusion.

- **Penalty-** Any person who acts as a tout while his name is included in the list of touts will be punished with

  o Imprisonment up to 3 months,

  o Fine up to Rs 500, or both.

- **Illegal practise**- The bill inserts a new provision in *Section 45 of the Advocates Act, 1961*, which prescribes 6 months of imprisonment for persons illegally practising in courts and before other authorities.

5.8 The Post Offices Bill, 2023

Why in news?

Rajya Sabha has recently passed the Post Office Bill, which repeals and replaces the Post Office Act, 1898.

Why there is a need for new bill?

- To provide a *simple legislative framework* for post offices, for citizen-centric services.

- To ensure the *effective functioning of the Postal Department* as a messenger service.

- To enhance the post offices as a *provider of banking facilities*.

> *660 post offices were closed earlier but 5,000 offices were opened between 2014 and 2023, and about 5,746 new ones are in the process of being opened.*

Features	Existing Provisions (Post Office Act, 1898)	New Provisions (Post Office Bill, 2023)
Exclusive privileges	Central government will have the exclusive privilege of conveying letters wherever it establishes posts. Stamps be issued as per the Rules prescribed by the Centre.	It *removed the exclusive privilege* of central government in conveying letters. It also made the post office to have the exclusive privilege of issuing postage stamps.

Services	Services provided by post office includes the delivery of postal articles including letters, postcards, and parcels and money orders.	Post Office will provide services prescribed by the central government.
Powers to intercept shipments	**Grounds** 1. Any public emergency 2. Interest of public safety or tranquillity. **Authority** - Such interceptions may be carried out by the central government, state governments, or any officer specially authorised by them. **Powers -** An intercepted shipment can be detained or disposed of by the officer in charge.	The bill *retains the power to intercept* shipments **Grounds** 1. Security of the state 2. Friendly relations with foreign states 3. Public order, emergency, or public safety 4. Contravention of the provisions of the Bill or any other law **Authority** - An officer empowered by the central government through a notification may carry out an interception.
Examination of shipment	An officer in charge of the Post Office may examine if he suspects any items prohibited, or are liable to be paid duty upon.	The bill *removes the powers of examination*. In such case, Central government may empower an officer of the Post Office to deliver the shipment to the ***customs authority*** who will then deal with the item in question.
Offences and penalties	The Act specifies various offences and penalties.	The Bill does not provide for any offences or consequences, except one. Amounts not paid or neglected by a user will be recoverable as arrears of land revenue.
Exemptions from liability	The government is exempted from any liability of loss, mis delivery, delay or damage to a postal article but does not apply where the liability is undertaken by the central government in express terms. Officers are also exempt from such liability unless they have acted fraudulently or wilfully.	It *retains exemption* provided to the central government and the officer in charge. The Post Office may prescribe the liability regarding its services which was earlier prescribed by the central government.

What are the concerns with the bill?

- **Draconian colonial provisions** – It not only retains the provision of intercepting a transmitted shipment in the interest of security of state but also added more grounds of interception.

- **Without any procedure -** The bill also does not lay down any procedures for interception or opening letters of packages.

- **Lacks transparency** – It is silent on specifying the 'level of officer' who will be empowered with such powers.

- **Harms Right to privacy** - Lack of safeguards may violate freedom of speech and expression, and right to privacy of individuals.

- **Emergency as ground** - The grounds for interception include 'emergency', which may be beyond reasonable restrictions under the Constitution.

- **Conflict of Interest** – The bill exempts India Post from liability for lapses in postal services.

- Liability may be prescribed through Rules by the central government, which also administers India Post. This may lead to conflict of interest.

- **Accountability** - It *removed the penalties* for offences done by the post office officials.

5.9   Telecommunication Bill 2023

Why in news?

Recently the Telecommunication Bill 2023 was introduced in Lok Sabha.

What are the key provisions of the Bill?

About	Description
Aim	To update and unify the existing laws on telecommunication services, networks, and spectrum.
Replaces outdated laws	It repeals the ○ Indian Telegraph Act, 1885 ○ Indian Wireless Telegraphy Act, 1933 and ○ Telegraph Wires (Unlawful Possession) Act, 1950.
Regulate activities	It amends the Telecom Regulatory Authority of India (TRAI) Act, 1997.
Authorisation for telecom related activities	Prior authorisation from the central government will be required to ○ Provide telecommunication services, ○ Establish, operate, maintain, or expand telecommunications networks, or ○ Possess radio equipment.
License authorisation	Existing licences will continue to be valid for the period of their grant, or for 5 years
Power of interception	Messages between two or more persons may be intercepted, monitored or blocked on grounds ○ Security of the state ○ Prevention of incitement of offences ○ Public order
Power to search	An officer authorised by the government may search premises or vehicles for possession of unauthorised telecom network or equipment.
Power to specify standards	The central government may prescribe standards and assessments for telecom equipment, infrastructure, networks, and services.
Right of way	• Facility providers may seek a right of way over public or private property to establish telecom infrastructure. • Right of way must be provided on a *non-discriminatory and non-exclusive basis* to the extent possible.
Users protection	• The central government may provide for measures to protect users which include ○ Prior consent to receive specified messages such as advertising messages, ○ Creation of *Do Not Disturb registers*, and ○ Mechanism to allow users to report *malware or specified messages*. • Entities providing telecom services must establish an online mechanism for registration and redressal of grievances.
Appointments of TRAI	• The Bill amends TRAI Act to allow individuals with ○ At least 30 years of professional experience to serve as the chairperson ○ At least 25 years of professional experience to serve as members.
Digital Bharat Nidhi	• Universal Service Obligation Fund under 1885 Act has been retained in the Bill. • It will provide telecom service in underserved areas, further the fund is allowed to use for research and development.

Offences and penalties	The Bill specifies various *criminal and civil* offences.
Adjudication process	• The central government will appoint an *adjudicating officer* to conduct inquiries and pass orders against civil offences under the Bill. • Orders of the adjudicating officer may be appealed before the *Designated Appeals Committee* within 30 days. • Appeals against the orders of the Committee, in connection to breach of terms and conditions, may be filed with *Telecom Dispute Settlement and Appellate Tribunal* (TDSAT) within 30 days.

To know about the draft telecommunication Bill 2022 click here

What does the Bill say about national security?

- It gives the government the power to take over or control telecom services and networks in case of emergencies or for national security reasons.

- **Public order**- The government he government can also intercept, detain, or disclose messages sent or received by any telecom service or network, if it deems it necessary for the country's interests or public order.

- **Press messages**- If it is from accredited correspondents, it shall not be intercepted or detained, unless they are prohibited by the rules.

- **Public interest**-The government can also direct any telecom service or network to transmit specific messages in the public interest.

- **Assignment of spectrum**- It will be assigned by auction, except for specified uses, where it will be allocated on an administrative basis.

- The Central government may re-purpose or re-assign any frequency range and may permit sharing, trading, leasing, and surrender of spectrum.
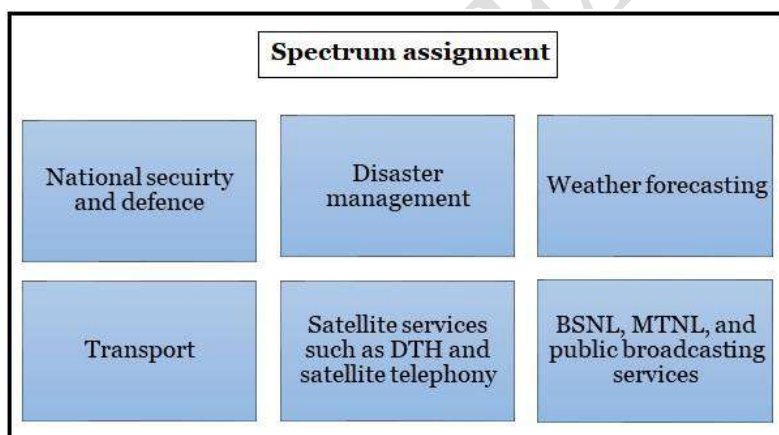
5.10   Press and Registration of Periodicals Bill, 2023

Why in News?

Recently, the Press and Registration of Periodicals Bill, 2023, was passed in the Lok Sabha that seeks to repeal the Press and Registration of Books Act, 1867.

Why was this Bill brought in?

- **Objective** - To remove the legacy of the British Raj.

- The 1867 Act *exercise complete control* over the press, printers, publishers of newspapers and books with heavy fines and penalties for various violations.

- In today's age of free press and the Government's commitment *to uphold media freedom,* the 1867 law was archaic and outdated.

> *A **periodical** means any publication, barring books or journals that is printed at regular intervals and contains public news or comments on public news.*

What are key features of the bill?

- **Press Registrar General (PRG)** – It creates a **_new position_** who is entrusted with tasks like

  o   Issuing certificates of registration to periodicals

  o   Maintaining records of registered periodicals

  o   Collecting application fees

  o   Disbursing the Centre's funds for the Act's implementation

- **Registration** – A simple online mechanism has been put in place to apply for title verification and grant of certificate of registration.

- **Facsimile edition of a foreign periodical** – Foreign periodicals can be printed in India with prior *approval of the Central Government* and its registration with the Press Registrar General (PRG).

- **Role of District magistrate/local authority** – It reduced their role with regard to grant of Certificate of Registration and title allotment.

- **Suspension** – It allows the PRG to suspend a periodical's registration for a *minimum period of 30 days which can extend to 180 days* for

  - Registration obtained by furnishing false information

  - Failure to publish periodicals continuously

  - Giving false particulars in annual statements

- **Cancellation** – The PRG may cancel the registration if

  - The publisher does not correct defects that lead to suspension

  - A periodical has the same title as any other periodical

  - The owner/ publisher has been convicted of a terrorist act or unlawful activity, or for acting against the security of the State

- **Penalties** – If a periodical is published without registration, the PRG may direct its publication to be stopped and non - compliance within 6 months will be punishable with imprisonment of upto 6 months.

- **Press and Registration Appellate Board** – It will be *headed by the **Chairman of the Press Council of India*** (PCI) and comprise *2 PCI members*.

- It will hear appeals against refusal of registration, imposition of penalties, suspension or cancellation of registration.

> *PCI is an autonomous, statutory, quasi-judicial body which governs the conduct of the print media and is also empowered to hold hearings on receipt of complaints and take suitable action where appropriate.*

	Press and Registration of Books Act 1867	**Press and Registration of Periodicals Bill 2023**
Books	They were part of it.	They are not a part as they are administered by Ministry of Education.
Printing presses	Need to file declaration before the DM.	Only an online intimation has to be filed before the PRG and the DM.
Publisher of the periodical	Need to file declaration before the District authority	No need of filing such declaration.
Title allotment and grant of Certificate	Sequential application to be sent to PRG and the district authority.	Simultaneous application can be sent.
Decision of approval	By both PRG and the District authority.	Only by the PRG.
Title allotment process	At times it took 2-3 years.	60 days.
Penalties for violation	Conviction and imprisonment up to 6 months.	Decriminalized but it can be given in extreme cases.
Power to cancel the declaration of a periodical	Only by the DM.	Empowers the PRG to suspend/cancel the certificate of registration.

What are the advantages of the bill?

- **Improves ease of doing business** – The process of allotment of title and certificate is by a simple and simultaneous application process through an online system without the requirement of any physical interface.

- **Unburdens publishers** – No need of publishers to file a declaration with the DM or the local authorities for authentication.

- **Quick process** – The entire process involves 8 steps and consume less time (60 days).

- **Removes procedural obstacles** – PRG can fast track the process, thereby reducing the difficulty in starting a publication by small and medium publishers.

- **Decriminalizes the colonial era statute** – End criminality, while imprisonment is provided only in extreme cases.

- For certain violations, only financial penalties have been proposed.

- **Good governance –** It ensures good governance through a credible appellate mechanism.

6. GOVERNANCE

6.1   University-Industry Collaboration

Why in news?

Recently, the University Grants Commission (UGC) approved the draft guidelines on 'Sustainable and Vibrant University-Industry (UI) Linkage System for Indian Universities'.

What are the benefits of proposed UI linkage?

- **Address the local issues** - Universities and industries can collaborate at State and central level to address the technological needs of that region.

- **Benefit students** – It will offer industry exposure and make students globally competent and improve their employability.

- **Single window opportunity** - One industry can cater to many universities through the IRC, and one university to address the needs of many universities through the URC.

- **Improves business productivity** – Through URC, MSMEs can benefit from faculty knowledge and student skills to improve the overall productivity of their businesses.

- **Advances research and innovation** – IRC can help universities obtaining funding for R&D besides offering students opportunities to interact with industry practitioners.

Students
Technical skills
Lateral thinking skills
Understanding of system dynamics
Preparing project deliverable
Highly trained individuals
Innovative ideas

Industry
Supervise students in projects
Corporate training
Support and finance projects
Resource sharing
Industry liaison

Academia
Engage industrial professionals
Industrial relevance in research
Students Counseling
Industrial collabration
Creative thinking lessons
Policy constraint
Fundamental Research

What are the hurdles in collaborating?

- **Different goals** – Higher education institutions *(HEIs) are service motive* that predominantly seek to educate students while *industries are profit-driven*.

- **Different focus** - HEIs focus on creating *theoretical knowledge* and conducting research while industries pursue *practical applications* of knowledge to enhance productivity and innovation.

- **Funding basis** – Unlike HEIs, an industrial company might be sceptical about *funding a research project* if it believes that the outcomes do not translate into prompt saleable applications.

- **Cultural differences** - HEI needs more academic rigour and theoretical profoundness while the company will focus more on practical outcomes.

- **Lack of recognition** – Industry recognizes the product development which is mostly a team effort but _academia recognises only the individual effort_ based on number of publications the individual has.

What is the way forward?

- **Evolve shared goals** - The two parties must engage in an _open dialogue, develop a flexible attitude_, and find common ground where theoretical knowledge and practical applications can coexist.

- **Bridge the cultural gap** - HEI researchers could _refine their findings into practical recommendations_ that the industrial partner can implement, while the industrial partner could provide more context to the data.

- **Establish communication** – Indian HEIs must establish good communication channels with the industry to work out a _mutually agreeable IP arrangement and non-disclosure agreements_.

- **Facility oriented collaboration** - Universities with minimal research facilities can focus on short-term collaborations with local companies that lack technical expertise.

- Universities with good research facilities can focus on long-term research collaborations with industry that aim to develop cutting-edge technologies.

7. HEALTH

7.1 Loneliness: A Public Health Concern

Why in news?

Recently, World Health Organisation (WHO) declared a pressing, albeit underappreciated, global health threat 'loneliness' in its report.

What is loneliness?

- **Definition** – It is largely understood to be "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively," and is computed as an experience other than 'social isolation.

- **Vulnerable population**
  - **WHO** – At least 10% of adolescents, and 25% of older people are lonely.
  - **The Global State of Social Connections**– At least 25% of 4.5 billion people felt 'lonely' or 'very lonely' in 2023.

> _During the course of the UN Decade of Healthy Ageing (2021-2030), the Demographic Change and Healthy Ageing Unit of WHO will be addressing social isolation and loneliness._

- **Spread** – WHO clarified in 2023 that loneliness impacts the health and well-being of all age groups.

- **Reason for higher levels** – Wars, climate change and social inequality.

- **Impact of Covid pandemic** – _It have calcified loneliness_ as a feature of daily life, with implications on people's long-term mental and physical health, longevity and well-being.

- **Measure** - The WHO has established a _Commission on Social Connection (2024–2026)_ with the intent of addressing loneliness from a public health lens.

- It will propose a global agenda on social connection and work to develop solutions targeting loneliness as a medical and social condition.

What is India's status in Loneliness?

- **Loneliness in India**
  - **2004 NSSO study** – About 49.1 lakh people (12.3 lakh men and 36.8 lakh women) suffered from loneliness.
  - In 2012, self-reported loneliness was found to be 17.3% and 9.5% in urban and rural adolescents, respectively.

- **Loneliness among younger people** – The Centre for the Study of Developing Societies (CSDS) in 2017 studied 6,000 people aged 15-34 years across 19 States.

- o 12% of India's youth reported feeling depressed often, and about 8% frequently felt lonely.

- **Loneliness among the elderly** – The Longitudinal Ageing Study in India (LASI) in 2017-18 surveyed 72,000 people from 35 States and Union Territories.

  - o 20.5% of adults aged 45 years and above reported moderate loneliness, and 13.3% were severely lonely.

- **Gender vulnerability** – The odds of loneliness were higher among females as compared to males.

- **A taboo in our society** – There is lack of acknowledgment of mental health issues as people see poor mental health as a "collective problem" that reflects badly on the family, even impairing one's marriage eligibility.

Why loneliness as a public health concern in India?

- **A fertiliser of other diseases** – It can thus inflame India's rising communicable and non-communicable disease burden.

  - o The **2017 LASI** found that loneliness also increased the odds of major depressive disorder and insomnia symptoms.

- **Emerging dementia epidemic** - Mental health disorders like depression, anxiety disorders, bipolar disorder have risen steadily over the last few years.

What are the reasons for India's loneliness epidemic?

- **Social inequity** – People belonging to marginalised communities go through loneliness intensely.

- **Socioeconomic challenges** – High poverty, income inequality, low education, high dependency ratio is making people depressed.

- **Higher dependence on monsoon** – There is rising farmer suicides due to the burden of seasonal droughts.

- **Rapid urbanisation and changing family structure** – The suicides of daily wage or migrant workers is more due to their disintegration at their village home as well as the lack of any family structure in the urban setting.

- **Reduced social cohesion and support** – Changing lifestyles erode kinship ties and interpersonal relationships.

- **Slum rehabilitation issues** - The 2022 study in Mumbai reported that slum rehabilitation dwellers loneliness was partly due to random allocation of flats.

  - o It hampered their collective identity, weakened their social support network, and significantly led to loneliness.

- **Attachment to Social media** – Social media has uniformly been linked to rising loneliness.

- **Impact of COVID-19 pandemic** – Loneliness among young people is on the rise.

- **Chronic illnesses** – It exacerbate loneliness among people.

- **Institutional deficiencies** – According to a 2023 report by a Standing Committee on Health and Family Welfare, India lags with inadequate staff, medical infrastructure and budgetary allocation.

By 2030, India wants to reduce suicide mortality by 10% under the National Suicide Prevention Strategy (NSPS).

What should India focus on?

- **Change perspectives** – Treat loneliness as a conditions itself rather than considering as a symptom or state of mind.

- **Tailored treatments** – Treat loneliness as a distinct social and medical condition to develop targeted interventions specific to people's cultural context.

- **Capacity building** – Investing in mental healthcare facilities, training doctors and setting up health provisions in AIIMS. India has already launched the suicide and mental health helplines.

- **Scale up digital infrastructure** – Develop and improve digital mental health programming infrastructure.

- **Efficient diagnosis and treatment** – Find the root cause of loneliness and suggest physical exercise and spending time socially. Develop healthcare dedicated to addressing loneliness.

- **Community intervention** – Address deficits in communities by building safe spaces like community facilities, effecting anti-discrimination and equality laws, and tackling the causes and consequences of poverty.

- **Conduct national-level survey** – It should be conducted in local languages, and questions modified to match people's cultural context as almost 60% of India which lives offline remains beyond the purview of research paradigms.

8. INDIA AND ITS NEIGHBOURHOOD

8.1   India's Neighbourhood Dilemmas

Why in news?

India's foreign policy faces challenges in its neighbourhood, where China has become a major rival and superpower in the region.

What are the challenges that India faces in its neighbourhood?

Challenges	About
Anti-India regime	Countries in South Asia are hostile or unfriendly to India. ○ Maldives- India Out Campaign started since 2020 asking Indians to leave the country. ○ **Bangladesh-** Opposition party has accused India of interfering in Bangladesh's internal affairs.
Aggressive China	China has become a major player in South Asia, offering economic and strategic benefits to the smaller states in the region. ○ Belt and Road Initiative- It involved many South Asian countries in infrastructure, it also infringes on India's sovereignty and territorial integrity. ○ **Connectivity projects**- Economic and strategic influence is achieved with projects like *China-Pakistan Economic Corridor (CPEC)* and the *China-Maldives Friendship Bridge*. ○ **Diplomatic support**- It has engaged with countries that are isolated or sanctioned by the international community, such as Afghanistan, Myanmar and Sri Lanka, providing them with diplomatic and military support. ○ **Debt trap diplomacy**- It is China's predatory lending practice in which poor countries are overwhelmed with unsustainable loans and would be forced to cede control of strategic assets to China. Example- Hambantota port in Sri Lanka. ○ **Friendly approach**- China tried to resolve border disputes with its neighbours except India as seen in the case of Bhutan, where China offered to swap territory in exchange for Doklam plateau, which is claimed by both Bhutan and China
Geopolitical lock-in	India will be geopolitically locked in within an unfriendly South Asia. ○ Influence of China with the South Asian Countries would weaken the bilateral ties of other countries with India. ○ This could limit India's strategic options and regional leadership role.

What are the causes of dilemmas faced by India in its neighbourhood?

- **Regional geopolitical architecture-** It is characterised by 5 overlapping elements.

- **US diminishing presence-** The US withdrawal from South Asia has created a power vacuum that China has filled, and that this is disadvantageous for India.

- **Indo-Pacific region focus-** US has reduced its military presence and aid to Afghanistan and Pakistan and shifted its strategic focus to the Indo-Pacific region.

- **Geopolitical buffer-** China's rise has provided a buffer for the smaller states in South Asia, which can use the *"China card"* to balance against India and assert their strategic autonomy.

- **Lack of regional connectivity-** South Asia is one of the least interconnected and poorest regions in the world, and that the inhabitants of the region naturally gravitate towards China which can cater to their material needs.

- **Normative approach of India-** India intervening in domestic affairs of its neighbours such as Sri Lanka, Nepal and Maldives is not welcomed by them.

- **Norms-free-zone-** China has offered itself as a no-frills non-normative alternative to India, and that this has changed the India-centric calculus of the region.

- **One track approach-** India's policy stance of dealing only with those on power is less risky but it also generates path-dependencies and alienates other centres of power or opposition leaders.

- **Pro-China orientation-** India's status quo bias has created problems in Bangladesh where the opposition party has become hostile about India and oriented towards China.

- **Flawed assumption-** India believes that South Asia minus Pakistan would be amenable to India

and that the India's cultural and historical ties with the region would give it an advantage over China.
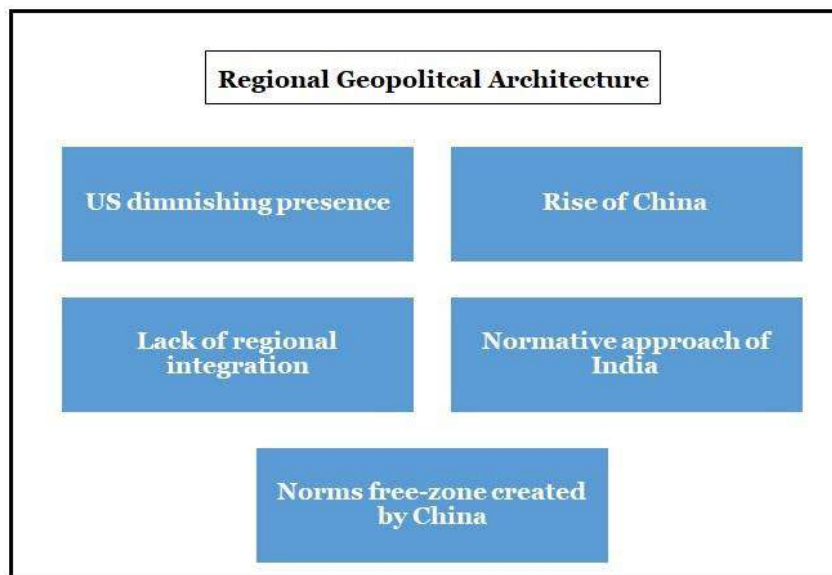
What lies ahead?

- **Regional reality-** India must acknowledge the fundamental change that China is a serious contender for a regional primacy, this would help India to deal with reality and frame the foreign policy accordingly.

- **Constructive engagement**- India need to proactively pursue the involvement of friendly external actors in the region, to counter the possibility of a Sino-centric South Asia and lessen the anti-India elements in the neighbourhood.

- **Flexible policy**- India should engage with multiple actors in each of the neighbouring countries to reduce their anti-India attitude and increase their trust

- **Effective diplomacy**- India should increase the human resources and capacity for India's diplomatic pursuits, to match its growing role in world affairs.

9. BILATERAL ISSUES

9.1 India-Oman Relationship

Why in news?

Recently the Oman's Sultan Haitham bin Tarik visited India, it marks a significant milestone as it is the first State visit by an Omani ruler in 26 years.

What is the history of India-Oman relations?

- **Historical relations-**The maritime trade routes established between the Sumerian civilisation and the Harappan civilisation in the Indus Valley highlight the great historical significance.

- Oman had links with the India through Gujarat, and with Tamilakam along the Malabar Coast.

- **Political relations-** The political engagement between the two countries has increasingly taken on a more strategic shape.

- Oman is a strategic partner of India and an important interlocutor at Gulf Cooperation Council (GCC), Arab League and Indian Ocean Rim Association (IORA) forums.

- Oman was one of the few Arab countries that maintained close ties with India during and after the Cold War, despite the pro-Pakistan stance of most of the Arab world.

- **G20 summit**- As a mark of this special friendship, India has invited Oman as a guest country during India's Presidency in 2023.

- **Diplomatic relations**- Both countries established diplomatic relations in 1955 and the relationship was upgraded to Strategic partnership in 2008. It is based on the twin pillars of mutual trust and shared interests.

- **Economic relations**- India is among Oman's top trading partners.
  - Crude oil- 2nd largest market for Oman after China.
  - Non-oil exports- 2nd largest market for Oman after Saudi Arabia

- **Oman-India Joint Investment Fund (OIJIF)-** It was set up in 2010 as a Special Purpose Vehicle (SPV) to invest in India, which is a 50-50 joint venture between the State Bank of India and the erstwhile State General Reserve Fund (SGRF) of Oman.

Main items of India's export	Main items of India's import
Mineral fuels, mineral oils and products of their distillation	Mineral fuels, mineral oils and products of their distillation
Inorganic chemicals, Organic or Inorganic compounds of precious metals	Fertilizers
Iron and Steel	Ships, boats and floating structures

- **Rupay debit card-** Both launched the Rupay debit card in Oman, a key footprint of India's initiative of promoting digital public infrastructure (DPI) in the world.

- **Defence cooperation** - Oman is India's closest defence partner in Gulf region. Oman is the first Gulf country with which all the three wings of India's defence forces hold joint exercise.

- The 1st ever India-Oman Defence Industrial Seminar was held in Muscat in 2023.

Defence wing	Joint Exercise
Maritime exercise	Naseem al-Bahr
Military exercise	Al Najah IV
Air exercise	Eastern Bridge VI

- **Operation Sankalp**- During the Persian Gulf crisis in 2019, the Indian Navy launched this operation to ensure the safe passage of Indian flagged ships which most often operated off the coast of Oman

- **Cultural relations**- There is a deep socio-cultural bond between India and Oman, rooted in the strength of people-to-people contacts.

- **Yoga special events**- 'Oman yoga yatra' and 'Yoga for Vasudhaiva Kutumbakam' was launched by embassy, it reflects the rich Indian cultural tradition celebrated by the people of Oman.

- The 1st ever 'Festival of India in Oman', organized by the Embassy with support of Ministry of Culture of India in 2017.

- **Indian community in Oman**- It is organized under Indian Social clubs in Muscat, Salalah, Sohar, and Sur.

- These clubs have several sub-groups called Linguistic Wings which cater to their members' cultural and social needs.

- **Pravasi Bharatiya Samman Awards**- It is given to recognize the outstanding contributions of Indians and People of Indian Origin in Oman to the strengthening of our bilateral relations.

What are the key takeaways from the recent visit?

- A vision document titled, 'A joint Partnership for the future' touching all grounds of development is endorsed and accepted firmly.

- **Digital connectivity**- Both have agreed to enhance cooperation on digital payment systems, such as RuPay and e-Dirham, to facilitate trade and remittances between the two countries.
  - India has proposed to link Unified Payment Interface (UPI) with Oman's mobile wallet app, **Thawani.**

- **Hospitality**- India promises to reopen historic maritime voyage to Oman sailing through Mandvi to Muscat tentatively in 2025-26.

- **Terrorism**- An MoU has been signed between Financial Intelligence Unit (FIU) and National Centre for Financial Information (FNCI) on cooperation in the exchange of intelligence related to money laundering, associated predicate offences and terrorism financing.

- **Food security**- Both have recognized the importance of ensuring food security and enhancing agricultural cooperation, especially in the context of the Covid-19 pandemic.

- **Cultural relation**- Dhofar University and the Indian Council for Cultural Relations (ICCR) on establishment of the ICCR Chair of Indian Studies- Hindi Language.

- The vision document acknowledges the remarkable synergy between **Oman Vision 2040** and India's development objectives, under **'Amrit Kaal'**, affirming commitment to harnessing these complementarities for deepening the partnership between Oman and India.

Why Oman is India's gateway to West Asia?

- **Connectivity**- India-Middle-East-Europe Connectivity Corridor (IMEEC) infrastructure project to link India to Europe across West Asia, Oman will play a key vital role in undersea connectivity.

- **Defence base**- India has been granted access to the **Duqm port** in Oman, which can serve as a strategic base for India in the region.

- **Geopolitical significance**- Oman's location is of utmost strategic importance to India due to the coastline along Arabian Sea as well as the Gulf of Oman leading into the Persian Gulf and towards the Gulf of Aden.

- **Key strategic partners**- Saudi Arabia, United Arab Emirates (UAE) and Oman completes the trio of key strategic partners of India in the Gulf region.

- **Oman's peaceful neutral policy**-Oman has adopted a moderate and mediating role in the region, avoiding involvement in conflicts and disputes.

- **Persian Gulf crisis**- Oman facilitated dialogue and communication between US and Iran, it's efforts were praised by the international community as a constructive contribution to regional stability

9.2   Gujral Doctrine of Foreign Policy

Why in news?

November 30 marks the 11th death anniversary of IK Gujral, the mastermind behind the doctrine that shaped India's foreign policy.

Who is Mr. Gujral?

Journalist Bhabani Sen Gupta coined the term "Gujral doctrine"

- Inder Kumar Gujral was born in 1919 in Jhelum, India [now in Pakistan].

- He served as the **12th Prime Minister of India** from April 1997 to March 1998

- He was the 2nd PM to govern exclusively from the Rajya Sabha.

- He was the Minister of Information and Broadcasting during the Emergency in the Indira Gandhi led cabinet.

- As a Minister of External Affairs (EAM), he propounded **'Gujral Doctrine',** which called for better relations with neighbouring countries.

- Gujral was also the member of the **Club of Madrid**, an independent non-profit organisation composed of 81 democratic former Presidents and Prime Ministers from 57 different countries.

- The submission of **Jain Commission's report** ultimately led to the fall of the IK Gujral led government.

GUJRAL DOCTRINE

PRINCIPLE 1 - With the neighbours like Nepal, Bangladesh, Bhutan, Maldives and Sri Lanka, India does not ask for reciprocity but gives all that it can in good faith and trust.

PRINCIPLE 2 - No South Asian country will allow its territory to be used against the interest of another country of the region.

PRINCIPLE 3 - None will interfere in the internal affairs of another

PRINCIPLE 4 - All South Asian countries must respect each other's territorial integrity and sovereignty.

PRINCIPLE 5 - The countries will settle all their disputes through peaceful bilateral negotiations

What is the Gujral Doctrine?

- Gujral Doctrine consisted of *5 principles*, outlined by Gujral at a speech in Chatham House in London in 1996.

- It was based on the understanding that India's size and population made it a major player in South East Asia, and its position could be better cemented by adopting a non-domineering attitude towards its smaller neighbours.

> *Gujral named the countries from which India would not expect reciprocity, and it did not include Pakistan.*

- It also emphasised the importance of keeping dialogue going.

What are the successes of Gujral Doctrine?

- Gujral's approach to foreign policy helped strengthen trust and cooperation in India's neighbourhood.

- **River water sharing** - Gujral's policy of non-reciprocal accommodation led to the signing of a 30-year treaty between India and Bangladesh in 1996.

- He ensured Bhutanese consent for digging a canal from a Bhutanese river to augment the flow of water to Ganga.

- He showed his willingness to revise the ***Mahakali treaty with Nepal*** which was received well in Nepal.

- Mahakali Treaty was signed in 1996 for the Integrated Development of Mahakali River (River Sarda), including Sarda Barrage, Tanakpur Barrage &Pancheshwar Project.

- **Approach with Pakistan** - With Pakistan, Gujral kept talks going.

- Under his tenure as EAM, India unilaterally eased travel restrictions, permitting Pakistani tourists to visit India and easing travel for Pakistani businessmen to India.

- **Nuclear treaty** - Despite international pressure, Gujral firmly refused to sign the *Comprehensive Test Ban Treaty (CTBT)* in 1996.

- CTBT is a multilateral treaty that bans all nuclear explosions, for both civilian and military purposes, in all environments.

What are the criticisms?

- Gujral has received criticism for

  o Failing to convince the foreign affairs bureaucracy to follow the doctrine wholeheartedly.

  o Going too soft on Pakistan, and leaving India vulnerable to the threats of the future, including the many terror attacks.

FOREIGN POLICY OF INDEPENDENT INDIA

PANCHSHEEL
- Mutual respect for each other's territorial integrity and sovereignty
- Non-aggression
- Non-interference in each other's internal affairs
- Equality and mutual benefit
- Peaceful coexistence

NON ALIGNMENT
- The aim of Non-alignment was to maintain national independence in foreign affairs. It was neither neutrality nor non-involvement nor isolationism.

ANT-COLONIALISM
India has always opposed colonialism and racism.
Ex- It favoured Indonesia's fighting against Dutch colonialism in 1947, against South Africa's illegal occupation of Namibia, the apartheid policy in South Africa and fully supported the inclusion of communist China in the United Nations

Article 51
- DPSP on Promotion of International Peace and Security provides to
- Promote international peace and security
- Maintain just and honourable relations between nations
- Foster respect for international law and treaty obligations
- Encourage settlement of international disputes by arbitration

9.3   India's External Affairs: 2024

Why in News?

India is headed for Lok Sabha elections in 2024 and outcome of the elections will send strategic signals to the neighbourhood and the world about the direction of India's foreign policies.

What are the India's foreign policy choices for 2024?

Ties	Challenges	Opportunities
US-Canada	• Biden's unavailability for the Republic Day celebrations.	• Both USA and India are invested heavily with each other.

	• Postponement of Quad summit • Allegation of India's role in assassination of Khalistani separatist in both USA and Canada.	• Indian PM has expressed India's "commitment to the rule of law".
Pakistan	• Constitutional changes in Jammu and Kashmir. • India's status quo of following doctrine of indifference.	• Election results of both nations could open avenues for restarting their relationship.
Bangladesh	• Election due in Bangladesh in 2024. • Security imperatives as Bangladesh opposition is viewed with suspicion.	• Improving connectivity between its Northeast and Bangladesh.
China	• Continuing deadlock due to border standoff since 2020.	• Elections may change the diplomacy.
West Asia and Global South	• Gaza conflict has tested India's position. • Global South did not take India's initial support for Israel kindly.	• Balancing with Palestine to call for ceasefire in last UN vote. • India's success in negotiating a joint declaration at the G20 summit.
Russia	• War in Ukraine test India's position. • Pressure from the US has kept India from giving Moscow a free hand. • Payment crisis. • 2023 is the 2nd year with no India-Russia annual summit at the level of leaders. • Russia's dependence on Beijing for its economic survival.	• Imports of Russian oil. • Leaders' summit is possible at BRICS meet in 2024.
West	• The free trade pacts with the UK and European partners are said to be at a critical stage. • Elections are due in both and this shrinks the policy space and flexibility for negotiators.	• The dialogues with the US and EU on technology and trade, to remove the barriers for India to access high tech in AI, quantum computing, and cybersecurity.
Maldives	• Indian Out campaign by Maldives President. • Maldives call for withdrew of Indian Military presence.	• Colombo Security Conclave for strengthening India's position in Indian Ocean.
Afghanistan	• Afghanistan's announcement of closing the Embassy of Afghanistan in Delhi. • Removal of India's embassy from Kabul after Taliban take over.	• India is engaging with the Taliban, a technical team has been posted at the embassy in Kabul.

To know about India's neighbourhood dilemma's click here

10. INTERNATIONAL GROUPINGS

10.1 BIMSTEC

Why in News?

India recently seconded a senior diplomat to drive BIMSTEC as its 4th Secretary-General (SG).

What is BIMSTEC?

- **BIMSTEC** – Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation.

- It is a regional organization group of littoral countries encircling the Bay of Bengal with own flag and emblem.

- **Established in** – **1997** with the signing of the **Bangkok Declaration**.

- 2022 marked the 25th anniversary of BISTEC formation.

- **Secretariat at** – Dhaka, Bangladesh.

- **Aim** – To foster **economic and social development** among member countries.

> *BIMSTEC was initially known as BIST-EC (Bangladesh, India, Sri Lanka, Thailand- Economic cooperation) before the joining of Myanmar (1997), Bhutan (2004) and Nepal (2004).*

- **Members** – **7 members** (Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand).

- It includes 5 members from SAARC and 2 from ASEAN.

- **BIMSTEC Charter** – It was signed and adopted during the fifth BIMSTEC Summit in Sri Lanka in 2022.

BIMSTEC's Principles

Respect For Sovereign Equality	Respect For Territorial Integrity	Respect For Political Independence	Non-interference in Internal Affairs	Non-aggression	Peaceful co-existence

BIMSTEC Working Structure

The Summit	The Ministerial Meeting	The Sectoral Ministerial Meetings	The Senior Officials' Meeting	The BIMSTEC Permanent Working Committee

Importance of BIMSTEC

- Accounts for **22%** of the world's population
- Combined GDP of **$2.7 trillion**
- **One-fourth** of the world's traded goods cross the Bay every year
- **Six focus areas**-trade. technology, energy, transport, tourism and fisheries

What are the purposes of BIMSTEC?

- **Accelerating economic growth** - Promote joint endeavours, trade and investment.

- **Increasing collaboration** – On matters of common interest in the economic, social, technical and scientific fields.

- **Improving assistance** – In the form of training and research facilities in the educational, professional and technical spheres.

- **Effective cooperation** – Maintain beneficial cooperation with existing international and regional organizations.

- **Maintaining peace and stability** – By close collaboration in combating international terrorism, transnational organized crimes as well as natural disasters, climate change and communicable diseases.

- **Improving social progress** – Promoting endeavour to eradicate poverty from the Bay of Bengal region.

- **Developing connectivity** – Creating synergy among connectivity frameworks in the region, as a key enabler to economic integration for shared prosperity.

What are the various BIMSTEC Centres?

- **BIMSTEC Energy Centre (BEC)** – It is to be housed in the premises of the Central Power Research Institute in **Bengaluru, India**.

- It will also function as the Secretariat of the BIMSTEC Grid Interconnection Coordination Committee.

- **BIMSTEC Centre on Weather and Climate** - It is located in the National Centre for Medium Range Weather Forecasting (NCMRWF) **in Uttar Pradesh, India**.

- **BIMSTEC Cultural Industries Observatory** – In 2006, it was proposed for the establishment of BIMSTEC Cultural Industries Commission (BCIC) and the BIMTEC Cultural Industries Observatory (BCIO) **in Bhutan**.

- **BIMSTEC Technology Transfer Facility** – The Memorandum of Association (MoA) on the establishment was signed in 2022 during the 5th BIMSTEC Summit but its entry into force is awaited.

What are the shortcomings?

- It has decided not to go-ahead with the BIMSTEC Development Fund.

- Negotiation of the BIMSTEC FTA is yet to be completed.

- BIMSTEC grid connectivity and energy projects are yet to take off.

- While the connectivity plan is ready, the real implementation is yet to start.

- The postponement of the 6th Summit has slowed BIMSTEC integration.

> *Bangladesh is going to take over the chairmanship of BIMSTEC from Thailand once the 6th Summit is over.*

What lies ahead?

- 6th BIMSTEC summit under the chairmanship of Thailand will be held in 2024 with promising features like

  - Adoption of the BIMSTEC Rules of Procedure

  - Adoption of the BIMSTEC Maritime Cooperation Agreement (BMCA)

  - Launching of BIMSTEC Bangkok Vision 2030

10.2 Colombo Security Conclave (CSC)

Why in news?

Recently, India's National Security Adviser (NSA), took part in the 6th NSA meeting of the Colombo Security Conclave (CSC) which agreed upon a road map for the year 2024.

What is Colombo Security Conclave?

- It is a **_regional security grouping_** initially known as the Trilateral for Maritime Security Cooperation.

- **Established in** – **_2011_**

- **Aim** – To promote a safe, secure, and stable Indian Ocean, with India playing a leadership role.

- **Membership** – **_4_**

  - **_India, Sri Lanka, and the Maldives_** were part of trilateral maritime security collaboration, while **_Mauritius_** joined at 5th meeting of grouping in Male in 2022.

- **Observer status** – **_Bangladesh and Seychelles_**, now they have received invitations to become active participants in the group.

- **Permanent secretariat** – **_In Colombo_**, established in 2021 to coordinate all activities and implement decisions made at the National Security Advisor (NSA) level.

- **Meeting** – It happens at the level of NSA and deputy NSA.

> *The CSC countries are all members of the 2 region-wide Indian Ocean groupings, the Indian Ocean Rim Association (IORA), and the Indian Ocean Naval Symposium (IONS).*

Five Pillars of Colombo Security Conclave

1. Maritime safety and security
2. Countering terrorism and radicalization
3. Combating trafficking and transnational organised crime
4. Cyber-security and protection of critical infrastructure
5. Humanitarian assistance and disaster relief

- **Security-focused exercises** - In 2021, India, Sri Lanka, and Maldives conducted ***Exercise Dosti XV*** in Maldives and they subsequently conducted their 1st joint exercise in the Arabian Sea named as ***Table Top Exercise (TTX).***

- **Significance** – Since 2021, it has investigated terrorism and terror financing, narcotics trafficking, cybercrime and security, marine pollution, maritime law, and coastal security.

- **Conducting conferences** - In 2022, for the 1st time, the organisation held a

  o Conference of oceanographers and hydrographers

  o Conference on coastal security and the next iterations of these conferences are scheduled for 2024.

- **Joint working groups** – It is to focus on terrorism, cyber-security, humanitarian aid and disaster relief (HADR), trafficking and transnational organised crimes.

- **Collaborating on capacity-building** - In sectors such as counter-terrorism, police, law enforcement, and cyber-security.

What is the changing dynamics of CSC?

- **Disruption** – It started in 2011 but it came to a standstill after 2014 due to rising *tensions between India and the Maldives* which led to the ***suspension of meetings between 2014 and 2020***.

- **Revival** – ***In 2020***, India pushed for the revival and thus it was ***rebranded as Colombo Security Conclave***.

- India also expressed interest in *expanding the CSC to the Seychelles and Bangladesh* who are currently observer nations.

- **Reason for revival** – It is due to *increasing importance of Indian Ocean* in an evolving multipolar world today, with extra-regional powers competing to make inroads in the region.

- It is partially linked to the *increased Chinese presence in Indian Ocean* along with its Belt and Road Initiative (BRI) projects.

- China has established a base in Djibouti and controls Sri Lanka's Hambantota port.

- **Space for India's leadership** – It offers India an opportunity to institutionalise its role, shape *the regional security architecture*, and better address the existing and emerging threats.

- India plays as the *1st responder in the IOR*, be it to avert coups or to offer humanitarian and economic assistance during COVID-19 and multi-faceted crises.

What are the challenges faced by CSC?

- **Domestic politics** – It remains vulnerable to domestic political changes in member-states, as evidenced by the *Maldives' absence from the recent meeting*.

- **Chinese influence** – All member-states being democracies may continue to play *nationalist and pro-China cards* for domestic and external benefits as the Indo-Pacific region grows in prominence.

- **Emerging Sub-regionalism** – The *convergence of 6 Indian Ocean region countries* within the CSC signifies the emergence of sub-regionalism on a unified maritime and security platform.

What lies ahead?

- Uphold a *common strategic vision* emphasizing the importance of not being hindered by the escalating Chinese influence in the region.

- *Avert points of contention with neighbouring countries* and foster collaboration in the region.

G.S PAPER III

11.   ECONOMY

11.1   Unnati ZCZP Bonds

Why in news?

Social stock exchange sees 1st listing with Unnati Foundation 1st entity in December 2023.

What are Social Stock Exchanges (SSE)?

- A *separate segment of the existing Stock Exchange* that can help social enterprise's *to raise funds from public* through the stock exchange mechanism.

- It will act as a medium between Social Enterprises and fund providers**.**

- SEBI had permitted social enterprises registered on these exchanges to raise funds through zero coupon zero principal bonds (ZCZP) in 2022.

> *Unnati ZCZP bond is the 1st such listing on SSE segment in India.*

What is a ZCZP instruments?

- **ZCZP** – Zero Coupon Zero Principle are financial instrument that are included in the list of *securities under Securities Contracts (Regulation) Act, 1956*.

- They do *not give any interest*, and investors will **not get any money back** on the maturity of the bond.

- **Eligibility criteria for issuance** – *Only by NPO* that are registered with Social Stock Exchange (SSE).

- ZCZP can only be issued for a specific project with specific tenure.

Debt Security (Bond)	ZCZP instrument
It is like a loan.	It is not a loan but a donation.
It makes interest payments and the principal when the bond matures.	It doesn't makes interest payments and the principal on maturity.

- The project must fall under the list of eligible activities under SEBI (ICDR) Regulations, 2018.

- **Issuance** - They are issued *through private placement or public issuance.*

    o Minimum issue size – Rs. 50 Lakh (originally Rs.1 crore)

    o Minimum application size – Rs.10, 000 (originally Rs.2 lakh)

    o Minimum subscription required - 75% of the funds proposed

- **Trade** – They shall be issued in dematerialized form only.

- They are *not available for trading in the secondary market*, but they can be transferred to legal heirs.

- **Maturity** – It will mature when the project for which they are raised terminate, or 12 months from the date of allotment.

What is Unnati ZCZP Bonds?

- **Issuer** – *SGBS Unnati Foundation, an NPO* formed in November 2011.

    o **Unnati** – Vocational training program for underprivileged and unemployed youth in the age group of 18 to 25 years.

    o **UNXT** – 1 month training programme for final year students at government colleges.

    o **Sugam** – A grassroot entrepreneurship accelerator helping non-urban youth to develop scalable businesses.

- **Need of funds** –To *train up to 10,000 graduating youth* from government colleges in Uttar Pradesh, Madhya Pradesh, Karnataka, Andhra Pradesh and Tamil Nadu to help them secure employment.

    o The youth will be trained for 165 hours (classroom learning and self-learning content on a mobile application).

    o Cost per head for training would be ₹2,000 per youth.

- **Specifics** – It is a *public issue* with face value of ₹1 each of ₹2 crore that will be *listed on the NSE*.

- This listing will be displayed along with other such future bond issuances on the social stock exchange page on the NSE website.

- It *raised Rs 1.8 crore from 4 investors* and include brokerage firm Zerodha and National Bank for Agriculture and Rural Development (NABARD).

> *Social enterprises* – *Enterprise that are engaging in the activity of creating positive social impact and that meets primacy of their social intent.*
>
> - *Not-for-profit organization*
> - *For profit social enterprise*

What are the benefits of these ZCZP instruments?

- There are obviously ___no pecuniary benefits___ from these instruments as it is akin to a donation made to a charity.

- **Greater transparency** - The end use of the funds can also be ___monitored___ since the enterprises have to ___disclose details of money utilised and balance___ amount remaining to exchanges.

- **Visibility to the social enterprises** - It helps them to approach the public at regular intervals if they can show good outcomes.
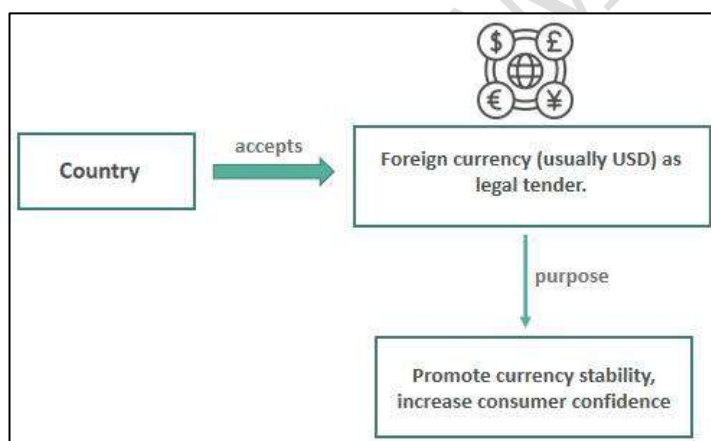
11.2	Dollarisation

Why in news?

Javier Milei, the recent winner of Argentina's presidential election, has drawn attention for his plan to replace the ___country's currency "Peso"___ with the dollar.

What is dollarisation?

- It is the process by which a country decides to use two currencies the local currency and generally a stronger, more established currency like the US dollar.

- **Occurrence-** It occurs in developing countries with a weak central monetary authority or an unstable economic environment.

- It usually happens when a country's currency becomes unstable or loses its value due to high inflation or other economic problems.

  - **Example**- Zimbabwe ran a dollarization test to see if the adoption of foreign currency could reduce high inflation and stabilize its economy.

- **Types**- There are 4 types of dollarization that countries can adopt.

What is the significance of dollarisation?

- **Economic stability**- It can lower inflation rates and stabilise prices, as the dollar is less prone to devaluation and volatility than the domestic currency.

- **Promote investment**- It can avoid currency crises, which reduces the sovereign risk premium and lowers interest rates, leading to higher investment and growth.

- **Boost trade-** It can facilitate trade and integration with international markets, as the dollar is stronger and more widely accepted than the domestic currency.

- **FDI destination**- It can encourage foreign direct investment (FDI), as investors do not need to worry about exchange rate risks or currency fluctuations.

- **Cost effective**- It can promote fiscal discipline and a competitive financial system, as the government and the banks cannot rely on printing money to finance their deficits or bailouts.
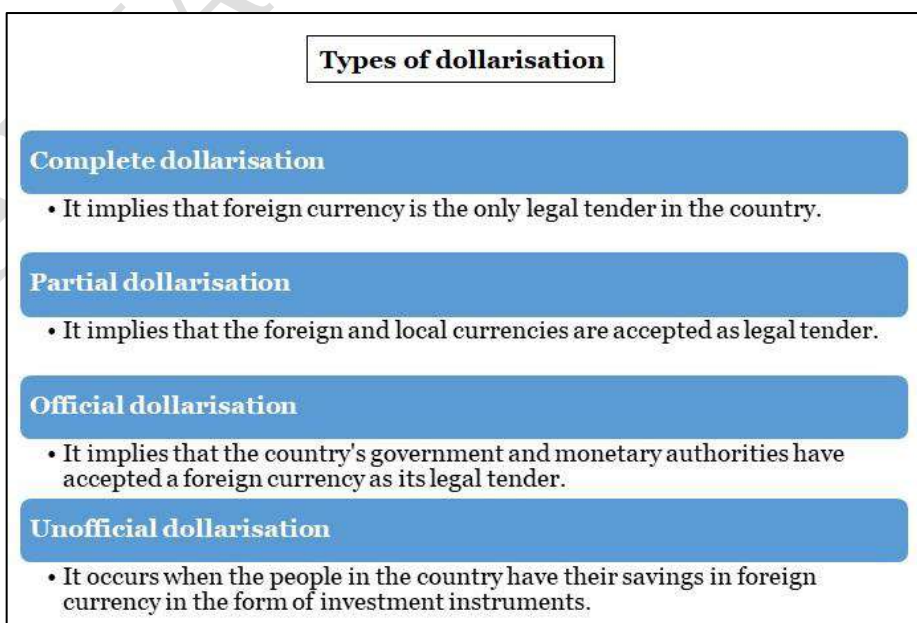
3 fully dollarised economies - Ecuador, Panama and El Salvador have had successful economic outcomes following dollarisation.

What are the issues of dollarisation?

- **Monetary autonomy**- It can reduce the country's monetary autonomy, which means it cannot adjust its money supply or interest rates according to its economic needs.
    - Greece benefited from using the Euro as a common currency, but lost its policy autonomy.
    - Ecuador's dollarisation led to losing of monetary autonomy and exchange rate policy autonomy.
- **Seigniorage**- It can lose the revenue generated by issuing currency.
    - *Seigniorage - The profit that a government or a central bank makes by issuing money*
- **Country's identity**- The country may face a loss of public support or legitimacy, especially if the decision to dollarise is perceived as imposed by external forces or interests.
- **External factors-** It can increase the country's vulnerability to foreign influence and external shocks, as it depends on the US monetary policy and dollar availability.
- **Liquidity risks-** It can impair the lender-of-last-resort's ability to provide emergency liquidity to the financial system in times of crisis.

Ecuador model of Dollarization
- **Price stability**- It helped the country to reduce inflation which was over 100% in 2000 to around 4% in following years.
- **Lower interest rate**- Interest rate declined making credit more affordable and encouraging investment and consumption.
- **Fiscal discipline**- It limited government's ability to finance its spending by printing money. This also improved the country's credit rating and reduced its country risk premium.
- The country used oil revenues to increase social spending and reduce poverty and inequality.

What lies ahead?

- Dollarisation is not a silver bullet, but if used well in conjunction with domestic policy, it can offer a route to success.
- Dollarisation should be implemented in a country based on dollar reserves, fiscal policy, trade policy and external shocks to realise its full potential.

De-dollarization
- It is the process of reducing the reliance on the US dollar as a reserve currency, a medium of exchange, or a unit of account in the global economy.
- It can increase monetary autonomy, diversify their currency reserves, or challenge the US influence on global financial system.
- **Global regulatory landscape-**
o **China-** It is promoting the use of its **Renminbi** in international trade and finance, especially with its Belt and Road Initiative partners.
o **Russia-** It promotes the use of **Rouble** after facing US and European Union sanctions over its involvement in Ukraine.
o **India**- It has released a roadmap for the internationalisation of the Indian rupee
o **European Union-** It is promoting the use of **Euro** in international currency to reduce its exposure to US sanctions and monetary policy spill overs.

11.3 Strategy for India's Future Growth

Why in news?

India's future growth strategy needs to be calibrated in view of the changing global conditions.

India's growth projections
- India's growth in 2023-24 is currently projected by the Reserve Bank of India at **7%**.
- International Monetary Fund (IMF) and the World Bank have pegged it at 6.3%.
- India is likely to realise the RBI's currently projected growth of 7% in this fiscal year.

What are the challenges that India faces?

- **Deglobalisation-** There is a trend of reducing global integration and increasing protectionism among countries due to various factors such as geopolitical conflicts, sanctions, and supply chain disruptions .

- **Geopolitical conflicts**- The ongoing conflicts such as Russia-Ukraine war and the Israel-Hamas war have escalated in recent years and have caused humanitarian crises, regional instability, and diplomatic tensions.

- **Economic sanctions**- The geopolitical conflicts have led to sanctions and isolation leading to breaks in supply chains as well as disruptions in international settlements due to non-access to systems such as *SWIFT* for the sanctioned countries.

- **Reduced world real GDP growth**- It has fallen, implying that the global economy is slowing down and facing recessionary pressures.

- **Reduced global exports**- This is due to reduced real GDP of the world as countries including India want to reduce their dependence on imported petroleum due to supply uncertainties and *price volatility*.

- **Increase in household debt**- This reflects the decline in household savings, if the trend persists even after the recovery of economy from the pandemic this could pose a risk to India's growth potential and fiscal sustainability.

- **Climate friendly technologies**- India's climate commitments may have negative impact on economic growth as some sectors face higher cost and lower productivity.

How India should frame the future growth strategy?

> *Incremental Capital Output Ratio is the ratio of the change in capital stock to the change in output, it measures how much additional capital is needed to produce one unit of additional output*

- **Self-reliant model**- India should adopt independent and resilient economic model, where it can generate enough domestic demand and supply to support its growth, without relying too much on external sources.

- **Domestic growth drivers**- India needs to rely more on domestic sources of growth, to achieve and sustain a 7% plus real growth, *domestic savings* will be critical.

- **Low ICOR**- Incremental Capital Output Ratio must be low for the higher productivity of capital and a higher potential growth rate of the economy.

- **Demographic dividend**-As per UN population projections, the share of India's workin g age population is projected to peak at 68.9% in 2030 while its overall dependency ratio would be at its lowest at 31.2%.

- **Strategize employment**- The non-agricultural growth will have to be high enough to absorb labour released from agriculture which is estimated at 45.8% in 2022-23 by the Periodic Labour Force Survey.

> *The service sector accounts for about 55% of India's GDP and employs over 30% of its workforce.*

- **Adopt new technologies**- Absorption of productivity-enhancing technologies including Artificial Intelligence (AI) and Generative AI would add to overall growth.

- **Productive investment**- India needs to invest in training and skilling its workers to cope with the changing structure of output and to adopt new technologies.

- **Focus on service sector**- The adverse impact of climate-promoting technological changes can be minimised by emphasising service sector growth which is relatively climate friendly.

SWIFT

- The Society for Worldwide Interbank Financial Telecommunications (SWIFT) system is an electronic communications network.

- **Founded-** In 1973.

- **Aim-** To simplify international financial transactions.

- **Bank Identifier Code-** SWIFT assigns each financial organization a unique code with either 8 or 11 characters.

- It's a member-owned cooperative
- Provides safe and secure financial transactions
- Allows individuals and businesses to take electronic or card payments even if the customer or vendor uses a different bank

- **Headquarters-** La Hulpe, Belgium.

- **Fiscal responsibility**- It is important to ensure that the combined fiscal deficit and debt to GDP ratios are brought down to 6% and 60%, respectively for sustainable growth.

What lies ahead?

- Higher savings and investment rates can boost economic growth by providing more resources for productive activities.

- The need of the hour is to enhance the skills and employability of the young workforce to the labour market.

- India must adopt a technology mix which is employment friendly to create more jobs and reduce inequality.

12. ENVIRONMENT

12.1 UN Treaty to End Plastic Pollution

Why in news?

Recently Intergovernmental Negotiating Committee (INC), under the United Nations Environment Programme (UNEP), met in Nairobi for its third round of negotiations to develop an international legally binding instrument to end plastic pollution worldwide.

What is Intergovernmental Negotiating Committee (INC)?

- The committee is formed to develop the instrument on plastic pollution.

- **Comprehensive approach**- It addresses the full life cycle of plastics, including its production, design, and disposal.

- **Zero draft text-** INC-3 was a make-or-break opportunity as countries came together to negotiate the 'zero draft' text developed by the Committee's Secretariat, with various options for core obligations and control measures.

Session	Year	Location
INC-1	2022	Punta del Este Convention and Exhibition Centre
INC-2	2023 (May-June)	Paris, France
INC-3	2023 (November)	Nairobi

- **UNEA Resolution 5/14**- UNEA adopted a resolution to develop an international legally binding instrument on plastic pollution, including in the marine environment.

- **Aim**-The resolution has the ambition to complete the negotiations to frame the instrument by end of 2024.

- The INC is responsible for delivering a global plastics treaty by 2025.

What is zero draft text?

- **First draft-** The text is 1st draft of the _global plastics treaty_ that could support progress on reducing, circulating, and preventing plastic pollution.

- **Developed by-** INC chair and the Secretariat

- **Guidelines-** The draft is based on the mandate given by the INC-2 in Paris.

> _Zero draft is a preliminary version of a document that contains options for potential provisions or elements of the document._

- **Negotiation process-** The text was a good starting point for the negotiations because it catered to ambitions at all levels
  - Strong and binding
  - Moderate and flexible
  - Weak and voluntary

- **Role of civil society-** INC-3 saw a high participation of civil society organisations especially from the _Global South_ that advocated for a strong and binding treaty to end plastic pollution.

- **Reduce plastic production**- Countries affected by plastic pollution like Kenya, Norway, and the European Union, argue that the life cycle starts at production, in order to include production in the treaty.

- **Penalty**- The draft contains options such as imposing a plastic-pollution fee, to be paid by plastic polymer producers.

- **Fund**- The draft contains the provisions like reducing the financial flow into projects with a high carbon footprint.

- **Environment health**- Countries will have to cut, if not eliminate, _fossil-fuel subsidies_ and investments in _environmentally disfavourable technologies_ such as incineration and waste-to-energy plants.

- **Strong binding provisions**- African group of countries and Small-Island Developing States (SIDS) played an important role for the high-impact elements in the treaty.

- **Voice for human rights**-They championed the voices of waste-pickers and Indigenous peoples, and approached the treaty from human-rights and public-health perspectives.

What are the challenges faced during the negotiations?

- **Opposition-** The negotiations was opposed by group of like-minded countries that opposed many of the upstream and ambitious measures in the text.

- **Flexible measures**- Opposed countries also argued to include a clause on sustainable development to protect their economic interests and investments.

- **Bulk size-** INC-3 did not adopt the mandate to proceed with developing the first draft of the treaty, as the draft text had tripled in size with many additions and deletions by the member states.

- **Influence of industry-** Fossil fuels and chemicals industry had a high presence of lobbyists at the negotiations. They object to eliminating compounds and polymers of concern and problematic and avoidable plastics, which are key in ending plastic pollution.

- **Exclusion of production-** Some countries argued that the life cycle starts at product design, in order to exclude production from the scope of the treaty, this would undermine the effectiveness of the treaty in tackling the root causes of plastic pollution.

- **Financial provisions-** The same like-minded group demanded that provisions like plastic pollution fee and financial control to be deleted altogether from the draft.

- **Plastic trade-** The plastics treaty is expected to plug the holes left open by the **Basel Convention**, any restrictions on trade is considered to be impinging on the freedom and sovereignty of nations.

> **Basel Convention**
>
> - An international treaty to reduce the movement of hazardous waste between nations and from developed to less developed countries.
>
> - **Aim-** To protect the human environment from the adverse effects of hazardous waste that is generated, managed and disposed of in the world community
>
> - **Adopted-** In 1989 by the Conference of Plenipotentiaries in Basel, Switzerland.
>
> - **Coverage-** It covers a wide range of wastes, such as industrial, medical, household, and plastic wastes, that are defined as hazardous based on their origin, composition, characteristics, or potential harm

- **Rules of procedure**- In INC-2 there was no concrete outcome in it, even as a handful of countries, including India, continued to demand consensus-based decision-making instead of a two-thirds vote majority.

- **Vagueness**- There is no clear cut definition for "_environmentally sound management_", instead terms such as best available science and best available technology continue to be used.

What lies ahead?

- The negotiations failed to adopt a mandate for developing the first draft of the treaty, and that no intersessional work will take place before the next meeting in 2024.

- INC-3 exposed the considerable influence of industry and revealed those member states that are opposed to a strong binding treaty to end plastic pollution.

- The need of the hour is more pressure and action from civil society and other stakeholders to push for a robust and effective treaty.

12.2   Global Cooling Pledge

Why in news?

Around 63 countries signed up the world's 1st ever pledge to drastically cut cooling emissions at the ongoing COP28 climate summit in Dubai.

Global Cooling Pledge

- **Joint initiative**- United Arab Emirates as host of COP28 and the _UNEP-led 'Cool Coalition'_.

- It is the world's first collective focus on energy emissions from the cooling sector.

- **Passive cooling strategies**- It outlines actions such as insulation, natural shading, ventilation and reflective surfaces, higher energy efficiency standards and a rapid phase down of climate-warming hydrofluorocarbon (HFC) refrigerants.

- **Aim-** It commits the countries to reduce their cooling emissions by at least 68% by 2050.

- **Outcome-** It could reduce the projected 2050 emissions from business-as-usual cooling by around 3.8 billion tons of CO_2 equivalent.

What are the sources of cooling emissions?

- **Coolants-** They allow the refrigeration process to change the state quickly and absorb and release heat to enable cooling process.

- **Chlorofluorocarbon (CFCs) -** It was most used refrigerant, the increased levels of CFCs in the atmosphere were responsible for abnormally low ozone concentrations in Antarctica.

- **Alternatives for CFC-** CFCs were largely replaced by two groups of chemicals, hydrofluorocarbons (HFCs) and hydro chlorofluorocarbons (HCFCs), but they presented a new problem.

- They don't damage ozone layer but absorb infrared radiation, trapping heat inside the atmosphere rather than letting it escape back into space, generating a greenhouse effect that warms Earth.

> _Cooling emissions are emissions generated from refrigerants, used in appliances like ACs and refrigerators, and the energy used for cooling._

> _Montreal Protocol is an agreement signed in 1987 that led to freeze the production and consumption of ozone-depleting substances including CFCs._

- As per Climate and Clean Air Coalition even relatively small amounts of HFCs contribute significantly to near-term warming as greenhouse gases which are hundreds to thousands of times more potent than carbon dioxide (CO_2) per unit of mass.
  - _HFC-134a_, a form of HFC and most commonly used in domestic fridges, has a global warming potential of 3,400 times that of CO_2.

- **Fossil fuels-** Fossil fuels such as coal, oil and gas are by far the largest contributor to climate change, accounting for over 75% of greenhouse gas emissions and nearly 90% of all CO_2 emissions.

Commitments pledged in Global Cooling Pledge

- Ratify Kigali Amendment by 2024.

- Support robust action through the _Montreal Protocol Multilateral Fund_ for early action to reduce HFC consumption.

- Establish _Minimum Energy Performance Standards_ (MEPS) for air conditioning by 2030.

- Include cooling emissions in countries overall climate action plans, called Nationally Determined Contributions.

- Publish own _national cooling action plans_ by 2026.

- Support the deployment of highly efficient air conditioning technologies.

- Establish _national model building energy codes_ by 2030.

- Pursue the life cycle management of fluorocarbons through the _Initiative on Fluorocarbons Life Cycle Management_.

- Support initiatives such as United Nations Environment Programme-led Cool Coalition, to advance global cooperation and domestic actions.

- Support collaborative research, innovation, and deployment activities at the local and international level.

What are the benefits of the Global Cooling Pledge?

- **Cooling accessibility**- Around 3.5 billion more people can enjoy refrigerators, air conditioners or passive cooling by 2050, improving their health and well-being.

- **Lower electricity bills**- End users can save 1 trillion dollars in 2050 and 17 trillion dollars cumulatively from 2022 to 2050 by using less power for cooling.

- **Reduced peak power demand**- The power grid can be relieved by cutting peak power requirements by 1.5 to 2 terawatts (TW), which is almost twice the European Union's current capacity.

- **Cut investments**- The need for building new power plants can be avoided by saving 4 to 5 trillion dollars in power generation investments.
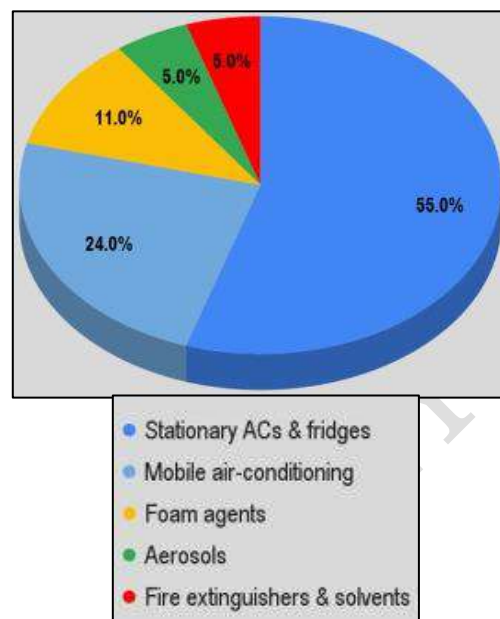
What lies ahead?

- **Kigali amendment**- It is an amendment to Montreal Protocol signed by 150 countries in 2016, to reduce HFC consumption by 80% by 2047.

    o If achieved, this could avoid more than 0.4 degree Celsius of global warming by 2100.

- **Climate friendly chemicals**- The phasing-out of HFCs would promote the use of natural refrigerants such as ammonia, certain hydrocarbons, and CO2 in cooling devices which have lower or zero global warming potential.

- **Proper disposal**- Most of the HFCs and HCFCs take place at the appliance's end of life, consumers and authorities need to dispose of them properly.

    o Proper management and reuse of potent refrigerant gases could slash 100 billion gigatons of global CO2 emissions between 2020 and 2050.

- **Sustainable buildings**- Improving insulation materials and constructing buildings with large openings for better ventilation can help reduce heat inside, this could cool buildings without the use of AC.

- **Holistic approach**- Sustainable cooling can be affordable if governments take an integrated approach, one that emphasizes passive cooling, mandates energy efficiency and phases out damaging refrigerants while offering targeted financial support to vulnerable populations.

12.3   Challenges in Renewable Energy

Why in news?

International Energy Agency (IEA) has called for government to commit to tripling global renewable capacity by 2030 ahead of COP 28, but some key players have not signed the pledge.

Global Renewables and Energy Efficiency Pledge
- **Led by-** US, European Union and UAE.
- **Aim-** To achieve net zero emission by mid-century (2050).
- **Coal phase-out-** The pledge calls for "the phase down of unabated coal power" and an end to the financing of new coal-fired power plants.
- It is seen as a crucial step to limit global warming to 1.5°C above pre-industrial levels, as agreed in the Paris Agreement.
- **Target-**   o To triple worldwide installed renewable energy generation capacity to at least 11,000 GW.   o To double global average annual rate of energy efficiency improvements to more than 4% by 2030.
- **Signed-** At COP 28 in Dubai.
- **Major non-signatory countries**- India and China

- According to IEA projections, the global share of renewables in power generation is anticipated to jump from 28% in 2021 to 80 % by 2050, while coal's contribution will dwindle to 3%.
- Primary renewable energy sources with their share in global power generation-
    - Hydroelectric- 16.1 %
    - Wind- 5.6%
    - Solar-3.8%

What are the challenges of increasing renewables energy?

- **Hydroelectric power**- Large dams are difficult to construct due to environmental and regulatory issues.
- **Unrealistic goal**-Around 57% of hydroelectric power is of renewable energy, but tripling its capacity by 2030 is unlikely.
- **Solar power**- It is limited by daylight hours, land availability, environmental impacts, and import dependence.
- **High cost**-Solar panels also need efficient and costly storage solutions to match peak demand and overcome intermittency.
- **Import dependency**- Amy countries depend on China for solar panels or raw materials, it increases the import costs.
- **Wind energy** -It is affected by weather conditions, site availability, and material emissions.
- **Structural issues**- Wind turbines also face the problem of intermittency and require backup or storage solutions to provide stable power.
- To triple renewable energy by 2030 the solar and wind output must increase by at least 5 times.
- **Issues with fossil fuel**- The COP 28 pledge does not specify reducing fossil fuels, which cause over 80% of greenhouse emissions. The US and other countries still subsidize and use fossil fuels extensively.
- **Fund deficit**- The transition to renewables requires massive investments, which can burden poorer countries and affect their budgets for essential services.

> *Despite the challenges, renewable energy capacity has more than doubled globally in the past decade, with costs declining significantly. By 2035, renewable electricity generation is expected to surpass fossil fuel production.*

To know more about the challenges in tripling global renewable energy capacity, click here

What is India's stand with respect renewable energy?

- **India's status-** India is the *3rd largest energy consuming* country in the world.
- As per *Renewables 2022 Global Status Report*, India stands
    - 4th globally in renewable energy installed capacity
    - 4th in wind power capacity
    - 4th in solar power capacity
- India has already achieved its target of *40% installed electric capacity from non-fossil fuels.*
- **Renewable energy target**- India has set an enhanced target of 500 GW of non-fossil fuel-based energy by 2030, which is the world's largest expansion plan in renewable energy.
- **Carbon neutrality**-India has also pledged to achieve net-zero emissions by 2070.
- **Tripling renewables proposal**- India didn't sign the pledge as a report has found that India would need an investment of about 293 billion dollars to triple its renewable energy installed capacity by 2030.
- **Reliance on coal**- India is not comfortable with the coal phase out target as it need to focus on poverty reduction and economic growth, hence it did not sign the pledge.

Steps taken by India to promote Renewable Energy

- **National Green Hydrogen Mission**- It focuses on direct and indirect employment, import substitution, and R&D for higher efficiency in renewable energy technologies.

- **PM KUSUM scheme**-It is aimed at ensuring *energy security* for farmers in India, along with honouring India's commitment to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030 as part of Intended Nationally Determined Contributions (INDCs).

- **Investment-** India allows up to 100% Foreign Direct Investment under the *automatic route* for renewable energy generation and distribution project.

- **Production Linked Incentive (PLI)** - Scheme for high efficiency solar aims to enhance India's manufacturing capabilities and exports in the solar sector.

- **Green Energy Corridors-** It is established to create *intra-state transmission* system for renewable energy projects.

- **International Solar Alliance-** It is a joint effort by India and France to mobilize efforts against climate change through deployment of solar energy solutions with an aim of *One Sun, One World, One Grid*.

- **Green carbon credits-**It is proposed by India to create *carbon sinks* through people's participation.

12.4   Challenges for Global Goal on Adaptation

Why in news?

COP28 at Dubai culminated in the adoption of Global Goal on Adaptation (GGA) framework.

What is Global Goal on Adaptation?

- It sets the *vision for global wellbeing and resilience* to protect people and ecosystems.

- **Establishment** – *In 2015*, a collective commitment under *Article 7.1 of the Paris Agreement* at COP 15, proposed by the African Group of Negotiators (AGN) in 2013.

- **Aims** – To enhance ***adaptive capacity, strengthen resilience and reduce vulnerability*** to climate change and thereby contributing to sustainable development.

At Paris agreement, the global mitigation goal was aimed at limiting global temperature rise to 1.5°C.

- **Role** – It is to serve as a *unifying framework* that can drive political action and finance for adaptation on the same scale as mitigation.

- It will help in *setting specific, measurable targets and guidelines* for global adaptation action as well as enhancing adaptation finance and support for developing countries.

- **Glasgow-Sharm el-Sheikh work programme (GlaSS) –** It was created by the signatories to the Paris Agreement *at COP 26 in Glasgow in 2021* to better understand, conceptualize and achieve this goal.

- It is a *2 year programme (2022-2023)* carried out by

   o   The Subsidiary Body for Scientific and Technological Advice (SBSTA), the Subsidiary Body for Implementation (SBI), the 2 technical bodies that support the CMA (Meeting of Parties to the Paris agreement)

   o   With the support of the UNFCCC secretariat

	Adaptation	**Mitigation**
Aim	To reduce vulnerability and to enhance resilience.	To reduce the greenhouse gas emissions to slow the climate change.
Approach	Local or regional	Global
Targets	It addresses specific climate impacts like flooding or heatwaves	It addresses the overall emissions through strategies like renewable energy or reforestation.
Measurement	It is complex with no universal metric, focusing on varied local outcomes.	It is measured in CO_2 equivalents, offering a standardized metric for comparing efforts globally.

What are the challenges for Global Goal on Adaptation?

- **Determining national action** – It is complex due to differences in national conditions, administrative capacities, and economic development levels.

- This will affect how global goals are adopted locally.

- **Measuring progress** – There is *no universal metric* for adaptation which makes it difficult to aggregate and compare progress across countries.

- While the GGA is working on developing indicators, it currently lacks specifics on development and implementation.

- **Lack of climate financing**– There is also a strong bias in climate financing in favour of mitigation as compared to adaptation.

- The adaptation finance gap is widening, with *a need for $ 71 billion per year until 2030*.

- Current finance is insufficient, with adaptation finance significantly trailing behind mitigation.

What is the way forward?

- **Collective action** – All regions need to acknowledge global cooperation to achieve the Paris Agreement's objectives.

- **Integrate adaptation and mitigation** – Climate action requires a balanced approach.

- **Ensure equity, rights, and justice** – Prioritize marginalized communities and future generations to benefit equitably from adaptation strategies.

- **Transformational Adaptation** – To embracing innovation and empowering local communities.

- **Capacity Building** – To build institutional, technical, and financial capabilities.

- **Engaging young people**.

12.5	Bharat Stage Emission Standards

Why in news?

Commission for Air Quality Management (CAQM) has lifted the stage III measures of Graded Response Action Plan (GRAP), allowing BS III petrol and BS IV diesel vehicles to run in Delhi and NCR.

What is Graded Response Action Plan?

- It is a step-by-step plan for the ***entire Delhi-NCR region,*** getting on board 13 different agencies of NCR regions like pollution control boards, industrial area authorities, municipal corporations etc.,

- **Objective**- To prevent the deterioration of air quality once it reaches a certain threshold in the Delhi-NCR region.

- **Notified by -** Union Environment Ministry in 2017 based on Supreme Court directions.

- **Implementation-** Commission for Air Quality Management (CAQM).

- **Approach-** The plan does not include yearlong measures and only focuses on incremental actions which gets activated on the basis of values of AQI.

- **Stages-** There are 4 stages which has different set of actions to be taken by authorities.

- **Recent policy decisions**-

  - Closure of the thermal power plant at Badarpur

  - Bringing BS-VI fuel to Delhi before the deadline set initially

  - Ban on Pet coke as a fuel in Delhi NCR

  - Revoking Stage III action plan under which BS III petrol and BS IV diesel vehicles were restricted

> ***Air Quality Index (AQI)*** *is a underlined colour coded index that shows the measure of air quality.*

> *Mashelkar Committee recommended a roadmap for implementation of Euro norms based on emission standards for India.*

Stages	Air Quality Index category	Range
Stage I	Poor	201-300
Stage II	Very poor	301-400
Stage III	Severe	401-450
Stage IV	Severe +	>450

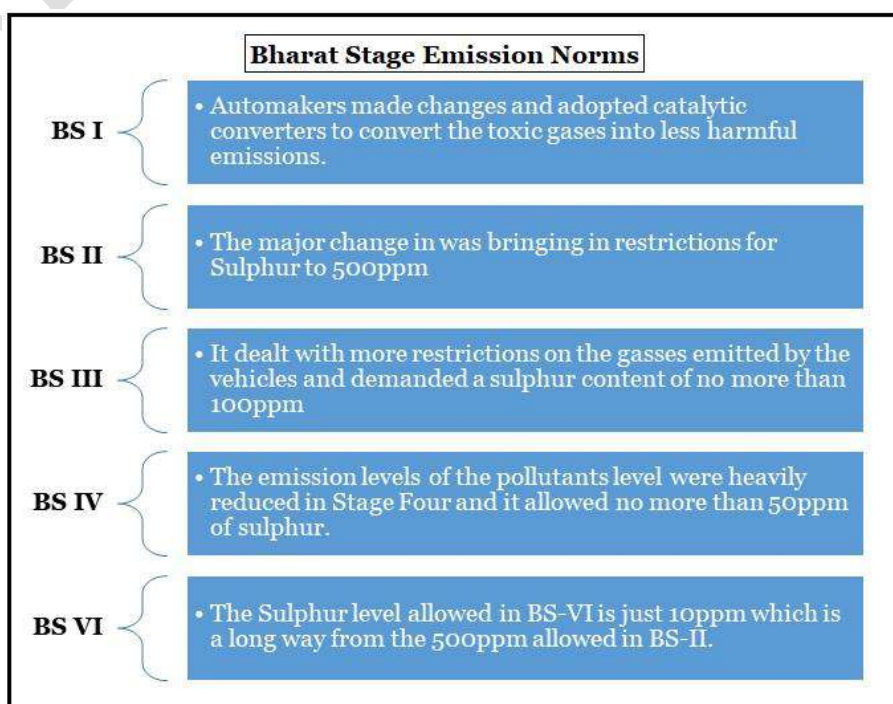| Commission for Air Quality Management (CAQM) |
|---|
| • **Statutory body**- Enacted under *CAQM in National Capital Region (NCR) and Adjoining Areas, Act 2021*.
 • **Mandate-** To enhance coordination, conduct research, identify and address issues related to air quality.
 • **Focus areas**- NCR and its neighbouring regions including Punjab, Haryana, Uttar Pradesh, and Rajasthan.
 • **Function** - Consolidate all monitoring bodies on one platform, for comprehensive and efficient air quality management. |

What is Bharat Stage Emission Standards?

- **Objective**- To regulate the output of air pollutants from compression and spark-ignition engines equipment, including motor vehicles.

- They are in line with the European emission norms with a *time lag of 5 years.*

- **Launched by**- *Central Pollution Control Board* (CPCB) under the Ministry of Environment, Forest and Climate Change (MoEFCC).

- In 1999, Supreme Court mandated that all vehicles in India have to meet the *Euro I or India 2000* standard.

About	Europe Emission Standards	Bharat Stage Emission Standards
Origin	In Europe	Indian government-instituted emission norms
Adoption	1970	2000
Iterations	Euro 1, Euro 2, Euro 3, Euro 4, Euro 5, Euro 6	BS I, BS II, BS III, BS IV, BS V, BS VI
Exceptions	All standards are followed with Euro 6 being the latest	The government decided to leap directly from BS-IV to BS-VI, due to the time it took to move from BS-III to BS-IV

What is the difference between BS IV and BS VI?

- **Stringent-** BS VI is more stringent and have lower limits for pollutants especially Particulate Matter (PM) and Nitrogen Oxide (NOx) than BS IV norms.

- **Presence of sulphur-** The BS-VI fuel is estimated to bring around an 80% reduction of sulphur, from 50 parts per million to 10 ppm.

- **NOx emission**- NOx is expected to come down by nearly 70% for diesel cars and 25% for cars with petrol engines.

- **Better emission control**- BS VI has new features such as Selective Catalytic Reduction, Diesel Particulate Filter, Real Driving Emission, and Onboard Diagnostics.

- **Fuel quality**- BS vehicle needs fuel that contains less sulphur hence BS IV grade fuel cannot be used as it may cause damage to the engine and increase emissions.

Bharat Stage Emission Norms

- **BS I** : Automakers made changes and adopted catalytic converters to convert the toxic gases into less harmful emissions.

- **BS II** : The major change in was bringing in restrictions for Sulphur to 500ppm

- **BS III** : It dealt with more restrictions on the gasses emitted by the vehicles and demanded a sulphur content of no more than 100ppm

- **BS IV** : The emission levels of the pollutants level were heavily reduced in Stage Four and it allowed no more than 50ppm of sulphur.

- **BS VI** : The Sulphur level allowed in BS-VI is just 10ppm which is a long way from the 500ppm allowed in BS-II.

12.6 Ethanol Blended Petrol Program

Why in news?

Recently the Ministry of Consumer Affairs, Food and Public Distribution directed all mills and distilleries not to use sugarcane juice/syrup for making any ethanol "with immediate effect".

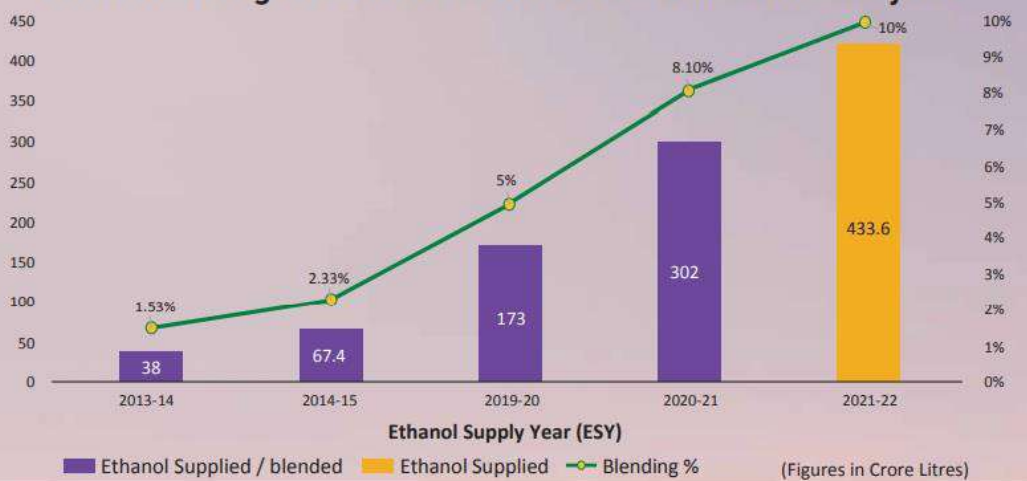### Status of Ethanol Production in India

- India is the *world's 3rd largest energy consuming nation* and a significant part of India's energy requirement is met through oil imports.

- Ethanol production capacity increased more than 2.5 times and no. of distilleries increased by 66% in 8 years.

- Most of the ethanol production in India comes from *B Heavy Molasses.*

- Ethanol Industry is expected to grow by 500%.

AVERAGE ETHANOL BLENDING WITH PETROL (%)

2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23*
1.60	2.33	3.51	2.07	4.22	4.92	5.00	8.10	10.02	11.75

  - India has doubled ethanol blending with petrol to *10% in the last two years.*

  - Ethanol blending will reach 12% in 2023 and meet the target of *25% by 2025.*

ETHANOL BLENDING IN INDIA

Ethanol blending % has increased more than 6 times in last 8 years

Ethanol Supply Year (ESY)	Ethanol Supplied / blended	Blending %
2013-14	38	1.53%
2014-15	67.4	2.33%
2019-20	173	5%
2020-21	302	8.10%
2021-22	433.6	10%

(Figures in Crore Litres)

Ethanol %age contribution from different feed stocks

2017-18: C Heavy Molasses 100

2020-21: B Heavy Molasses 60.5, C Heavy Molasses 12.9, DFG/Maize 13.0, SCJ/Sugar/Syrup 12.97, 0.7

2021-22: B Heavy Molasses 61.1, Surplus Rice From FCI 11.2, DFG/Maize 5.5, SCJ/Sugar/Syrup 19.7, C Heavy Molasses 2.5

Legend: C Heavy Molasses | B Heavy Molasses | SCJ/Sugar/Syrup | DFG/Maize | Surplus Rice From FCI
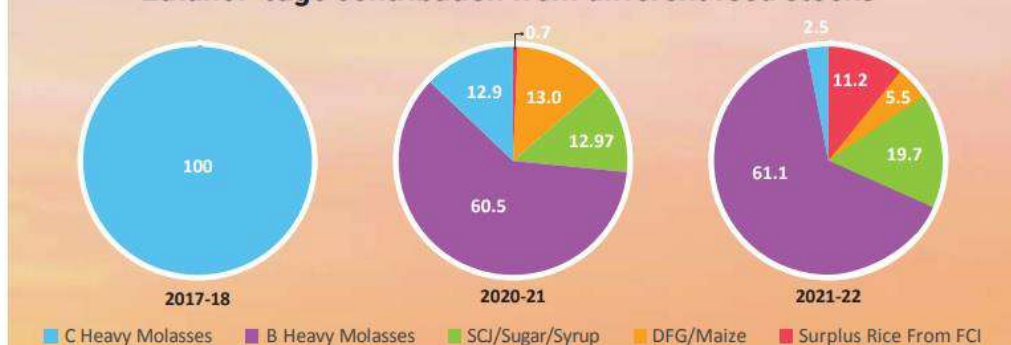
What is Ethanol Blended Petrol Program (EBP)?

- **Launch year**- 2003

- **Aim**- To promote the use of renewable fuels.

- **Ethanol-** It is an *agro-based product*, mainly produced from a by-product of the sugar industry, namely molasses. It is 99.9% pure alcohol that can be blended with petrol.

- **Guidelines-** National Policy on Biofuels.

- **Nodal department**- *Department of Food and Public Distribution (DFPD)* is the nodal department for promotion of fuel grade ethanol producing distilleries in the country.

- **Target-**
    - **E10-** It has achieved the target of 10% ethanol blending in 2022.
    - **E20-** It has set a target of 20% blending (E20) by 2030 which was now shifted to 2025-26.

- **Price fixation**-The procurement price of ethanol is fixed by the *government*, and oil companies can purchase it from domestic sources.

- **C-heavy molasses**- Ethanol is typically made from "C-heavy" molasses, a by-product of sugarcane processing.

- **Alternative feedstocks**- It include "B-heavy" molasses, concentrated sugarcane juice, and other substrates like rice and maize.

- **Increase in ethanol production**- It happened largely after 2017-18, when mills started making it from B-heavy molasses and concentrated sugarcane juice/syrup.

To know about ethanol blending in India click here

What is the significance of EBP?

- **Differential pricing**-The success of the Ethanol Blended Petrol (EBP) program is attributed to differential pricing for ethanol produced from various feedstocks.

- **Diversified production**-Government support and alternative feedstocks have diversified ethanol production.

- **Sustainable production**- The government raised the procurement price of ethanol produced from damaged grain and maize; this would lead to food security as it reduces the reliance on the food sources.

- **Fuel India**- Uttar Pradesh and Bihar would "fuel India" in future as Punjab, Haryana, Maharashtra feeds India.

> *Uttar Pradesh is a major sugarcane producer, Bihar is the major producer of maize.*

- **Vehicle efficiency**- Ethanol blending offers increase in Research Octane Number (RON) of the blend, fuel embedded oxygen and higher flame speed.

- **Climate resilient**- It helps in complete combustion and reduce vehicular emissions such as hydrocarbon, carbon monoxide and particulate matter.

- **Energy security**-Domestic biofuels provide a strategic opportunity to the country, as they reduce the nation's dependence on imported fossil fuels.

- **Waste to wealth**- Ethanol produced from damaged food grain would promote circular economy.

Why the government announced restrictions on ethanol production?

- **Low stock**- As per National National Federation of Cooperative Sugar Factories the sugar production for the year 2022-23 is lowest since 2016-17.

- **Uncertain production-** Maharashtra and Karnataka are expected to record particularly sharp declines, on the back of subpar rains and low reservoir water levels in their major cane-growing areas.

> *The Government directed the sugar mills and distillers "not to use sugarcane juice /sugar syrup" for ethanol production under Sugar (Control) Order 1966.*

- **Domestic availability**- The sugar production is low coupled with uncertain production, hence the government prefers domestic supply for exports.

- **Consumerism**- The primacy has been given to consumers over ethanol production which is the need of the hour and the government gives high preference for food rather than fuel.

- **Check food inflation**- The restrictions by the government is to regulate the price mechanism for ethanol.

12.7	Limitations of CCS and CDR

Why in news?

The draft decisions taken at COP28 at Dubai have referred to the abatement and removal of carbon emissions using carbon capture and storage (CCS) and carbon-dioxide removal (CDR) technologies.
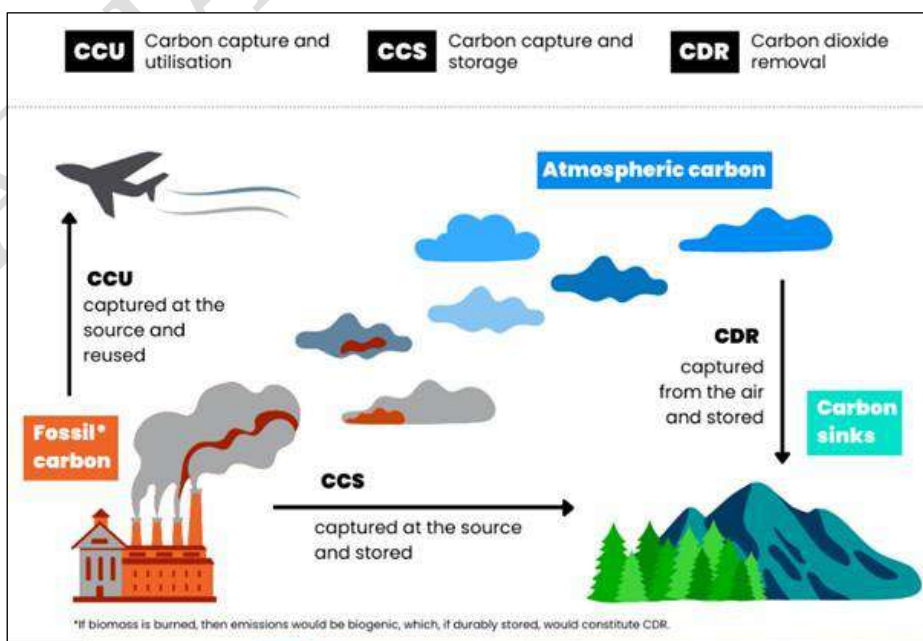
What are 'unabated' fossil fuels?

- **Unabated -** Doing nothing to reduce the carbon dioxide (CO_2) and other greenhouse gases that are released from the burning of coal, oil, and natural gas.

- According to IPCC, unabated fossil fuels are those "*without interventions* that substantially reduce GHG emissions.

- At COP28, the term "unabated fossil fuels" has come to mean the combustion of these fuels ***without using CCS technologies*** to capture their emissions.

- **Abated -** Attempts to decrease the release of polluting substances to an acceptable level.

What are CCS and CDR?

- **Carbon capture and storage (CCS)** – CCS refers to technologies that can ***capture CO_2 at a source of emissions*** before it is released into the atmosphere.

- These sources include the fossil fuel industry (where coal, oil and gas are combusted to generate power) and industrial processes like steel and cement production.

CDR and CCS are distinct, but some CO2 removal methods (direct air capture) may share the same capture processes or long-term storage infrastructure used for conventional CCS.

- It is a three-step process, involving:
  - Capturing the CO_2 produced
  - Transporting the captured CO_2
  - Storing it deep underground

- **Carbon-Dioxide Removal (CDR)** – Uses technologies, practices, and approaches to ***remove CO2 from our atmosphere*** through deliberate and intentional human actions.

- *CDR* captures CO_2 from the atmosphere and locks it away for years in plants, soils, oceans, rocks, saline aquifers, depleted oil wells, or long-lived products like cement.

- It can be *natural* (afforestation or reforestation) or *use technologies* (direct air capture), where machines mimic trees by absorbing CO_2 and storing it underground.
  - For example: Enhanced rock weathering and BECCS (Bioenergy with carbon capture and storage)

How well do CCS and CDR need to work?

- According to 6th Assessment Report (AR6) of UN's IPCC, ***climate mitigation relies a lot on the use of CDR*** in achieving the goal of limiting the world's average surface temperature increase to 1.5 degrees C with no or limited overshoot.
  - If CO_2 emissions continue at current levels, we will have a 50% chance of exceeding 1.5 degrees C compared to pre-industrial levels in 7 years.

- There is more than a 50% chance of limiting warming to 1.5 degrees C assuming if the world can **sequester 5 billion tonnes of CO2 by 2040** which is more than India emits currently every year.

What are the limitations of CCS?

- **Under developed technology**– CCS haven't demonstrated feasibility at large scale despite decades of development.

- **Higher costs** – It is cheaper to shut down a coal plant and replace it with some combination of wind, solar and batteries in comparison to attaching a carbon capture device to the plant.

> *Direct mitigation - Reducing our reliance on fossil fuels with renewable energy sources like solar and wind power.*

- **Additional energy needs** – It create new energy needs for the transport and long-term storage of carbon.

- **Creates room to emit GHGs -** A Germany-based climate science and policy institute, revealed that reliance on CCS could release an extra 86 billion tonnes of greenhouse gases into the atmosphere between 2020 and 2050.

- **Underperformance** - A 2022 study by the Institute for Energy Economics and Financial Analysis (IEEFA) found that most of the 13 flagship CCS projects worldwide have either failed entirely or underperformed.

What are the limitations of CDR?

- **Affect land rights** – Higher land demand for planting trees and deploying large-scale CDR methods deprive indigenous communities of their land rights.

- **Threaten food security** – It compete with other forms of land-use, like agriculture that is crucial for ensuring food security.

- **Affect biodiversity** – It might alter existing land usage and thereby impact habitat and survival of different organisms.

- **Impact of climate change mitigation** – Deploying CDR technologies in large tracts of land might counteract from using land to generate renewable energy resources.
  - For example, the **2023 'Land Gap' report** shows over reliance of government on land-based CDR to offset fossil fuel emissions thereby shifting their mitigation burden away from reducing fossil fuel use.

- **Uncertain future** – There is need to identify viable and scalable CDR methods and to figure out who will pay for CDR at scale in the future.
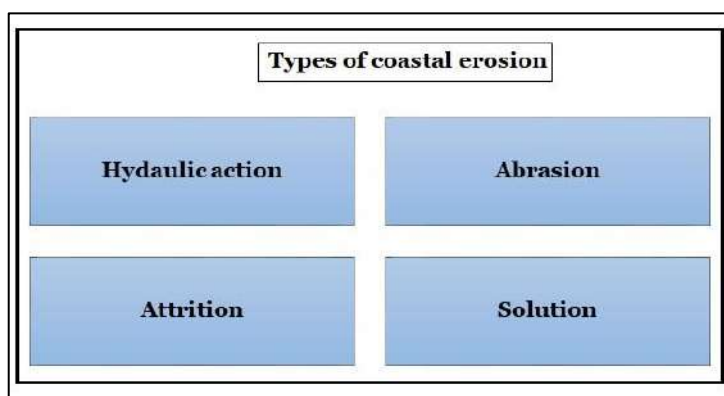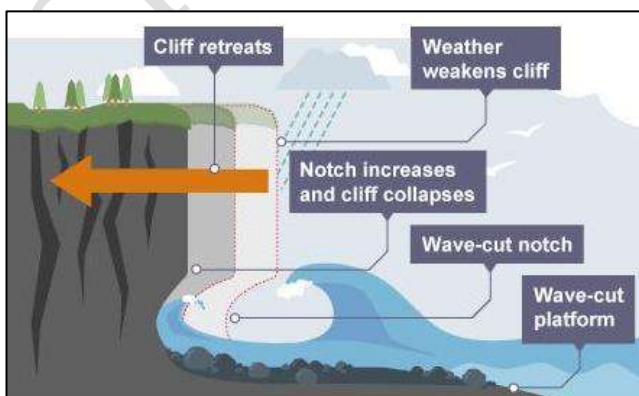
12.8 Coastline Erosion

Why in news?

Recently, Union Minister cited that over one-third of India's coastline is vulnerable to erosion as per the study of National Centre for Coastal Research.

What are the key highlights of the study?

- **Coastal erosion**- It has been noticed in 9 States and 2 Union Territories.

> *As much as 32% of India's coastline underwent sea erosion and 27% of it expanded between 1990 and 2018.*
>
> *Goa & Maharashtra have the most stable coastlines in India.*

- **-** The report states that the **_west coast has relatively been stable_** with erosion in minor pockets like Kerala. In the west, 48% of the coastline is stable, whereas only 28% of the eastern coast has been deemed stable.

- **Accretion-** States such as Odisha (51%) and Andhra Pradesh (42%) recorded the maximum gain (The coast is growing) owing to coastline changes.

What is coastal erosion?

- **Shoreline retreat**- It is the loss of coastal lands due to the net removal of sediments or bedrock from the shoreline.

- **Hydraulic action -** This type of erosion is more effective in areas where the rock has many cracks or joints, such as limestone or chalk.

- It can also create features such as blowholes, geysers, and sea caves.

- **Abrasion-** It is also known as corrosion or sandpapering. It can create smooth and polished surfaces on the rock, such as wave-cut platforms.

- It can also erode softer rocks faster than harder ones, creating differential erosion2.

- **Attrition-** This type reduces the size and shape of the rock fragments carried by the waves.

- It can also increase the efficiency of abrasion, as smaller and rounder particles can act as more effective tools for erosion.

- **Solution-** It is also known as corrosion or dissolution. It depends on the chemical composition of the rock and the water.

- Some rocks, such as limestone and chalk, are more soluble than others, such as granite and basalt.

- It can create features such as karst landscapes, sinkholes, and stalactites.

What are the factors causing coastal erosion?

Factors	About
Waves	- It is due to the powerful waves generated by wind and tides erode the coastline over time. - The intensity of wave action depends on factors such as coastal geomorphology, wind patterns, and sea currents.
Sea level rise	- Rising sea levels due to global warming and climate change contribute to coastal erosion. - As sea levels rise, waves reach farther inland, leading to erosion of coastal land.
Sediment loss	- Natural processes like coastal currents and longshore drift can cause the loss of sediment along the coastline. - This reduces the availability of sediment to replenish eroded areas.
Human interference	- Improper coastal infrastructure development, sand mining, construction of harbours, and coastal pollution, can accelerate coastal erosion. - These activities disrupt natural sediment movement and alter coastal processes.

What are the effects of coastal erosion?

- **Land loss**- It can have severe implications for coastal communities, infrastructure, and ecosystems. Valuable agricultural land, residential areas, and tourist destinations can be negatively affected.

- **Climate refugees**- Erosion can force communities to relocate as their homes and livelihoods are threatened.

- **Coastal flooding-**As erosion removes natural barriers, such as sand dunes and vegetation, coastal areas become more vulnerable to flooding during storms and high tides.

- **Biodiversity loss-**Coastal erosion affects coastal ecosystems, including mangroves, coral reefs, and dune systems.

- **Economic Impact**- It can damage or destroy coastal infrastructure, including roads, buildings, and ports.

- **Loss of revenue**- It can impact beach tourism and reduced land productivity can also impact local economies.

What are the India's initiatives for coastal management?

- **Integrated Coastal Zone Management (ICZM)**- It is a study and a planning initiative under _World Bank_, with the first phase for Enhancing Coastal Ocean Resource Efficiency (ENCORE)

- **Society of Integrated Coastal Management-** It launches the ICZM under four components.
    - National Coastal Management Program
    - ICZM- West Bengal
    - ICZM- Orissa
    - ICZM- Gujarat

> *Indian coast is about 7500 km long and characterized by varied landforms and ecosystems.*

- **National Centre for Sustainable Coastal Management**- It is set up in Chennai to undertake studies and research in the area of Coastal Zone Management including coastal resources and environment.

- **National Action Plan on Climate Change**- It outlines a strategy that aims to enable the country to adapt to climate change and enhance the ecological sustainability of our development path.

- **Coastal Regulation Zone**- It is notified by the Ministry of Environment under the ambit of Environment Protection Act 1986, sets guidelines to strike balance between economic growth and environmental conservation.

National Centre for Coastal Research (NCCR)

- **Ministry** - Ministry of Earth Sciences

- **Origin** - In 1998, the Project Directorate 'Integrated Coastal and Marine Area Management (ICMAM-PD)' was developed in Chennai.

- In 2018, ICMAM-PD was designated as the NCCR.

- **Objective**-
    - To develop and improve the country's capabilities in addressing the challenging problems prevailing in the coastal zone.
    - To offer scientific and technical support to coastal communities for integrated and sustainable use of resources towards the socio-economic benefit of the society

- **Multi-disciplinary research**-Marine Pollutions, Coastal processes and Hazards, Coastal Habitats and Ecosystem and Capacity Building and Training.

- **Technical support**- It provides support to the coastal states and stakeholders for sustainable coastal management.

12.9   Arctic Report Card 2023

Why in news?

Recently the National Oceanic and Atmospheric Administration (NOAA) released the annual Arctic report card 2023.

What is Arctic report card?

- **Launch year**-2006

- **Released by-** National Oceanic and Atmospheric Administration**.**

- **Published-** Annually since 2006

- **About-** It is a comprehensive assessment of the current state and trends of the Arctic environment relative to the historical records.

- **Data source**- It is a peer reviewed analysis done by 82 scientists from 13 countries.

- **Significance**-It is intended for a wide audience, including scientists, teachers, students, decision-makers and the general public interested in the Arctic environment and science.

What are the key highlights of the report?

About	Description
Warmest summer	- The Arctic experienced its warmest summer and sixth warmest year on record in 2023. - It has widespread impacts on ecosystems and communities.

Feedback loops	• The rising air temperature, sea ice decline and warming water temperature feed off one another in a warming climate. • The summer warming reduces sea ice, which causes more warming.
Arctic sea ice extent	• It was the sixth lowest in the satellite record, which began in 1979. • The 17 lowest Arctic sea ice extents on record occurred during the last 17 years.
Greenland ice sheet	• It continued to lose mass despite above-average winter snow accumulation. • The ice sheet lost an estimated 223 gigatons of ice in 2023, equivalent to about 0.62 millimeters of global sea level rise.
Arctic tundra	• It showed the third-highest peak greenness since 2000, indicating increased plant growth and productivity. • However, the greening was not uniform across the region, and some areas showed browning or reduced vegetation.
Arctic ocean	• The primary productivity, or the amount of organic matter produced by phytoplankton, was above average in many regions. • This reflects the earlier onset of the phytoplankton bloom due to earlier sea ice melt.
Arctic precipitation	• It was the sixth highest on record, continuing the trend toward a wetter Arctic. • Increased precipitation can affect soil moisture, river runoff, permafrost thaw, and ecosystem dynamics
Arctic wildfires	• During 2023 it was the most extreme on record, burning an estimated 34.6 million hectares of land, or about 4.5% of the Arctic land area. • The fires emitted large amounts of carbon dioxide, black carbon, and other pollutants, affecting air quality and climate1
Arctic climate change	• It is disrupting the lives and livelihoods of people living in the region, especially Indigenous communities. • Some are adapting to new opportunities and challenges while other are working to restore damaged habitats and preserve their cultures.

What are the most severe consequences of the soaring temperatures in Arctic?

- **Subsea permafrost thawing**- Frozen soil under the sea bed is melting faster due to warmer oceans.
- This releases greenhouse gases that worsen climate change and ocean acidification.
- **Food insecurity**- Warming of freshwater and marine habitats makes the chinook and chum salmon smaller and less abundant than usual in Western Alaska due to warming freshwater and marine habitats.
- **Impact on livelihood**- The reduced salmon availability causes problems for fishing activities, livelihoods, and traditions of the Indigenous people who rely on salmon.
- **Raging wildfires**- The Arctic and Northern regions of Canada faced record-breaking wildfires that burned over 10 million acres of land in 2023.
- **Climate change**- The wildfires were fuelled by high temperatures, dry vegetation and soil, and low rainfall, all linked to climate change.
- **Mendenhall glacier melting**- The glacier in *Alaska* has thinned significantly due to rising temperatures in the past 20 years.
- **Severe flooding**- The meltwater formed a lake that broke its ice dam and flooded Juneau, causing damage and disaster.

What lies ahead?

- **Sustainable solution-** In Finland peatland restoration is done as a *nature-based climate solution* led by traditional knowledge, it will help to capture and store carbon away from the atmosphere.

- **Habitat preservation-** In Finland, an effort to restore damaged reindeer habitat is done in collaboration with Sámi reindeer herders (Indigenous population). It is helping to preserve their way of life.

- **Rewilding-** It requires partnership, recognition of Indigenous and community rights, and the use of Indigenous knowledge alongside science to succeed and avoid replication of past inequities.

- **Data collection-**The Alaska Arctic Observatory and Knowledge Hub (AAOKH) works with a network of coastal Indigenous observers to document long-term and holistic observations of environmental change and impacts in northern Alaska.

To know about Arctic research click here

13. SCIENCE & TECHNOLOGY

13.1 Global Partnership on AI Summit (GPAI)

Why in news?

The 2023 summit of the Global Partnership on Artificial Intelligence (GPAI) held on 12–14 December 2023, in New Delhi, India.

What is GPAI?

> *AI - Simulation of human intelligence processes by machines, especially computer systems.*

- **Launched in** – 2020

- It is a multi-stakeholder initiative with experts from industry, civil society, governments, international organisations and academia.

- **GPAI Secretariat** – OECD
    - The 1st 3 GPAI summits were held in Montreal, Paris and Tokyo, respectively.

- **Aim** – To bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.

- **Mission** – To share multidisciplinary research and identifying key issues among AI practitioners and **to understand AI impacts**.

- **4 working groups** – Responsible AI, data governance, the future of work, and innovation and commercialization.

- **Values** – Based on **OECD Recommendation on Artificial Intelligence** grounded in the principles of human rights, inclusion, diversity, innovation and economic growth.

- **Membership** – 29 members.

- It is open to countries, including emerging and developing countries.

What are the major outcomes of GPAI summit 2023?

- **Adopted GPAI New Delhi Declaration** on advancing safe, secure, and trustworthy AI and commitment to supporting the sustainability of GPAI projects.

- A call to prepare a global framework for the ethical use of AI.

- India Shines as Global Hub for AI Innovation.

> *Frontier AI - Highly capable foundation generative AI model that could possess dangerous capabilities which pose severe risks to public safety.*

- India brought together all major initiatives for AI – UN Advisory Group on AI, UK AI Safety Summit.

- AI Research Analytics and Knowledge Dissemination Platform (**AIRAWAT**) and **National Program on Artificial Intelligence** and its role in shaping AI ecosystem in India was prominently emphasized.

- Startup community and research community showcased their AI products and services in the expo.

- **AI Pitch fest** provided an opportunity to upcoming startups to pitch for their innovation and value-added products and services.

- Taking AI among the masses especially among youths and students.

What does the GPAI New Delhi declaration on AI say?

- GPAI 2023 has unanimously **adopted the New Delhi declaration on AI.**
- **Objectives –** To mitigate risks arising from the development and deployment of AI systems.
- To promoting equitable access to critical resources for AI innovation.
- To support AI innovation in the agriculture sector as a new "thematic priority".
- **Governing principles** - A *global framework for use of AI* should

  o Upheld democratic values and human rights
  o Safeguard dignity and well-being
  o Ensure personal data protection
  o Protect intellectual property rights, privacy, security
  o Foster innovation and promote responsible, sustainable, and human-centred use of AI.

> *Bletchley declaration on AI was signed by 28 major countries including India to initiate a global action to tackle the potential risks of AI.*

- **Contrasts Bletchley declaration** – Unlike *UK AI Safety Summit* which mainly focused only on security and safety risks related to AI, this finds a balance between innovation and the risks associated with AI systems.

13.2   Global Space Missions: 2023 & 2024

Why in news?

Space missions reach new heights in 2023 as India sticks lunar landing, NASA studies asteroids, and SpaceX iterates at warp speed and 2024 is shaping up to be another exciting year for space exploration.

What are significant global spaceflights in 2023?

Mission	Features
OSIRIS-REx (NASA)	• It studied the asteroid Bennu and returned a sample from Bennu which is thought to be a time capsule from the birth of our solar system.
Psyche (NASA)	• Aim is to explore the origin of planetary cores. • Psyche is believed to have a high metal content.
Shenzhou 16 (China)	• Send 3 humans to Tiangong space station. • It created a world record with 17 humans in orbit, 6 aboard Tiangong and 11 on the ISS.
Chandrayaan-3 (ISRO)	• It made a soft landing on the Moon. • India became the 4th country in the world to soft-land a spacecraft on the Moon. • 1st spacecraft to land near the South Pole of the Moon.
Aditya L1 (ISRO)	• It is India's 1st mission to study the Sun and space weather. • It will travel around 1.5 million kilometres away from the planet to the 1st Lagrange point, or L1, between the Sun and the Earth.

What are important global space missions in 2024?

Mission	Objectives	Key points
NASA		
Europa Clipper	To explore Europa, Jupiter's moon.	It will study the icy shell, its surface's geology and its subsurface ocean and will also look for active geysers.

Artemis II	To send 4 humans to the Moon for 10 days.	It includes **the 1st woman and the 1st person of colour** to the moon.
VIPER	To survey water at the south pole of the Moon.	Volatiles Investigating Polar Exploration Rover, a robot the size of a golf cart to search for volatiles.
Lunar Trailblazer and PRIME-1	To look for water on the Moon with PRIME-1 to drill into the Moon.	It will orbit the Moon, measuring the temperature of the surface and mapping out the locations of water molecules across the globe.
JAXA (Japan Space Agency)		
MMX	To study the Mars moon – **Phobos, Deimos.**	MMX stands for Martian Moon eXploration.
ESA (European Space Agency)		
Hera	To study to the **Didymos-Dimorphos** asteroid system.	It will study physical properties of the asteroids.

Quick Facts

- **DART mission -** NASA's mission to the Didymos-Dimorphos asteroid system in 2022, collided with Dimorphos with such force that it actually changed its orbit to test a planetary defense technique called kinetic impact.

- **Europa -** It is a moon of Jupiter that is slightly smaller than Earth's Moon, with a surface made of ice and it likely harbours a saltwater ocean.

- **Volatiles -** They are molecules that easily vaporize, like water and carbon dioxide, at lunar temperatures and they could provide resources for future human exploration on the Moon.

- **SIMPLEx -** It is NASA's small, low-cost planetary missions which stands for Small, Innovative Missions for PLanetary Exploration.

- **Luna-25 -** Russia's 1st independent lunar mission crashed onto the lunar surface as it attempted to become the 1st mission to land near the moon's South Pole.

- **The Hakuto mission -** The 1st privately-led lunar mission (Tokyo based) in history, also crashed onto the moon after spending nearly 5 months in space.

13.3   Ransomware attacks on Indian IT Firms

Why in news?

IT service provider HCL Technologies has shared that it was hit by a ransomware incident within a restricted cloud environment.

What is a ransomware?

- **Ransomware** – It is an extortion software designed to lock or encrypt a device or data on a system and then demand a ransom (money) for its release.

- Attackers usually leave behind a message with instructions on the ransom amount, mode of transfer, or

instructions on how to contact them for further guidance.
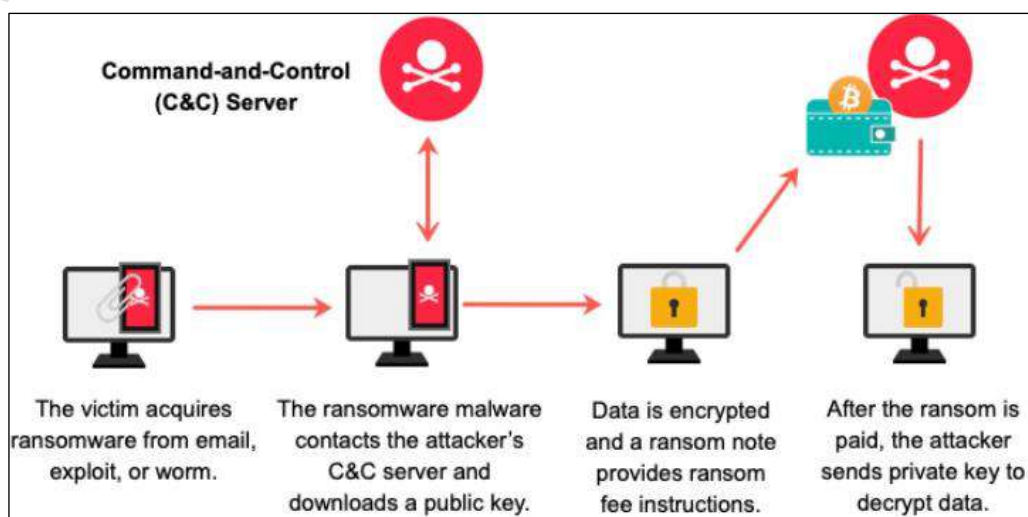
- **Working**

    o Originates from a malicious link, email attachment, exploited vulnerability, attack campaign, or worm.

    o Installs in victim's machine.

    o Spreads to other devices on a network and connects to a command-and-control server controlled by the attacker.

- **Impact** - It can lead to data loss, productivity losses, and reputational damage.

> *Ransomware-as-a-service business models promote new generation of smaller and smarter gangs are likely to become more prevalent*

What is the current status of ransomware attacks in India?

- **Indian Ransomware Report** – It is released by India's Computer Emergency Response Team (CERT-In).

    o A 51% increase in ransomware incidents was reported in first half of 2022 as compared to 2021.

    o A majority of these attacks target data centres, IT, and TeS sectors in the country.

- **State of Ransomware 2023 Report** -It is a 2023 study by Sophos, a cybersecurity company.

    o **Increase in ransomware attack** – Attack on organisations is up from 57% the previous year to 73%.

    o **Drop in successful encryption of data** – It is 77% of reported organisation, a drop from 78% the previous year.

Malware	Ransomware
Malware is a computer virus designed to replicate and copies itself from file to file or program to program.	Ransomware is a sub-type of malware from cryptovirology that blocks access to the system unless ransom is paid.
Malware typically piggybacks on malicious links, fraudulent email attachements, social media messages, etc.	Ransomware are spread through phishing emails containing malicious attachments or web-based messaging applications.
Malware is also referred to as virus, worm, Trojan horses, spyware, adware, and ransomeware.	It's a new type of malware that presents itself in many ways to hold data to ransom.
The best way to protect the system from malware is to install antimalware programs.	The only way to protect your systems is to pay the ransom to the attackers.
It's a broad term that refers to all types of malicious programs.	Crypto and Locker are the two main types of ransomware.

    o **Ransom Paid** – 44% of organisations payed the ransom to retrieve their data.

    o **Highest Impact** – It is in education sector, where 79% of higher education organizations surveyed and 80% of lower education organizations surveyed reported such incidents.

Why do attackers target IT organisations?

- **Repository of valuable data** – They hold sensitive information like personally identifiable data of users, intellectual property, access credentials, and even financial information.

- Higher the value for data, higher the chances that the ransom will be paid.

- **Higher vulnerability of the target** – If the data is leaked, it could lead to a drop in their value and replication of software, devaluing the company thus threatening its revenue streams.

- Successful attacks could potentially open the channel to target supply chains, adding pressure on companies to pay the ransom.

Ransomware Attacks

- **Recent attacks** – Akira, Wiperware attacks from Russia and LockBit Black.

- **Ransomware attacks in India** – Indian organisations are increasingly targeted by ransomware attacks.

- In 2023, a *US-based subsidiary of Infosys* was reportedly targeted by a ransomware attack while Indian drug manufacturer *Sun Pharma* was hit by a cyberattack.

- In 2022, a ransomware attack crippled AIIMS for days.

- **Easy target** – They are among the 1st to adopt new technologies and use open architecture, which may not have the highest levels of protection against cyberattacks, making them an easy target.

How to protect against ransomware?

- Cyber awareness training and education

- Continuous data backups

- Patching – Apply recent security updates on system or software.

- User authentication

- Reduce the attack surface – By addressing phishing messages, unpatched vulnerabilities, remote access solutions and mobile malware.

- Deploy anti-ransomware solution.

To know more about cybercrime prevention in India, click here

> 'Police' and 'Public Order' are State subjects as per the 7th Schedule of the Constitution of India.

13.4 Decentralized Autonomous Organizations

Why in news?

Decentralized Autonomous Organizations (DAOs) represent a groundbreaking innovation at the intersection of blockchain technology and governance.
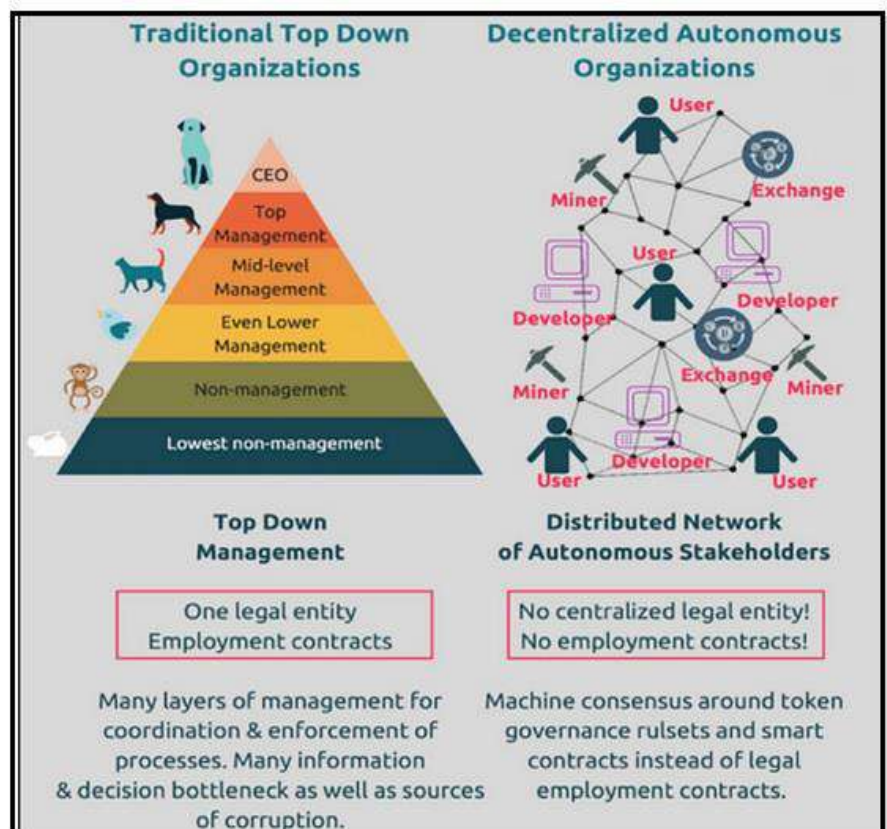
What is DAOs?

- **Legal structure**- It operates without centralized control and is governed by smart contracts and the consensus of its members.

- **Decision making**- It uses _blockchain technology_ and smart contract to take decisions in a _bottom-up management approach_.

> Blockchain is a type of shared database that differs from a typical database in the way it stores information, it store data in blocks linked together via cryptography.

- **Community driven**-It is represented by rules encoded as a computer program that is transparent, controlled by the respective organization members, and not influenced by a government.

- **Smart contracts**- It executes predefined rules without the need for intermediaries, ensuring trust through code rather than traditional authorities.

- **Enhanced cooperation**- They enable global, borderless cooperation on an unprecedented scale.

- **Constructive engagement**- Participants, often referred to as token holders, can propose and vote on decisions related to the organization's goals and resources.

- **Self-executing systems**- This decentralized decision-making process ensures that no single entity holds undue influence.

What is the significance of DAOs?

- **Decentralization-** The authority of decision making is broad and made by a collection of individuals independent of third-party intermediaries.

- **Transparency-** In DAOs votes are cast via block chain and made publicly viewable.

Traditional Top Down Organizations / Decentralized Autonomous Organizations

CEO / Top Management / Mid-level Management / Even Lower Management / Non-management / Lowest non-management

Top Down Management
One legal entity Employment contracts
Many layers of management for coordination & enforcement of processes. Many information & decision bottleneck as well as sources of corruption.

Distributed Network of Autonomous Stakeholders
No centralized legal entity! No employment contracts!
Machine consensus around token governance rulsets and smart contracts instead of legal employment contracts.

- **Fosters trust-** As vote and their decisions will be made publicly viewable, this will incentivizes actions that will benefit voters' reputations and discourage acts against the community.

- **Inclusivity-** The concept of a DAO encourages people from all over the world to seamlessly come together to build a single vision.

- **Simplicity-** With just an internet connection, token holders can interact with other owners wherever they may live.

- **Versatility-** It demonstrates the potential to reshape industries across various sectors like finance, supply chain, governance etc.,

Applications of DAOs
• **Finance-** Platforms like Compound and MakerDAO have introduced lending and borrowing services, enabling users to participate in the global financial ecosystem without relying on traditional banks.
• **Intellectual property protection-** In the art world, artists are tokenizing their creations and utilizing DAOs to manage royalties and maintain control over their intellectual property.
• **Supply chain management-** DAOs offer transparency and traceability in global supply chains, ensuring the authenticity and quality of products.
• **Online governance-** DAOs have emerged as tools for decision-making, with platforms like DAOstack facilitating decentralized governance structures for internet communities

What are the challenges of DAOs?

- **Lack of regulation-** It is a new concept and there is lack of regulation and legal frameworks to govern their use, this can create uncertainty and expose to legal risks.

- **Technical complexity-** They are built on block chain technology which is difficult and complex to understand.

- **Forgery-** Malicious actors could exploit vulnerabilities in smart contracts as they are transparent, use DAOs to launder money or engage in illegal activities.

- **Security breach-** DAO hack in 2016 exposed vulnerabilities in the code, leading to a contentious **hard fork** in the Ethereum block chain.

> *Hard fork refers to a change in a network's protocol that makes previously invalid blocks and transactions valid or vice-versa.*

- **Lack of Accountability-** DAOs operate through a *consensus-based decision-making process*, which can lead to slower decision-making and potential conflicts among members.

- **Taxation compliance-** DAOs have to comply with various regulations such as Anti-Money Laundering and Know Your Customer further add layers of complexity to the legal framework

- **Dispute resolution-** It often rely on code-based solutions, present a unique challenge in the absence of traditional legal mechanisms.

What lies ahead?

- DAO need to adhere to the complexities of the law while harnessing their transformative potential.

- It is crucial for regulators, developers, and participants to work collaboratively to harness the full potential of DAOs while addressing their evolving challenges.

14. INTERNAL SECURITY

## 14.1 UNLF Peace Accord

Why in news?

Recently, the Centre and Manipur government signed a peace agreement with the United National Liberation Front (UNLF), the oldest valley-based armed group in Manipur.

History of insurgency in Manipur
• Manipur has been in the cross-currents of India's oldest insurgent movements.

- **Naga movement** - Country's longest-running insurgency which fights for the Greater Nagaland or Nagalim.

- **Kuki** - They also have fought the Indian government for an '*independent Kuki homeland*', spread across Manipur.

- The Kuki insurgency gained momentum after ethnic clashes with the Nagas of Manipur in the early 1990s.

- **Meitei** - The Meiteis in Manipur opposed the merger agreement between the Manipuri king and the Indian government in 1949.

To know more about insurgency in Manipur, click here
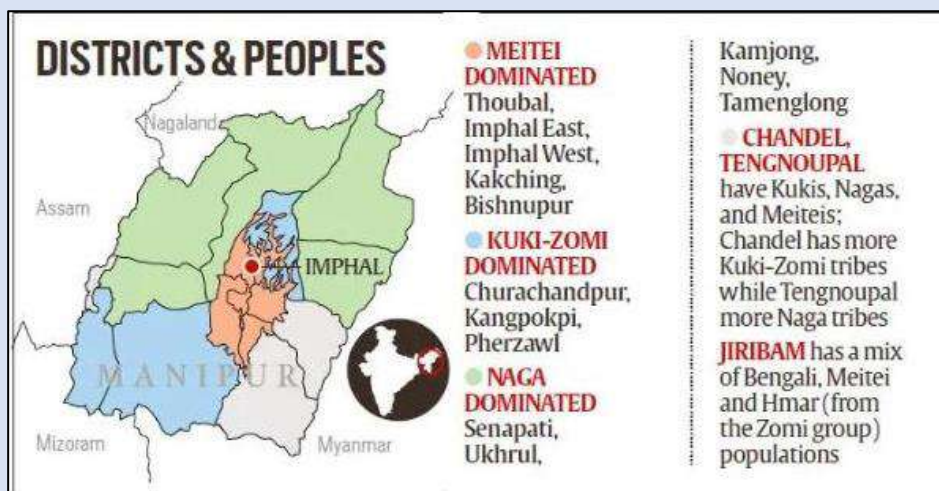
What is the history of UNLF?

- **Established**-1964

- **Founder-** Arambam Samarendra

- **Aim**- To liberate Manipur from India and to form an independent socialist state of Manipur.

- It is distinct from the insurgent groups active in the state's Naga-dominated and Kuki-Zomi dominated hills.

UNLF is Manipur's oldest militant group dominated by the Meitei community and one of the seven "Meitei Extremist Organisations" banned by the Union government under the Unlawful Activities Prevention Act.

- **Objective-**
  - It favoured a long-term programme to ***secede from India,*** form alliance mainly with China and gradually capture political power with the help of an indoctrinated young population and the intelligentsia.
  - It aimed at reclaiming the ***Kabow Valley in Myanmar.***

- **Manipur People's Army**- It is an armed wing formed in 1990 which has carried out attacks on India's security force.

- **4 point proposal-** In 2005, it mooted a proposal to bring the Indo-Manipur conflict to an end.

Plebiscite	It should be conducted under United Nations (UN) supervision to elicit the opinion of the people of the State on the core issue of restoration of Manipur's independence.
UN peace keeping force	They should be deployed in Manipur to ensure that the process is free and fair.
Arms surrender	Arms to be surrendered to UN force by UNLF, matched by the withdrawal of Indian troops
Political authority	Handing over of political power by the UN in accordance with the results of the plebiscite.

- **Government's response**- The Central government didn't accept the 4-point proposal by UNLF.

- **Factions-** UNLF split into 2 factions due to internal differences.
  - **Khundongbam Pambei-** Signed the peace agreement recently with the government.
  - **NC Koireng**- Remains opposed to talks.

What is the significance of the deal?

- **Historic milestone**- The pact marks a historic milestone, as it is the 1st time a valley-based proscribed organization has engaged in peace negotiations since the eruption of ethnic violence in 2023.

- **Establish peace-** The UNLF, known for its armed struggle, has agreed to renounce violence and participate in the peaceful democratic process.

- **Success of tripartite agreements**- The tripartite accords initiated by the Centre since 2014 have led to surrendering and a substantial decline in violence in terms of security forces, civilian casualties and number of violent incidents.

- **Rehabilitation-** The agreement provides for the rehabilitation and re-settlement of UNLF's armed cadres.

- **Institutional support**- A *Peace Monitoring Committee* will oversee the enforcement of agreed ground rules.

What are the challenges?

- **Multiple stakeholders-** The peace agreement can be complex to implement due to multiplicity of stakeholders and their divergent interests and grievances.

- **Unknown terms-** The terms of the agreement are not known and the involvement of militants in the latest ethnic conflict may complicate the issue further.

- **Opening up of issues**- If criminal cases are withdrawn, then similar concessions have to be given on the other side to the Kuki militants who professedly are continuing with the Suspension of Operations agreement.

- **Diverse demands**- Each group has distinct historical grievances, aspirations and demands, making it hard to arrive at a resolution that satisfies all parties.

- **Vulnerability**- The fragility of peace agreements also lies in their vulnerability to disruptions caused by extremist factions or splinter groups within these communities.

- **Distrust**- Lack of trust in the government's commitment to fulfil promises outlined in peace agreement undermines its effectiveness.

- **Geopolitical factors-** The reluctance of neighbouring countries to support peace processes or interference by external actors can destabilise the region.

What lies ahead?

- The UNLF Manipur Peace Pact represents hope for lasting peace, but the challenges need to be addressed.

- The road ahead requires commitment, transparency, and genuine reconciliation.

Unlawful Activities (Prevention) Act (UAPA)

- **Aim-** To prevent and punish unlawful and terrorist activities that threaten the sovereignty and integrity of the country.

- **Definition-** The Act defines unlawful activities as any action that

  o supports, propagates, or advocates secession from India,

  o disclaims or questions the territorial integrity of India,

  o causes or intends to cause disaffection against India,

  o supports any terrorist organization or individual.

UNLAWFUL ACTIVITIES PREVENTION ACT (UAPA)

The Act was enacted in 1967 to deal with matters of profound impact on the 'Defence of India' and to address threats to the very existence of our Nation
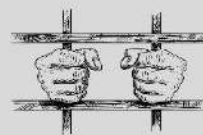
Permits keeping a person in prison for up to 180 days, without even filing a charge sheet.

Empowers the government to declare an organisation or an individual as "terrorist" and ban it.

An investigating officer needs prior approval of Director General of Police for seizure of properties.

Deprives the accused of the right to bail thus making them live under detention.

Investigation is done by officers of rank of Deputy Superintendent or ACP or above, & in case of NIA, the rank of Inspector or above.

- **Declaration of unlawful associations**- The Act empowers the Central government to declare any **organisation or individual** as unlawful.

- **Tribunal-** The declaration is subject to judicial review by a tribunal constituted by a sitting or retired judge of a High Court.

- **Punishment-**

  o **Unlawful activity**- Imprisonment ranging from 5 years to life, and fine.

  o **Terrorist activity**- Death penalty or imprisonment for life, and fine

- **National Investigation Agency (NIA)**- It is authorized to investigate any offence under the Act, and to arrest any person who is reasonably suspected of having committed such offence.

- It also provides for the attachment and forfeiture of any property that is derived from, or used for, any unlawful or terrorist activity by NIA.

- **Special courts**- It is established by the Central or State government to try any offence under the Act.

- **Appeal and revision of the judgments of the special courts** - by the High Court and the Supreme Court.
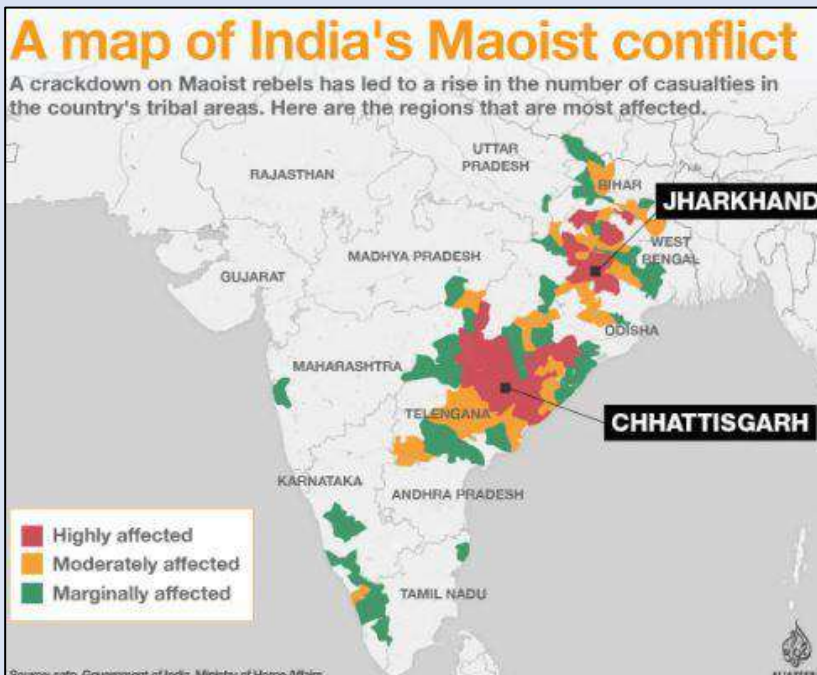
14.2	**Grass Root Democracy against Maoism**

Why in news?

The low polling turnout in the Maoist-affected areas of Chhattisgarh is a pointer that democracy needs to be strengthened at the grassroots.

History of Maoist insurgency in Chhattisgarh

- Chhattisgarh is a part of the _larger Naxalite-Maoist insurgency_ that has been going on in India since late 1960s.

- **Maoism**- It is a doctrine to capture State power through the combination of armed insurgency, mass mobilization and strategic alliances.

- **Aim**- To overthrow the Indian state and establish a _"people's democracy"_ through a protracted people's war

- **Geographical location-** The State's strategic location, dense forests, rugged terrain and remote areas provide the ideal conditions for Maoist groups to operate and hide.

- **Internal security issue-** In 2006, then Prime Minister Manmohan Singh declared the Maoist insurgency as the _"greatest internal security challenge"_ facing India.

- **Operation green hunt, 2009-** It is multipronged offensive of the Indian security forces against the Maoists that has begun in the forests of Chhattisgarh.

- **Operation Prahar, 2017-** It is a targeted action by police officials in various States including Chhattisgarh against criminals, outlawed elements or even for illegal liquor sales.

A map of India's Maoist conflict

A crackdown on Maoist rebels has led to a rise in the number of casualties in the country's tribal areas. Here are the regions that are most affected.

Highly affected
Moderately affected
Marginally affected

Why there is lower turnout ratio of voters in Maoism affected areas of Chhattisgarh?

- **Influence of Maoists**- They claim to fight for tribal cause, force the tribals to shun the democratic process and instead follow their own 'janta sarkar'.

- **Fear of violence-** The Maoists often threaten the voters, candidates, and security forces to disrupt the elections and enforce their boycott call.

- **Disrupt election**-They also plant improvised explosive devices (IEDs) and landmines near the polling booths to deter the voters from reaching the polling stations.

- **Lack of trust**-The Maoists claim to represent the interests of the tribals and accuse the government and the mainstream parties of exploiting and neglecting them.

- **Logistical challenges**- The Maoist-affected areas are often located in remote and inaccessible regions, with poor road connectivity and communication facilities.

> As per report only 3% to 4% of the voters in Maoist-affected areas such as Bijapur and Konta participated in the elections, indicating the failure of the political parties to address the Maoist challenge.

- **Inconvenient-** The voters have to travel long distances, sometimes on foot, to reach the polling stations, which may not be feasible or convenient for many of them.

- **Limited voting time**- The polling hours are often reduced in these areas due to security reasons, which may limit the voter participation.

- **Religion based conversation**- It is used by political parties as a 'manufactured agenda' to divert attention from basic issues affecting the tribals such as their rights and aspirations.

- **Lack of governance**- The government's development programs have failed to reach the tribals, Maoists have set up their own parallel development programs and have provided basic services to the tribals.

Why PESA is important in Maoism affected regions?

Panchayat (Extension to Scheduled Areas) Act 1996
• **Bhuria Committee, 1995-** It is based on this report, the Parliament enacted the PESA Act, 1996 in 10 states.
• **Coverage-** Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, Rajasthan and Telangana.
• **Aim-** To empower the tribals to govern their own affairs, in accordance with their culture and traditions.
• **Need-** To provide for the extension of the provisions of Part IX of the Constitution relating to the Panchayats to the Scheduled Areas.
• **Nodal Ministry**- Ministry of Panchayat Raj Institutions
• **Objective-** It empowers gram sabhas to play a key role in approving development plans and controlling all social sectors.

- **Tribal empowerment-** The Act will empower the tribals to govern their own affairs, in accordance with their culture and traditions.

- **People's participation**-The Act could also weaken the Maoist influence and challenge, by restoring the trust and confidence of the tribals in the democratic process.

- **Tribal governance -** If the Act is implemented sincerely and effectively, it could be a powerful tool to mainstream the tribal community, by accommodating their aspirations and rights.

- **Internal security**- It has the potential to address the root causes of the Maoist insurgency and bring peace and development to the tribal regions.

- **Autonomy**- The tribals could safeguard and administer their own natural resources and cultural legacy, which are frequently endangered by the State and corporate intervention.
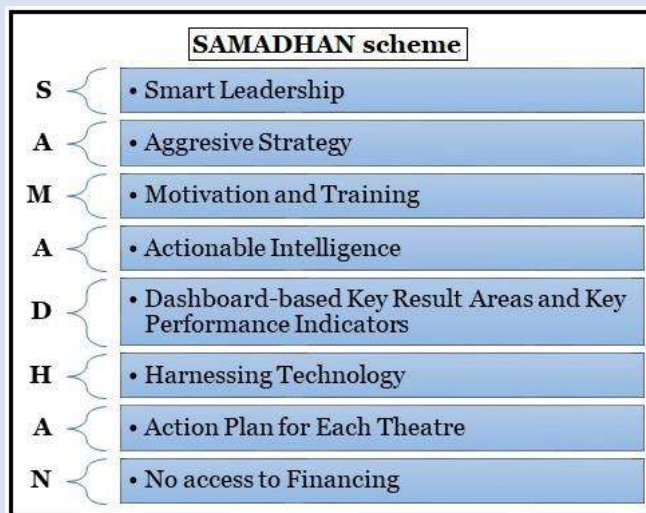
What lies ahead?

- The Maoists claim to fight for the tribals need to be exposed as they hinder empowerment and development, it should be challenged by the state and the society.

- The solution to the Maoist problem is not only about providing security and development to the tribals, but also about respecting and fulfilling their aspirations and dignity.

- The Maoists' hidden agenda and violence need to be countered by a long-term vision and commitment.

Measures taken to combat Maoism related insurgency
• **Security related expenditure (SRE)** - It is constituted by central government to provide financial support to the states affected by left wing extremisms (LWE).

- **Special infrastructure scheme (SIS)** - The scheme is to strengthen local police and intelligence.

- **Special central assistance** -It will provide fund to build infrastructure such as roads in LWE districts.

- **Central Reserve Police Force (CRPF)** -CRPF has been consistently enlarging its footprint by opening new camps deeper in the jungles of Jharkhand.

- **Bastariya Battalion** - It is launched by CRPF to recruit the local people to gain the local intelligence about the Maoist.

- **Counter-terrorism National Investigation Agency (NIA) and the Enforcement Directorate** - They have been directed to track CPI (Maoist) cadres, leaders and sympathizers with the aim to choke their funding.

- **District Reserve Guard (DRG)** - It is constituted primarily in Chhattisgarh to include the local police in neutralizing the Maoists.

- **SAMADHAN**- It was launched in 2017.

SAMADHAN scheme

S	• Smart Leadership
A	• Aggresive Strategy
M	• Motivation and Training
A	• Actionable Intelligence
D	• Dashboard-based Key Result Areas and Key Performance Indicators
H	• Harnessing Technology
A	• Action Plan for Each Theatre
N	• No access to Financing

14.3 Prevention of Cyber Crimes

Why in news?

The States and Union Territories are primarily responsible for the prevention, detection, investigation and prosecution of crimes including cybercrime through their Law Enforcement Agencies (LEAs).

Status of Cybercrime in India

- **'Police' and 'Public Order'** are State subjects as per the 7th Schedule of the Constitution of India.

- Hence States and UTs are responsible for cybercrime prevention, detection etc. The Central Government supplements the initiatives of the States/UTs through advisories and financial assistance under various schemes.

- As per Crime in India 2022 report majority of the cybercrime cases are fraud, extortion and sexual exploitation

- The states most affected with the cybercrimes are Maharashtra, Karnataka, Uttar Pradesh, Telangana and Kerala.

- As per a research, online abuse disproportionately affected *young women*.

- Out of 400 students surveyed from 111 Indian higher education institutions (HEIs), it is found around 60% of women experienced some form of Technology Facilitated Sexual Violence compared to only 8% of men.

- A global study by Economist Intelligence Unit found that 38% of women have had personal experiences of online violence, and 85% of women who spend time online have witnessed digital violence against other women.

What is a cyber-crime?

- It is a *criminal activity* that either targets or uses a computer, a computer network or a networked device. Most cybercrime is committed by cybercriminals or hackers who want to make money.

- Cybercrime can be carried out by individuals or organizations, some are organized, use advanced techniques and are highly technically skilled.

- **Types-**
    o Email and internet fraud.
    o **Identity fraud-** Personal information is stolen and used.
    o **Cyberextortion-** Demanding money to prevent a threatened attack.
    o **Cryptojacking-** Hackers mine cryptocurrency using resources they do not own.
    o **Cyberespionage-** Hackers access government or company data.
    o Infringing copyright, illegal gambling etc.,

To know about cyber threats click here

What are the steps taken to prevent cyber-attack?

- **Indian Computer Emergency Team (CERT-In)** - CERT-In is the national nodal agency for responding to computer security incidents as and when they occur.

- **Indian Cyber Crime Coordination Centre (I4C) -** It is launched to deal with all types of cybercrime in the country, in a coordinated and comprehensive manner.

  - National Cyber Forensic Laboratory
  - National Cyber Crime Reporting Portal
  - Citizen Financial Cyber Fraud Reporting and Management System

- **National Cyber Forensic Laboratory (Investigation) -** It has been established at _**New Delhi**_ to provide early stage cyber forensic assistance to Investigating Officers.

- **National Cyber Crime Reporting Portal-** It has been launched to enable public to report incidents pertaining to all types of cybercrimes, with special focus on cybercrimes against _women_ and _children_.

- **Citizen Financial Cyber Fraud Reporting and Management System-** It has been launched for immediate reporting of financial frauds and to stop siphoning off funds by the fraudsters.

- **National Cyber Forensic Laboratory (Evidence)** - It has been set up at _**Hyderabad**_ to provide the necessary forensic support in cases of evidence related to cybercrime, preserving the evidence and its analysis in line with the provisions of Information Technology Act and Evidence Act.

- **National Cyber Security Coordinator** - It is under the National Security Council Secretariat, coordinates with different agencies at the national level on cybersecurity issues.

- **The National Critical Information Infrastructure Protection Centre** - It has been set up for the protection of national critical information infrastructure.

- **Cyber Swachhta Kendra** - It is a _Botnet Cleaning and Malware Analysis Centre_ that has been launched for detection of malicious software programmes and to provide free tools to remove them.

- **National Cyber Coordination Centre** - It works on creating awareness about existing and potential threats.

- **Cyber Crisis Management Plan** - It has been formulated for countering cyber-attacks.

- **Centre for Financial Literacy Project-** It was launched by Reserve Bank of India in 2017 as a pilot project on financial literacy with an objective to adopt community led innovative and participatory approaches.

- **Massive Open Online Courses (MOOC) platform-** 'CyTrain' portal has been developed under I4C, for capacity building of police officers/judicial officers through online course on critical aspects of cyber crime investigation, forensics, prosecution etc., along with certification.

- **Awareness generation-** Dissemination of messages through SMS, I4C social media account.

  - Example- CyberDostI4C in Facebook, Radio campaign, Cyber Safety and Security Awareness weeks etc.,

- **Cyber Surakshit Bharat programme-** It is a public-private partnership to educate and enable the Chief Information Security Officers & broader IT community in Central/State Governments, Banks, PSUs and Government organizations to address the challenges of cyber security.

To know about cybersecurity click here

14.4 Modern Warfare

Why in news?

Recent Israel-Palestine conflict showed that even in today's digital age, militaries need to be prepared to fight analogue wars without relying on state-of-the-art technology.

What is the need for modern warfare?

- **Dynamic war nature**- To keep pace with the changing nature of war and the emergence of new technologies, such as hypersonic weapons, artificial intelligence, and space capabilities

- **Counter threats-** To counter the asymmetrical and unconventional threats from non-state actors, who use guerrilla tactics, cyberattacks, and weapons of mass destruction.

> _Modern warfare refers to the use of advanced technology and strategies to conduct war in the 20th and 21st centuries._

- **Efficiency**- To enhance the precision, speed, and efficiency of weapons and operations, reducing the collateral damage and human costs of war

- **Increase compliance**- To comply with the legal and ethical constraints on the use of force and the protection of human rights

To know emerging technologies in defence, click [here](#)

What are the limitations of modern warfare?

- **High cost-** It is expensive and requires a lot of resources to develop, maintain and operate.

- **Inaccuracy-** It is unreliable and may fail or malfunction in harsh or unpredictable environments.

- **Vulnerability**- It is dependent on external agencies such as satellites, networks, power grids, etc. that may be disrupted or hacked by adversaries.

- **Ethical constraints**- It may create ethical, legal and moral dilemmas for the users and decision-makers.

- **Disrupt human resource**- It may reduce the human skills, creativity and judgment that are essential for warfare.

- **Compromise training**- The focus of training syllabi shifts to operating these gadgets thus compromising both operator and maintainer training.

- **Unconventional threats**- Technology cannot always counter the low-tech or unconventional methods that use technologies to exploit the vulnerabilities of the conventional forces.

- **Constant upgradation**- It requires constant innovation and transformation of military organizations, doctrines and concepts to keep pace with the changing nature of war and the emergence of new technologies.

- **Unprepared for analogue war**- Militaries that rely too much on technology may lose the ability to fight without it.

What lies ahead?

- Militaries need to rethink their approach to warfare and balance the use of technology with simplicity, robustness, security and reliability.

- They must prepare for a range of options from sticks and stones to strategic deterrence.

- The armed forces should retain the ability to fight without depending on high-tech equipment.

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