



WE4U IAS COACHING
UPSC MONTHLY CURRENT AFFAIRS
JULY 2022

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1. INDIAN POLITY

1.1 Multi-Agency Maritime Security Group (MAMSG)

[News]:

First meeting of the Multi-Agency Maritime Security Group (MAMSG)

[Concept]:

- * India's National Security Adviser expressed the need of an hour to have a strong maritime system.
- * Major points of discussion included:
 - Mapping of existing orders and policies on maritime security to identify gaps,
 - Review of standard operating procedures for maritime contingencies,
 - Security of ports and coastal infrastructure,
 - Creation of a national maritime database,
 - Capacity building of coastal states and UTs.
- * Discussion on significance of maritime security:
 - The Indian Ocean, which has been an "ocean of peace", is now witness to rivalries and competitions.
 - In the changing geopolitical scenario, we see a potential of having a clash of interest, we need to protect it and be vigilant.

- The more we develop, the more assets we create, the more prosperous we get, greater would be the vulnerability and the need for security in the maritime domain.
- Security at the high seas and economic wellbeing is inextricably linked and all stakeholders must work unitedly.
- In national security discourse, the importance of land and maritime borders are very different.
- One cannot fence the maritime borders, and that disputes in seas are resolved through international norms and laws, while land disputes are bilateral in nature.
- * National Security Adviser also said that it is a major challenge to deny accessibility to foreign intelligence agencies looking to undertake espionage activities.
- * He referred to initiatives such as the Colombo security conclave for cooperation among the like-minded countries in the maritime domain and that it could be expanded further.

India.

- * 95% of Indian trade by volume is by ocean and routed via 12 major and over 200 non-major ports.
- * Over 90% of the hydrocarbon requirements are met through seaborne imports and offshore production.

- * With over three lakh fishing vessels, the marine fisheries sector is also a major contributor to the economy and livelihood of the fishing community.

1.2 Appointment of Judges

[News]:

Chief Justice of India again pointed out that the problem of pendency of cases is “intensifying” due to lack of sufficient number of judges.

[Concept]:

Procedures for Judicial Appointments

For CJI:

- * The President of India appoints the CJI and the other SC judges.
- * As far as the CJI is concerned, the outgoing CJI recommends his successor.
- * In practice, it has been strictly by seniority ever since the supersession controversy of the 1970s.

For SC Judges:

- * For other judges of the SC, the proposal is initiated by the CJI.
- * The CJI consults the rest of the Collegium members, as well as the senior-most judge of the court hailing from the High Court to which the recommended person belongs.

- * The consultees must record their opinions in writing and it should form part of the file.
- * The Collegium sends the recommendation to the Law Minister, who forwards it to the Prime Minister to advise the President.

For Chief Justice of High Courts:

- * The Chief Justice of the High Court is appointed as per the policy of having Chief Justices from outside the respective States.
- * The Collegium takes the call on the elevation.
- * High Court judges are recommended by a Collegium comprising the CJI and two senior-most judges.
- * The proposal, however, is initiated by the outgoing Chief Justice of the High Court concerned in consultation with two senior-most colleagues.
- * The recommendation is sent to the Chief Minister, who advises the Governor to send the proposal to the Union Law Minister.

1.3 Section 69A of IT Act, 2000

[News],

Twitter initiated legal action against some of the government ordering it to take down certain content posted on the micro blogging site.

[Concept],

Section 69A of IT Act, 2000



- * Section 69A of the Information Technology (IT) Act empowers the government to restrict access to any online content to protect the interest of;
 - Sovereignty and Integrity of the Nation.
 - Security of the State.
 - Friendly relations with foreign states.
 - Public order.
- * All orders to restrict information or content must be recorded in writing.
- * Social media intermediaries failing to comply with the rules and regulations are liable to be monetarily penalized along with an imprisonment term which may extend up to 7 years.
- * The procedures for executing the provisions of the act are mentioned in the Information Technology (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009.

Concern

- * The Confidentiality Clause under the act is preventing legal challenges to content blocking orders; it is difficult to understand the Governments reasoning.
- * It doesn't come under the purview of Right to Information (RTI), recently the Bharat Sanchar Nigam Limited (BSNL) rejected many RTI requests that asked for the list of blocked websites.
- * The lack of transparency, Clear guidelines and a monitoring mechanism under the act means that there are various forms of arbitrary behaviour involved.
- * The concerns are raised mainly when the orders are aimed at blocking individual accounts and not the specific content.

1.4 Zonal Council

[News],

Northern Zonal Council was held recently.

[Concept],

Zonal Councils



- * Zonal Councils are the statutory (and not the constitutional) bodies.
- * They are established by an Act of the Parliament, that is, States Reorganisation Act of 1956.
- * The act divided the country into five zones- Northern, Central, Eastern, Western and Southern and provided a zonal council for each zone.
- * While forming these zones, several factors have been taken into account which include:
 - * The natural divisions of the country.
 - * The river systems and means of communication.
 - * The cultural and linguistic affinity.
 - * The requirements of economic development, security and law and order.
- * In addition to the above mentioned Zonal Councils, a North-Eastern Council was created by a separate Act of Parliament, the North-Eastern Council Act of 1971.
- * Its members include Assam, Manipur, Mizoram, Arunachal Pradesh, Nagaland, Meghalaya, Tripura and Sikkim.

- * These are advisory bodies that make recommendations with regard to any matter of common interest in the field of economic and social planning between the Centre and States border disputes, linguistic minorities, inter-State transport or matters connected with the reorganisation of States.

Organizational Structure.

- * **Chairman.** The Union Home Minister is the Chairman of each of these Councils.
- * **Vice Chairman.** The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.
- * **Members.** Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.
- * **Advisers.** One person nominated by the Planning Commission (now NITI Aayog) for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in the Zone.

Objectives.

- * Bringing out national integration.
- * Arresting the growth of acute State consciousness, regionalism, linguism and particularistic tendencies.

- * Enabling the Centre and the States to co-operate and exchange ideas and experiences.
- * Establishing a climate of co-operation amongst the States for successful and speedy execution of development projects.

Functions of the Councils:

- * Any matter of common interest in the field of economic and social planning,
- * Any matter concerning border disputes, linguistic minorities or inter-State transport,
- * Any matter connected with or arising out of, the reorganization of the States under the States Reorganisation Act.

1.5 Article 72

[News]:

Article 72 In News: The Supreme Court held that Centre was bound to advise the President of India for the exercise of his powers under Article 72 of the Constitution and to release the appellant (Abu Salem).

[Concept]:

Pardoning Power of the President

Under Article 72 of the Constitution, the President shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or

commute the sentence of any person convicted of any offence where the sentence is a sentence of death.

Limitation.

- * The President cannot exercise his power of pardon independent of the government.
- * In several cases, the Supreme Court has ruled that the President has to act on the advice of the Council of Ministers while deciding mercy pleas.

Key Terms

- * **Pardon.** It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.
- * **Commutation.** It denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.
- * **Remission.** It implies reducing the period of sentence without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.
- * **Respite.** It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.

- * **Reprieve.** It implies a stay of the execution of a sentence (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

1.6 Election of Vice President

[News].

Both the ruling party and opposition party have selected their Vice Presidential election candidate.

[Concept].

Office of the Vice President.



- * Article 63: It states that “there shall be a Vice-President of India”.
- * Article 64: The Vice-President “shall be ex officio Chairman of the Council of the States” (Rajya Sabha).
- * Article 65: It says that “in the event of the occurrence of any vacancy in the office of the President by reason of his death, resignation or removal, or

otherwise, the Vice-President shall act as President until the date on which a new President...enters upon his office”.

- * The Vice-President shall also discharge the functions of the President when the latter is unable to do so “owing to absence, illness or any other cause.

Election of Vice-President.

- * Article 324 of the Constitution read with the Presidential and Vice-Presidential Elections Act, 1952 and the Presidential and Vice-Presidential Elections Rules, 1974, vests the superintendence, direction and control of the conduct of election to the office of the Vice-President of India in the Election Commission of India.
- * The notification for election shall be issued on or after the sixtieth day before the expiration of term of office of the outgoing Vice-President.
- * As per Article 66 of the Constitution of India, the Vice-President is elected by the members of the Electoral College.

Electoral College consists of:

- * Elected members of Rajya Sabha.
- * Nominated members of Rajya Sabha.
- * Elected members of Lok Sabha.
- * Since, all the electors are members of both Houses of Parliament, the value of the vote of each Member of Parliament would be the same i.e.1 (one).

- * The Election Commission, in consultation with the Central Government, appoints the Secretary General of Lok Sabha and Rajya Sabha, by rotation, as the Returning Officer.

1.7 Citizenship

[News]:

In 2021, over 1.6 lakh Indians renounced citizenship.

[Concept]:

Citizenship

- * Citizens are full members of the Indian State and owe allegiance to it. They enjoy all civil and political rights.

Constitutional Provisions

- * Citizenship is listed in the Union List under the Constitution and thus is under the exclusive jurisdiction of Parliament.
- * The Constitution does not define the term 'citizen' but details of various categories of persons who are entitled to citizenship are given in Part 2 (Articles 5 to 11).
- * Unlike other provisions of the Constitution, which came into being on January 26, 1950, these articles were enforced on November 26, 1949 itself, when the Constitution was adopted.

- * **Article 5:** It provided for citizenship on commencement of the Constitution.
- * **Article 6:** It provided rights of citizenship of certain persons who have migrated to India from Pakistan.
- * **Article 7:** Provided Rights of citizenship of certain migrants to Pakistan.
- * **Article 8:** Provided Rights of citizenship of certain persons of Indian origin residing outside India.
- * **Article 9:** Provided that if any person voluntarily acquired the citizenship of a foreign State will no longer be a citizen of India.
- * **Article 10:** It says that every person who is or is deemed to be a citizen of India under any of the foregoing provisions of this Part shall, subject to the provisions of any law that may be made by Parliament, continue to be such citizen.
- * **Article 11:** It empowers Parliament to make any provision with respect to the acquisition and termination of citizenship and all matters relating to it.

Citizenship Act and Amendments:

- * The Citizenship Act, 1955 provides for the acquisition and termination of Indian citizenship.

Acquisition and Determination of Indian Citizenship

- * There are four ways in which Indian citizenship can be acquired: birth, descent, registration and naturalization. The provisions are listed under the Citizenship Act, 1955.

Termination

- * According to the Act, citizenship can be revoked in three ways: Renunciation. Any Indian citizen who is also a national of another country who renounces his Indian citizenship in the prescribed manner through a declaration ceases to be an Indian citizen.
- * When a male person loses his Indian citizenship, all of his minor children lose their Indian citizenship as well.
- * However, such a child may become an Indian citizen within one year of reaching full age by making a declaration of his intention to reclaim Indian citizenship.
- * **Termination.** An Indian citizen's citizenship can be revoked if he or she knowingly or voluntarily adopts the citizenship of another country.
- * **Deprivation.** In some cases, the Indian government may deprive a person of his citizenship. However, this does not apply to all citizens.
- * The act has been amended four times — in 1986, 2003, 2005, and 2015.

1.8 Suspension of Member of Parliament

[News],

19 opposition members were suspended from Rajya Sabha for a week

[Concept],

What are the Rules under which the Presiding Officer acts

- * Rule Number 373 of the Rules of Procedure and Conduct of Business says:
- * The Speaker, if he is of the opinion that the conduct of any Member is grossly disorderly, may direct such Member to withdraw immediately from the House, and any Member so ordered to withdraw shall do so forthwith and shall remain absent during the remainder of the day's sitting.

To deal with more recalcitrant Members, the Speaker takes recourse to Rules 374 and 374A.

Rule 374 says:

- * The Speaker may, if deems it necessary, name a Member who disregards the authority of the Chair or abuses the rules of the House by persistently and willfully obstructing the business thereof.
- * If a Member is so named by the Speaker, the Speaker shall, on a motion being made forthwith put the question that the Member be suspended from the service of the House for a period not exceeding the remainder of the session. Provided that the House may, at any time, on a motion being made, resolve that such suspension be terminated.

Rule 374A:

- * disorder occasioned by a Member coming into the well of the House or abusing the Rules of the House persistently and willfully obstructing its business by shouting slogans or otherwise, such Member shall, on being

named by the Speaker, stand automatically suspended from the service of the House for five consecutive sittings or the remainder of the session, whichever is less.

What happens in Rajya Sabha?

- * Like the Speaker in Lok Sabha, Chairman of Rajya Sabha is empowered under Rule Number 255 of its Rule Book to direct any Member whose conduct is in his opinion grossly disorderly to withdraw immediately from the House.
- * Under Rule 256, the Chairman may name a Member who disregards the authority of the Chair or abuses the rules of the Council by persistently and willfully obstructing business.
- * In such a situation, the House may adopt a motion suspending the Member from the service of House for a period not exceeding remainder of the session.
- * The House may, by another motion, terminate the suspension.

What is the procedure for revocation of a Member's suspension?

- * While the Speaker is empowered to place a Member under suspension, the authority for revocation of this order is not vested in her.
- * It is for the House to resolve on a motion to revoke the suspension.

In Rajya Sabha

- * The House by motion terminates the suspension.

2. INDIAN ECONOMY

2.1 Net nonperforming assets (NNPA) ratio

[News]:

The asset quality of the banking system has improved with gross nonperforming assets (GNPA) ratio declining from 7.4 per cent in March 2021 to a six-year low of 5.9 per cent in March 2022.

[Concept]:



Non-Performing Asset (NPA)

- * NPAs are loans or advances made by a financial institution, on which both principal or interest is unpaid for a specified period of time.
- * Thus, NPAs are those loans that have ceased to generate income for the bank.

Types of NPA

Sub Standard: A sub-standard asset is one that is classified as an NPA for a period not exceeding twelve months.

Doubtful. A doubtful asset is one that has remained as an NPA for a period exceeding twelve months.

Loss: A loss asset is one where loss has already been identified by the bank or an external institution, but it is not yet completely written off, due to its recovery value, however little it may be.

- * The Net NPA ratio simply means the present NPAs of the bank over the number of loans provided. Mathematically it can be understood as:
- * Net NPA Ratio = $\frac{\text{Net NPA}}{\text{Total Loans Given}}$

2.2 Foreign Portfolio Investors

[News],

Foreign Portfolio Investors (FPIs) have been on a selling spree in India.

[Concept],

Foreign Portfolio Investors

- * Foreign portfolio investors are those that invest funds in markets outside of their home turf.
- * Examples of FPIs include stocks, bonds, mutual funds, exchange traded funds, American Depositary Receipts (ADRs), and Global Depositary Receipts (GDRs).

- * FPI is part of a country's capital account and is shown on its Balance of Payments (BOP).
- * The BOP measures the amount of money flowing from one country to other countries over one monetary year.
- * They are generally not active shareholders and do not exert any control over the companies whose shares they hold.
- * The Securities and Exchange Board of India (SEBI) brought new FPI Regulations, 2019, replacing the erstwhile FPI Regulations of 2014.
- * FPI is often referred to as "hot money" because of its tendency to flee at the first signs of trouble in an economy. FPI is more liquid, volatile and therefore riskier than FDI.

2.3 Build-Operate Transfer (BOT) model

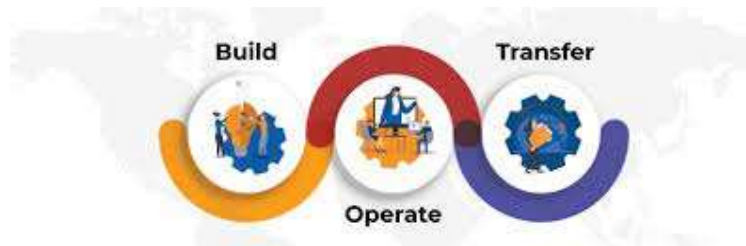
[News]:

After funding highway projects through public money for a better part of the last decade the National Highways Authority of India (NHAI) is set to return to funding through private investments using the build-operate-transfer (BOT) model.

[Concept]:

Build-Operate Transfer (BOT) model

About:



- * Under the BOT model, a private player is granted a concession to finance, build and operate a project for a specified period of time (20 or 30 year concession period), with the developer recouping the investments by way of user charges or tolls charged from customers using the facility, and thereby taking on a certain amount of financial risk.
- * It is a conventional Public-Private Partnership model in which a private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector.
- * Private sector partner has to bring the finance for the project and take the responsibility to construct and maintain it.
- * The government has decided to assess the revenue potential of a project every five years during the concession period as against every 10 years earlier.
- * This would mean that the concession period (or period till which road developers can collect toll) is extended early in the tenure of the contract, ensuring surety of revenue for the private company.

Working Process:

Build:

- * A private company (or consortium) agrees with a government to invest in a public infrastructure project. The company then secures their own financing to construct the project.

Operate:

- * The private developer then operates, maintains, and manages the facility for an agreed concession period and recoups their investment through charges or tolls.

Transfer:

- * After the concessionary period the company transfers ownership and operation of the facility to the government or relevant state authority.

What are the Advantages & Challenges in BoT Model?

Advantages:

- * The Government gets the benefit of the private sector to mobilize finance and to use the best management skills in the construction, operation and maintenance of the project.
- * The private participation also ensures efficiency and quality by using the best equipment.
- * BOT provides a mechanism and incentives for enterprises to improve efficiency through performance-based contracts and output-oriented targets.

- * The projects are conducted in a fully competitive bidding situation and are thus completed at the lowest possible cost.
- * The risks of the project are shared by the private sector.

Challenges:

- * There is a profit element in the equity portion of the financing, which is higher than the debt cost. This is the price paid for passing the risk to the private sector.
- * It may take a long time and considerable up front expenses to prepare and close a BOT financing deal as it involves multiple entities and requires a relatively complicated legal and institutional framework. There the BOT may not be suitable for small projects.
- * It may take time to develop the necessary institutional capacity to ensure that the full benefits of BOT are realized, such as development and enforcement of transparent and fair bidding and evaluation procedures and the resolution of potential disputes during implementation.

2.4 Yield inversion, soft-landing and reverse currency wars

[News]:

The three economic terms have gained focus in recent times.

[Concept]:

Bond yield curve inversion.

- * A yield curve illustrates the interest rates on bonds of increasing maturities.
- * An inverted yield curve occurs when short-term debt instruments carry higher yields than long-term instruments of the same credit risk profile.
- * Inverted yield curves are unusual since longer-term debt should carry greater risk and higher interest rates, so when they occur there are implications for consumers and investors alike.
- * An inverted yield curve is one of the most reliable leading indicators of an impending recession.

Soft Landing

- * It is a cyclical slowdown in economic growth that avoids recession.
- * A soft landing is the goal of a central bank when it seeks to raise interest rates just enough to stop an economy from overheating and experiencing high inflation, without causing a severe downturn.
- * Soft landing may also refer to a gradual, relatively painless slowdown in a particular industry or economic sector.
- * When actions of central bank bring about a recession, it is called hard-landing.

Reverse Currency War

- * A flip side of the US Fed's action of aggressively raising interest rates is that more and more investors are rushing to invest money in the US.

- * This has made the dollar become stronger than all the other currencies.
- * Every central bank is trying to figure out ways to counter the US Fed and raise interest rates themselves in order to ensure their currency doesn't lose too much value against the dollar.
- * That's because a currency which is losing value to the dollar, on the other hand, finds that it is getting costlier to import crude oil and other commodities that are often traded in dollars.

2.5 Central Bank Digital Currency (CBDC)

[News].

The Reserve Bank of India (RBI) is in process of implementing the Central Bank Digital Currency (CBDC) in a phased manner for wholesale and retail segments.

[Concept].

Central Bank Digital Currency (CBDC)



- * CBDC is a digital form of Fiat Currency which can be transacted using wallets backed by blockchain and is regulated by the central bank. It is a legal tender issued by a central bank in a digital form.
- * Fiat money is a government-issued currency that is not backed by a commodity such as gold. Fiat money gives central banks greater control over the economy because they can control how much money is printed.
- * Though the concept of CBDCs was directly inspired by bitcoin, it is different from decentralised virtual currencies and crypto assets, which are not issued by the state and lack the 'legal tender' status.

2.6 India's First International Bullion Exchange (IIBE)

[News]:

Prime Minister of India launched the India International Bullion Exchange (IIBX), India's first International Bullion Exchange, and NSE IFSC-SGX Connect.

[Concept]:

India International Bullion Exchange (IIBX)

- * It is a platform that not only enrolls jewellers to trade on the exchange, but has also set up necessary infrastructure to store physical gold and silver.
- * It facilitates efficient price discovery with assurance of responsible sourcing and quality, apart from giving impetus to financialisation of gold in India.

- * IFSCA is entrusted with notifying the eligible qualified jewellers in India for directly importing gold through IIBX.



3.INTERNATIONAL RELATIONS

3.1 Lancang–Mekong Cooperation

[News]:

Myanmar’s military government hosted the first high–level regional meeting since the Army took power last year.

[Concept]:

Lancang–Mekong Cooperation



- * The LMC consists of six countries: China, Cambodia, Myanmar, Laos, Thailand, and Vietnam.
- * Multilateral format: Lancang–Mekong Cooperation is a multilateral format established in 2016 for cooperation between the riparian states of the Lancang River and Mekong River.
- * The Lancang River originates on the Qinghai–Tibet Plateau in southwestern China. It is called the Mekong River as it flows through the other five countries before emptying into the sea.

- * **Purpose:** The central purpose of the format is for China to manage water flow from its hydropower dams with the other riparian states.
- * As a platform for discussion and sharing ideas, it aims to push forward pragmatic projects to benefit the six countries.
- * China has built seven mega dams on the Lancang–Mekong and according to the US–based NGO International Rivers, 20 are under construction or planned in Yunnan, Tibet and Qinghai.
- * **LMC Special Fund:** A fund was created in 2016 to aid in small and medium–sized projects by the Lancang–Mekong countries.

3.2 I2U2

[News]:

Prime Minister of India participated in first–ever I2U2 Virtual Summit along with the heads of the other members of the grouping.

[Concept]:

I2U2

- * I2U2 was initially formed in October, 2021 following the Abraham Accords between Israel and the UAE, to deal with issues concerning maritime security, infrastructure and transport in the region.

- * At that time, it was called the ‘International Forum for Economic Cooperation’.
- * That was referred as the ‘West Asian Quad’.
- * I2U2 initiative is a new grouping of India, Israel, USA and UAE.
- * In the grouping’s name, ‘I2’ stands for India and Israel, whereas ‘U2’ stands for USA and the UAE.
- * This is a great achievement which tells the geopolitical changes that happen in the region.
- * This will not only revitalize and re-energize the system of alliances and partnerships around the world, but also stitch together partnerships that did not exist previously or were not utilized to their full extent.

4. HISTORY AND ART & CULTURE

4.1 Sannati

[News],

Hardly paid attention to for two decades, Archaeological Survey of India has now taken up conservation work at this important Buddhist site near Kalaburagi.

[Concept],

Sannati



- * The ancient Buddhist site on bank of Bhima river near Kanaganahalli (forming part of Sannati site) in Kalaburagi district, has finally got some attention.
- * The conservation project taken up now envisages the resetting of the remains of Maha Stupa retrieved in the excavation
- * The stupa was built with locally available limestone

About the place

- * Sannati and Kanaganahalli were small and ordinary villages on the bank of Bhima till 1986 when the Kali temple at the Chandralamba temple complex in Sannati collapsed.
- * In the process of clearing the debris, they discovered an Ashokan edict which put the villages on the world map and opened new avenues of historical research on Mauryan Emperor Ashoka and Buddhism in its early years.
- * It prompted the ASI excavations at Sannati and nearby Kanaganahalli and attracted historians across India and beyond.

Kanaganahalli excavation

- * An 'abandoned well' turned out to be the magnificent Maha Stupa, which was referred to as Adholoka Maha Chaitya in the inscriptions.
- * More significantly, the stone-portrait of Emperor Ashoka, surrounded by his queens and female attendants was also found
- * While the Stupa is believed to be one of the largest of its time, the stone-portrait is considered to be the only surviving image of the Mauryan Emperor which had the inscription 'Raya Asoko' in Brahmi on it.
- * The Maha Stupa is believed to have been developed in three constructional phases – Maurya, Early Satavahana and Later Satavahana periods stretching from 3rd Century B.C. to 3rd Century A.D. The Stupa is believed to have been destroyed in an earthquake.

4.2 Alluri Sitarama Raju

[News].

Prime Minister to launch year-long celebrations to remember contributions of Alluri Sitarama Raju.

[Concept].

Alluri Sitarama Raju



- * Alluri Sitarama Raju (1897 – 1924) was an Indian revolutionary who waged an armed campaign against British colonial rule in India. He was nicknamed “Manyam Veerudu” (Hero of the Jungle) by local villagers for his heroic exploits.

Activities.

- * Born in present-day Andhra Pradesh, he became involved in anti-British activities in response to the 1882 Madras Forest Act

- * The act restricted the free movement of Adivasis (tribal communities) in their forest habitats and prevented them from practising a traditional form of agriculture known as podu (shifting cultivation).
- * Initially, Sitarama Raju, under the influence of Gandhi's Non-cooperation movement, inspired the tribals to seek justice in the local panchayat courts and boycott the colonial courts.
- * Led the Rampa Rebellion/Manyam Rebellion of 1922.
- * Death: In 1924, Raju was taken into police custody, tied to a tree, and shot by public execution, effectively ending the armed rebellion.

5. GEOGRAPHY

5.1 Derecho

[News]:

Some states of USA were hit by a storm system called a derecho. As the storm hit, it turned the skies green.

[Concept]:

Derecho

- * Derecho is “a widespread, long-lived, straight-line windstorm” that is associated with a “band of rapidly moving showers or thunderstorms”.
- * The name comes from the Spanish word ‘la derecha’ which means ‘straight’.
- * It is a warm-weather phenomenon that generally occurs in June and July.
- * They are a rare occurrence as compared to other storm systems like tornadoes or hurricanes.

Types:

Progressive:

- * A progressive derecho is associated with a short line of thunderstorms that may travel for hundreds of miles along a relatively narrow path.
- * It is a summer phenomenon.

Serial:

- * A serial derecho, on the other hand, has an extensive squall line – wide and long – sweeping across a large area.
- * It usually occurs during spring or fall.

Hybrid:

- * Hybrid ones have the features of both progressive and serial derechos.

5.2 Cloudbursts

[News]:

Highly-localised rains in Amarnath, J&K, caused flooding and loss of lives.

[Concept]:

Cloudbursts

- * A cloudburst is a localized but intense rainfall activity. It has a very specific definition: Rainfall of 10 cm or more in an hour over a roughly 10 km x 10 km area is classified as a cloudburst event. By this definition, 5 cm of rainfall in a half-hour period over the same area can also be categorized as a cloudburst. From this, it is clear that cloudbursts are different from rainfall.
- * Atmospheric changes during the occurrence of a cloudburst
- * Cloudbursts happen when drenched clouds are not able to cause rain because of the rising movement of the extremely hot current of air. Rather

than falling down, raindrops get larger in dimension and are forced up because of the air current.

- * The relative humidity and cloud cover is at the maximum level with low temperature and slow winds because of which a huge mass of clouds may get condensed at a very rapid rate and result in a cloudburst.
- * As temperatures increase, the atmosphere can hold more and more moisture. This moisture comes down as a short, very intense rainfall, probably in half an hour or one hour.

Consequences of a heavy downpour

- * It can result in flash floods in mountainous areas and urban floods in the cities.
- * Can lead to mudflows, landslides and land caving.
- * Loss of lives of humans and animals.
- * Loss of buildings and property damage.
- * Loss of forests and wild flora and fauna.

Can we forecast sudden rains?

- * The India Meteorological Department (IMD) forecasts rainfall events well in advance, but it does not predict the quantum of rainfall. The forecasts can be about light, heavy, or very heavy rainfall. But weather scientists do not have the capability to predict exactly how much rain is likely to fall at any given place.

5.3 Paracel Islands

[News]:

Recently, A U.S. destroyer sailed near the disputed Paracel Islands in the South China Sea, drawing an angry reaction from Beijing.

[Concept]:

Paracel Islands



- * The Paracel Islands, also known as the Xisha Islands are a disputed archipelago in the South China Sea.
- * The archipelago includes about 130 small coral islands and reefs, most grouped into the northeast Amphitrite Group or the western Crescent Group.
- * The archipelago includes Dragon Hole, the deepest underwater sinkhole in the world.
- * It is surrounded by productive fishing grounds and a seabed with potential, but as yet unexplored, oil and gas reserves.

6. ENVIRONMENT

6.1 ESZ Case: Gadgil's WGEEP report back in the spotlight

[News]:

As Kerala debates the Supreme Court order for maintaining at least a kilometer of Eco-Sensitive Zone for protected areas, the WGEEP report, popularly known as the Gadgil report, once again springs back to public discourse.

[Concept]:

Eco-Sensitive Areas

- * Eco-Sensitive Areas (ESAs) are located within 10 kms around Protected Areas, National Parks and Wildlife Sanctuaries.
- * ESAs are notified by the Ministry of Environment, Forest and Climate Change (MoEFCC) under Environment Protection Act 1986.
- * The basic aim is to regulate certain activities around National Parks and Wildlife Sanctuaries so as to minimise the negative impacts of such activities on the fragile ecosystem encompassing the protected areas.

Western Ghats Ecology Expert Panel

- * A committee headed by ecologist Madhav Gadgil also known as the Western Ghats Ecology Expert Panel (WGEEP) in 2011 recommended that all of the Western Ghats be declared as the Ecological Sensitive Areas (ESA) with only limited development allowed in graded zones.

- * The panel had classified the Western Ghats into Ecologically Sensitive Areas (ESA) 1, 2 and 3 of which ESA-1 is high priority, almost all developmental activities (mining, thermal power plants etc) were restricted in it.
- * It specified that the system of governance of the environment should be a bottom to top approach (right from Gram sabhas) rather than a top to bottom approach.
- * It also recommended the constitution of a Western Ghats Ecology Authority (WGEA), as a statutory authority under the Ministry of Environment and Forests, with the powers under Section 3 of the Environment (Protection) Act, 1986.
- * The report was criticized for being more environment-friendly and not in tune with the ground realities.

Kasturirangan Committee

- * The Kasturirangan Commission sought to balance the development and environment protection in contrast to the system proposed by the Gadgil report. The committee's major recommendations were:
- * Instead of the total area of Western Ghats, only 37% of the total area to be brought under ESA.
- * Complete ban on mining, quarrying and sand mining in ESA.
- * No thermal power projects to be allowed and hydropower projects be allowed only after detailed study.

- * Red industries i.e. which are highly polluting to be strictly banned.
- * The report recommended exclusion of inhabited regions and plantations from the purview of ESAs making it a pro farmer approach.

6.2 Environment Protection Act (EPA)

[News].

The Environment Ministry proposes to soften the provisions of punishment for the violations of Environment Protection Act (EPA)

[Concept].

Environment Protection Act, 1986

- * The EPA came into force on November 19, 1986.
- * The Act establishes the framework for studying, planning, and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment.
- * Objective: Providing for the protection and improvement of the environment.

Constitutional Provisions.

- * The EPA Act was enacted under Article 253 of the Indian Constitution which provides for the enactment of legislation for giving effect to international agreements.

- * Article 48A of the Constitution specifies that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
- * Article 51A further provides that every citizen shall protect the environment.

It authorises the central government.

- * To protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on environmental grounds.
- * To establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.
- * Last Amendment: The Act was last amended in 1991.
- * The Environment (Protection) Rules lay down procedures for setting standards of emission or discharge of environmental pollutants.

6.3 Banni grasslands

[News]:

Gujarat plans on restoring at least 76,000 hectares of this 2,497 sq km grassland which is a high-biodiversity area.

[Concept]:

Banni grasslands of Gujarat



- * The grasslands of Gujarat constitute about 4.33 per cent (8,490 sq km) of the total geographical area, distributed in eight districts and three different climatic regions — Kutch, Saurashtra and central Gujarat.
- * A majority of grasslands in Gujarat (41 per cent) are found in Kutch.
- * Banni grassland was declared a Protected Forest in 1955, under the Indian Forest Act, 1927.
- * Besides having 40 species of grass and 99 species of flowering plants, Banni is also home to Indian wolf, jackal, Indian fox, desert fox, desert cat, caracal, hyena, chinkara, Nilgai, wild boar, Indian hare and common monitor lizard. Banni also has 273 bird species and in years of good rainfall, is home to thousands of migratory birds.

Threats

- * The landscape of Banni has shown drastic changes with the deterioration of the grassland taking place due to heavy uncontrolled grazing, widespread

ingress of *Prosopis Juliflora* (a harmful exotic tree species), dams constructed on rivers flowing towards Banni, periodic occurrence of droughts and continuous increase in soil salinity

6.4 Forest (Conservation) Rules, 2022

[News].

Recently, the Ministry of Environment, Forest and Climate Change (MoEFCC) has issued the Forest (Conservation) Rules, 2022.

[Concept].

Forest Conservation Act, 1980

- * Enacted to check the indiscriminate deforestation of forest lands. It was amended in 1988 with prescribing the punishment for violations.
- * Some Salient Features includes –
- * Working plans should be up-to-date and should stress on conservation of forests.
- * Preliminary plans should have a multi-dimensional approach.
- * Tribal rights and concessions should be highlighted with control mechanisms.
- * Grazing should be studied and specific prescriptions should cover fodder propagation.

- * Clear felling with artificial regeneration should be avoided as far as possible and clear-felling blocks should not exceed 10 hectares in hills and 25 hectares area in plains. Banning all felling above 1000 m altitude for a few years to allow recovery of these areas.

What are the Provisions of Forest (Conservation) Rules, 2022?

Formation of Committees.

- * It constituted an Advisory Committee, a regional empowered committee at each of the integrated regional offices and a screening committee at State/Union Territory (UT) government-level.

Advisory Committee.

- * The role of the Advisory Committee is restricted to advise or recommend with regards to grant of approval under relevant sections in respect of proposals referred to it and any matter connected with the conservation of forests referred to it by the Central government.

Project Screening Committee.

- * The MoEFCC has directed the constitution of a project screening committee in each state/UT for an initial review of proposals involving diversion of forest land.
- * The five-member committee will meet at least twice every month and will advise the state governments on projects in a time bound manner.

- * All non-mining projects between 5-40 hectares must be reviewed within a period of 60 days and all such mining projects must be reviewed within 75 days.
- * For projects involving a larger area, the committee gets some more time — 120 days for non-mining projects involving more than 100 hectares and 150 days for mining projects.

Regional Empowered Committees.

- * All linear projects (roads, highways, etc), projects involving forest land up to 40 hectares and those that have projected a use of forest land having a canopy density up to 0.7 — irrespective of their extent for the purpose of survey — shall be examined in the Integrated Regional Office.

Compensatory Afforestation.

- * The applicants for diverting forest land in a hilly or mountainous state with green cover covering more than two-thirds of its geographical area, or in a state/UT with forest cover covering more than one-third of its geographical area, will be able to take up compensatory afforestation in other states/UTs where the cover is less than 20%.

6.5 India Designates 5 New Ramsar Sites

[News].

India has added five more Ramsar sites, or wetlands that are of international importance, bringing the number of such sites to 54. These are the Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest and Pichavaram Mangrove in Tamil Nadu, the Sakhya Sagar in Madhya Pradesh and Pala Wetland in Mizoram.

[Concept],

1. The Karikili Bird Sanctuary

- * Karikili Bird Sanctuary is a 61.21-hectare protected area located in the Kancheepuram District of Tamil Nadu.
- * The sanctuary is about 75 km from Chennai, south of Chengalpattu.
- * It comprises two rain-fed non-perennial irrigation tanks spreading over an area of more than 58 hectares.
- * The Site is flat or gently undulating and lies near low ridged, rocky hillocks.
- * The vegetation is mainly composed of *Barringtonia acutangula* and *Acacia nilotica* trees, raised as plantations by the Forest Department. Surrounding vegetation is composed of scrub and thorn.
- * The Site provides habitat for a variety of resident and migratory birds, most of them waterbirds, as well as a few species of scavengers. The near-threatened oriental darter (*Anhinga melanogaster*) and spot-billed pelican (*Pelecanus philippensis*) breed here.

- * The Karikili Bird Sanctuary has a history of people cooperating in protecting waterbirds, as their guano enables the supply of nutrient-enriched water to crop fields.
- * The Site was declared a Birds Sanctuary in 1972 and a management plan is currently being implemented to safeguard the biodiversity of the Site as well as the ecosystem services provided to the local communities.

2.Pallikaranai Marsh Reserve Forest.

- * Pallikaranai wetland is a freshwater marsh located in Chennai, Tamil Nadu.
- * It is the only surviving wetland ecosystem of the city and among the few and last remaining natural wetlands of South India.

3.Pichavaram Mangrove.

- * Pichavaram mangrove is located in a village near Chidambaram in Cuddalore District of Tamil Nadu.
- * The mangrove is one of the largest mangrove forests in India, covering 1100 hectares.

4.Pala wetland.

- * The Pala wetland is the largest natural wetland in Mizoram.
- * The renowned landmark is surrounded by green woodlands and home to rich diversity of animal species including a range of animals and birds.

5.Sakhya Sagar.

- * Sakhya Sagar Lake is an integral part of the beautiful ecology of the Madhav National Park in Shivpuri, Madhya Pradesh.



7.SOCIAL ISSUES

7.1 Mission Vatsalya Scheme

[News]:

Ministry of Women and Child Development issues Guidelines for Mission Vatsalya Scheme

[Concept]:

- * Mission Vatsalya is one of the new triad of schemes along with Mission Shakti, and Poshan 2.0, that aims at securing a healthy and happy childhood for every child.
- * It focuses on Child Protection Services and child welfare services.
- * It is essentially a renamed version of the pre-existing scheme called Child Protection Services.

Objectives of the Mission:

- * To secure a healthy and happy childhood for every child in India.
- * To foster a sensitive, supportive and synchronized ecosystem for the development of children.
- * To assist States/UTs in delivering the mandate of the Juvenile Justice Act 2015.
- * To achieve the SDG goals.

Components:

- * It will include statutory bodies; service delivery structures; institutional care/services; non-institutional community-based care; emergency outreach services (through Childline or the national helpline 1098 for children); training and capacity building.

Implementation.

- * Under the mission, the Government plans to partner with the private sector as well as volunteer groups for its scheme for the protection of vulnerable children such as those abandoned or missing.
- * For this, a Vatsalya portal will be developed that will allow volunteers to register so that State and District Authorities can engage them in executing various schemes.

7.2 Global Gender Gap Index

[News].

The Global Gender Gap Index for 2022 was released by the World Economic Forum.

[Concept].

Global Gender Gap Index

- * According to the WEF, it is the longest-standing index, which tracks progress towards closing gender gaps over time since its inception in 2006.
- * The Global Gender Gap Index benchmarks the current state and evolution of gender parity across four key dimensions:
 - * Economic Participation and Opportunity,
 - * Educational Attainment,
 - * Health and Survival, and
 - * Political Empowerment.
- * On each of the four sub-indices as well as on the overall index the GGG index provides scores between 0 and 1.
- * 1 shows full gender parity and 0 is complete imparity.
- * The cross-country comparisons aim to support the identification of the most effective policies to close gender gaps.

2022 Index highlights

- * The 2022 Global Gender Gap Index ranks India at 135 out of 146 countries.
- * In 2021, India was ranked 140 out of 156 countries.
- * Overall performance:
 - * India has approximately 662 million (or 66.2 crore) women.
 - * In 2022, India's overall score has improved from 0.625 (in 2021) to 0.629.

- * India's (135th) global gender gap score has oscillated between 0.593 and 0.683 since the index was first compiled. In 2022, India scored 0.629, which is its seventh-highest score in the last 16 years.



8. SCIENCE and TECHNOLOGY

8.1 ISRO's 'POEM' platform

[News]:

ISRO places 3 Singapore satellites, 6 experiments in orbit in second launch this year. The first one having placed an Indian Earth Observation Satellite in orbit.

[Concept]:

PSLV Orbital Experimental Module or 'POEM'



- * The PSLV Orbital Experimental Module is a platform that will help perform in-orbit experiments using the final, and otherwise discarded, stage of ISRO's Polar Satellite Launch Vehicle (PSLV).
- * PSLV: The PSLV is a four-stage rocket where the first three spent stages fall back into the ocean, and the final stage (PS4) — after launching the satellite into orbit — ends up as space junk.
- * However, in the PSLV-C53 mission, the spent final stage will be utilised as a “stabilised platform” to perform experiments.

- * Payloads: POEM is carrying six payloads, including two from Indian space start-ups Digantara (for making the map of space radiations, debris, and orbits) and Dhruva Space (for full-stack satellite development, launch, deployment, operation and maintenance services)
- * Significance: The inclusion of the two laid the ground for more public-private partnerships, to be facilitated by the Indian National Space Promotion and Authorization Center (IN-SPACe).
- * IN-SPACe is a nodal agency appointed by the Department of Space, which can authorize a non-government entity to use ISRO's infrastructure and resources, including ISRO's launch facilities.

Has ISRO repurposed and used PS4 rocket junk earlier?

- * The Indian space agency first demonstrated the capability of using PS4 as an orbital platform in 2019 with the PSLV-C44 mission

8.2 Dark Matter

[News]:

Dark matter detector experiment named LUX-ZEPLIN (LZ) in South Dakota in the U.S. was recently in news.

[Concept]:

Dark Matter

- * Dark matter is made up of particles that do not have a charge. They do not interact through electromagnetic interactions.
- * These are particles that are dark, namely because they do not emit light, which is an electromagnetic phenomenon, and matter because they possess mass like normal matter and hence interact through gravity.

Detecting dark matter:



- * It is difficult to measure the evidence of dark matter.
- * Gravitational force is extremely weak. A particle that interacts so weakly becomes rather elusive to detect.
- * This is because interactions from other known particles could drown out signals of dark matter particles.
- * The chamber of the LZ detector can contain only one gram of dust if it is to detect a dark matter particle.
- * This is the extent to which researchers have to go to rule out unwanted signals coming from other entities.

8.3 Fiberisation

[Concept],

What is Fiberisation?

- * The process of connecting radio towers with each other via optical fibre cables is called fiberisation.
- * It helps provide full utilisation of network capacity, and carry large amounts of data once 5G services are rolled out.
- * Aid in providing additional bandwidth and stronger backhaul support.
- * Fibre-based media, commonly called optical media, provides almost infinite
- * bandwidth and coverage, low latency and high insulation from interference.
- * With 5G, it will also be necessary to increase the density of mobile towers to
- * provide better coverage to consumers and businesses. This calls for increased
- * requirements for fibre deployment.

8.4 N-Treat technology

[Concept],

N-Treat technology

- * N-Treat is a seven-stage process for waste treatment that uses screens, gates, silt traps, curtains of coconut fibers for filtration, and disinfection using sodium hypochlorite.

- * According to the detailed project report for N-Treat, it is a natural and environment friendly way for sewage treatment.
- * It's set up takes place within the nullah channels that is through the in-situ or onsite method of treatment, and does not require additional space.

8.5 Indigenous Aircraft Carrier (IAC) Vikrant

[News].

Indian Navy has created maritime history by taking delivery of the prestigious Indigenous Aircraft Carrier (IAC) 'Vikrant'.

[Concept].

INS Vikrant



- * INS Vikrant (IAC-I) is the first aircraft carrier built in India and the first Vikrant-class aircraft carrier built by Cochin Shipyard (CSL) in Kochi, Kerala for the Indian Navy.
- * The motto of the ship is Jayema Sam Yudhi Sprdhah which is taken from Rig Veda and is translated as "I defeat those who fight against me".

- * It features a Short Take-Off But Arrested Recovery(STOBAR) configuration with a ski-jump.
- * Vikrant is powered by four General Electric LM2500+gas turbines on two shafts, generating over 80 megawatts (110,000 hp) of power. The gearboxes for the carriers were designed and supplied by Elecon Engineering.
- * For now the Navy has only one carrier, INS Vikramaditya , contracted from Russia under a \$2.3-billion deal and inducted into service in November 2013.

