DAILY
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By

Mentorship
India

Contents

Important News Articles

GS I

1. More defects and deviations tumble out in Vigilance probe into Kaleshwaram project - The Hindu

Relevance: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclones. etc., geographical features and their location-changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

Prelims Takeaway
• ISRO
• NRSC

News:
- Abdication of responsibility and callousness in execution of **work by contract agency Larsen & Toubro (L&T) l**ed to the extensive damage to the Medigadda Barrage of the Kaleshwaram project

Key Highlight
- The damage turned the mega structure into a failure in just four years time, an ongoing inquiry by the Vigilance and Enforcement Department into the fiasco was found.
- Irregularities and deviations from the prescribed norms are coming to light in the construction, periodic quality checks, inspection (supervision) and operational maintenance stages.
- It is understood that the investigating agency is taking the help of **the National Remote Sensing Agency (NRSA)**
  o to establish this fact by obtaining satellite imagery of the coffer dam area before, during and after the construction of the barrage.

The making of a monumental mess
A loud noise is heard at the barrage on the evening of October 21, 2023

A huge crack that developed at the radial gate hoisting area in Medigadda Barrage of the Kaleshwaram project.

- On-site engineers find out that multiple piers in Block 7 have been displaced

- Cracks on the structure, including at the radial gates hoisting area, come to light

- A team of National Dam Safety Authority (NDSA) inspects the damage at the barrage on October 24

- In its report on November 1, the NDSA faults design, construction and maintenance of the structure

- It suggests thorough sub-surface investigation to ascertain exact causes, and what remedial measures to take

- State govt. orders Vigilance & Enforcement inquiry into the issue on January 9

- V&E teams begin probe by conducting searches on Irrigation offices linked to the Kaleshwaram project at a dozen locations

- V&E probe ordered due to practical delays in constituting probe by a sitting judge of the High Court

National Remote Sensing Centre(NRSC)
- **NRSC is one of the primary centres of the Indian Space Research Organization** (ISRO), Department of Space (DOS).
- **NRSC has the mandate** for:
  o establishment of ground stations for receiving satellite data,
  o generation of data products
  o development of techniques for remote sensing applications, including disaster management support.
  o Geospatial services for good governance and
  o capacity building for professionals, faculty, and students.

2. Mesolithic rock paintings, Satavahana inscription discovered in Telangana's Pedapalli - The New Indian Express

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Mesolithic Period
• Vishnukundins Dynasty
• Microliths

News:
- Recently, a team from the Kotha Telangana Charitra Brundham (KTCB) has unearthed **rock paintings and inscriptions** in **Seethamma Loddi,** located in Gattu Singaram village, Peddapalli district.

Discoveries
- One inscription mentions **Satavahana prince Hakusiri,** while another is believed to belong to the **Vishnukundins dynasty.**
  o The Vishnukundins dynasty ruled parts of present-day Telangana and Andhra Pradesh.
- The paintings, found on a hillock deep inside a forest, are **predominantly red,** with some **white and yellow colours** used as well.
- It showcases scenes of men and women dancing, individuals with bows and arrows, footprints, and a variety of animals like deer, antelope, tortoise, jungle cat, monkeys, and wild lizards.
- **Intricate diamond-shaped designs** are also present.
- The rock paintings date back to the **Mesolithic period** (10,000 to 12,000 years ago) and the **Early Historic period** (1st BCE to 6th CE).

Archaeological Finds
- **Microliths**, including a core flake, were discovered at the site.
- A protected wall made of weathered black stone and a demolished stone structure from the Early Historic period were also observed.
- A **fossilized stone containing shells** suggests the site's age to be an astonishing 65 million years old.

3. Another 'atmospheric river' storm to hit California with potentially deadly floods - India Today

Relevance: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone. etc.

Prelims Takeaway
• Atmospheric Rivers
• Pineapple Express

News:
- A second, more potent **atmospheric river storm** is set to impact **Southern California,** bringing the risk of life-threatening floods and landslides.
- The upcoming storm follows heavy rains earlier in the week, both fueled by **atmospheric rivers** and **Pineapple Express phenomena.**

Atmospheric Rivers
- They are **long, concentrated regions** in the atmosphere that **transport moist air** from the tropics to higher latitudes.
  o They are responsible for 90% of the movement of moisture from the tropics toward the poles.
- They are the **largest transport mechanisms of freshwater** on Earth.

- They form when large-scale weather patterns align to create narrow channels, or filaments, of intense moisture transport.
- A well-known and strong one is the **Pineapple Express,** with moisture transported from the **tropical Pacific around Hawaii to the US and Canadian West Coasts.**

Features
- Typically, 250 to 375 miles wide, atmospheric rivers can **stretch more than a thousand miles long.**
- They primarily occur **during the winter of the respective hemisphere,** when extratropical cyclones are most prevalent.
- An average atmospheric river carries an amount of water vapour roughly equivalent to the average flow of water at the mouth of the Mississippi River.

Impacts of Atmospheric Rivers
- When atmospheric rivers run up against mountains or run into local atmospheric dynamics and are **forced to ascend.**
- The moisture they carry cools and condenses, leading to the potential for **heavy rainfall or snowfall.**
- They also pose risks such as **flash floods, mudslides, and landslides,** which can result in **loss of life and property damage.**
- As atmospheric rivers traverse land, they can **create conditions akin to hurricanes,** characterized by intense and swift precipitation, cyclonic winds, and increased wave heights.

4. 390-year-old lamp post in Nalgonda unravels trade links of Telangana - The Hindu

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Chalukya Dynasty
• Krishna River

News:
- Recently, archaeologists discovered **Deepastambham** (20-foot tall lamp post) on the edge of **River Krishna in Nalgonda district, Telangana.**
- These discoveries offer insights into **trade activities** in the area during the **early mediaeval period.**

Uniqueness of Lamp Post
- While **Dhwajasthambam** (flag poles) are **common in temple architecture, lamp posts are rare** in the **Deccan** region.
  o While they are common in temples in the west coast including Goa.
- The newly-discovered lamp post, dating back to June 1635, bears **inscriptions** in a **mix of Telugu and Tamil languages,** dedicated to **Kasi Viswanatha.**
- Its towering height suggests it may have served as a **navigational aid along the riverine trade route.**

Historical Context and Trade Routes
- The **village's location,** approximately 180 kilometres from Hyderabad under Qutb Shahi rule, further highlights its **significance as a trade hub.**
- **European travellers,** such as the **French diamond trader Tavernier,** mention land trade routes in the area but also refer to **riverine trade.**

Archaeological Significance
- In addition to the lamp post, archaeologists also unearthed an **eighth-century inscription** detailing a grant during the **Badami Chalukya rule.**
- This discovery enriches our understanding of the **region's historical and economic significance.**

5. Bharat Ratna for Swaminathan, Rao, Charan Singh - The Hindu/ Bharat Ratna PV Narasimha Rao, Charan Singh, MS Swaminathan - Indian Express

Relevance: Modern Indian history from about the middle of the eighteenth century until the present – significant events, personalities, issues.

Prelims Takeaway
• Bharat Ratna
• M. S. Swaminathan

News:
- The Bharat Ratna will be conferred on former **Prime Ministers P. V. Narasimha Rao** and **Choudhary Charan Singh** along with agricultural scientist **M. S. Swaminathan.**

- This is in addition to the two awardees already announced - **socialist leader Karpoori Thakur** and **former Deputy Prime Minister L. K. Advani.**

P. V. Narasimha Rao's Legacy
- P. V. Narasimha Rao is credited with **liberalizing the Indian economy** during his tenure as Prime Minister (1991-1996).
- He had a complicated relationship with the Congress party due to controversies like the Babri Masjid demolition.
- The Prime Minister stated that P. V. Narasimha Rao's visionary leadership was instrumental in **making India economically advanced.**

Choudhary Charan Singh's Contribution
- Choudhary Charan Singh, former Prime Minister (1979-1980), is hailed for his **dedication to farmers and democracy,** particularly during the Emergency.

M. S. Swaminathan's Impact
- M. S. Swaminathan is recognized for his pivotal role in **achieving agricultural self-reliance and modernization** in India.

Bharat Ratna
- Bharat Ratna is the **highest civilian award** of the Republic of India.
- Instituted in 1954, the award is conferred in **recognition of exceptional service/performance of the highest order,** without distinction of race, occupation, position, or sex.

Key Features
- There is no requirement for the Bharat Ratna to be **conferred annually,** nor is there a stipulation mandating that it **must be awarded exclusively to Indian citizens.**
- **Recommendations** for Bharat Ratna are made by the **Prime Minister of India** to the President.
- The number of Bharat Ratna Awards is **restricted to a maximum of three** in a particular year.
  - However, this year's tally of five awardees, one more than the four announced in 1999, is the highest that has ever been announced in a single year.
- On conferment of the award, the recipient receives a **Sanad (certificate)** signed by the President and a **medallion.**
  - The Award does not carry any monetary grant.
- In terms of **Article 18 (1)** of the Constitution, the award cannot be used as a **prefix or suffix** to the recipient's name.

6. BAPS temple inaugurated by PM Modi in Abu Dhabi: features, significance - Indian Express

Relevance: Art and Culture
News:
- The Indian Prime Minister recently inaugurated the **BAPS Swaminarayan temple in Abu Dhabi,** the first Hindu temple in the Gulf nation.
- The temple is built by **Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS),** a Vaishnav sect of Hinduism.

Features of the Temple
- The Abu Dhabi temple is a traditional **stone Hindu temple,** built in the traditional **Nagar style, with seven shikhars.**
  - The seven shikhars (spires) are representative of the seven Emirates of the UAE.
- The temple has two central domes viz. **Dome of Harmony** and **Dome of Peace,** emphasising human coexistence through the carvings of earth, water, fire, air, and plants.
- A **Wall of Harmony,** one of the largest 3D-printed walls in the UAE, features a video showcasing key milestones of the temple's construction.
  - The word 'harmony' has been written in 30 different ancient and modern languages.
- The temple's front panel depicts universal values, stories of harmony from different cultures, Hindu spiritual leaders and avatars.

Prelims Takeaway
• BAPS Temple in Abu Dhabi
• Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS)

- While the **external facade uses pink sandstone** from Rajasthan, the **interior uses Italian marbles.**
- Spread over 27 acres, the temple complex is on 13.5 acres, with a parking area of 13.5 acres.
  o The 13.5 acres of land was gifted by Sheikh Mohammed Bin Zayed Al Nahyan, the President of the UAE in 2019.
- Other amenities include an assembly hall with a capacity of 3,000 people, a community centre, exhibitions, classrooms, and a majlis venue.
- Like all BAPS temples around the world, it is **open to everyone.**

Key Architectural Features
- The temple incorporates various architectural elements, including **96 bells** representing **Pramukh Swami Maharaj's 96 years of life.**
- Special features like the **'holy river'** and depictions of **deities from diverse cultures** enhance its significance.
  o These include Lord Ram, Sita, Lakshman and Hanuman, Lord Shiv, Parvati, Ganpati, Kartikeya, Lord Jagannath, Lord Radha-Krishna, Akshar-Purushottam Maharaj (Bhagwan Swaminarayan and Gunatitanand Swami), Tirupati Balaji and Padmavati and Lord Ayappa.
- Apart from 15 value tales from Indian civilisation, stories from the Maya civilisation, Aztec civilisation, Egyptian civilisation, Arabic civilisation, European civilisation, Chinese civilisation and African civilisation have been depicted.
- **No ferrous material** (which is more vulnerable to corrosion) has been **used** in the temple.
- There is a special pillar, called the **'Pillar of pillars'**, which has around 1,400 small pillars carved into it.
- **Nano tiles** have been used, which will be comfortable for visitors to walk on even in the hot weather.
- Buildings surrounding the temple are modern and **monolithic**, with their colour resembling sand dunes.

7. Kotravai sculpture from Pallava period unearthed near Ulundurpet - The New Indian Express

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Cholas
• Pandayas

News:
- A team of archaeological researchers has d**iscovered an eighth-century Kotravai sculpture, an artefact that dates back to the Pallava period**, near Ulundurpet.

Key Highlights
- "Kotravai sculpture is made in a slab stone of five-feet height and four-feet width.
- The idol is depicted with eight hands, indicating its origin in the **eighth century during the Pallava period.**
- "The sculpture depicts various elements such as chakkara, sword, bell, and abhaya mudra in the right hands.
- Conch, bow, shield, and Uru Mudhra are shown in the left side hands along with bangles in all hands

The Pallava dynasty
- The Pallava dynasty **existed from 275 CE to 897 CE**, ruling a substantial portion of the Deccan, also known as Tondaimandalam.
- Pallava power expanded beyond their original heartland, and t**hey came into conflict with other dynasties, particularly the Chalukyas and Cholas.**

Rulers of the Pallava dynasty
- The Pallava rulers made significant contributions to the fields of art, architecture, and literature.
- **Simhavarman I (c. 275 – 300 CE):** Simhavarman I is considered one of the earliest known Pallava rulers. He is credited with laying the foundation for the dynasty's rule in the region.
- **Mahendravarman I (c. 600 – 630 CE):** Mahendravarman I was a notable Pallava king known for his patronage of the arts and literature.
- He was a prolific poet himself and is believed to have authored the Sanskrit play "Mattavilasa Prahasana." He was a follower of Jainism but later embraced Shaivism.

- **Narasimhavarman I (c. 630 – 668 CE):** Also known as Mamalla, Narasimhavarman I was one of the most famous Pallava rulers.
- He is best known for his military campaigns and his patronage of art and architecture. He is credited with the construction of the famous Shore Temple in Mahabalipuram, a UNESCO World Heritage site.
- **Nandivarman II (c. 731 – 796 CE):** Nandivarman II was another Pallava king who made significant contributions to art and architecture.
- He is known for his patronage of rock-cut temples, including the Mandagapattu and Trichinopoly rock-cut temples.
- **Nandivarman III (c. 850 – 869 CE):** Nandivarman III was one of the later Pallava rulers.
- His reign also witnessed the continuing decline of the Pallava dynasty as the Cholas expanded their influence in the region.

8. 16th century Qutub Shahi tombs get a digital twin - The Hindu

Relevance: Art and Culture

Prelims Takeaway
• Muhammad Quli Qutb Shah
• Mohammed Quli Qutub Shah's Tomb
• Digital Twin Technology

News:
- Recently, **Hexagon**, a reality tech firm, unveiled the **digital twin of Qutb Shahi's tomb** in Hyderabad.

Digital Twin Technology
- A digital twin is a **digital model** of an object, system or a process that acts the **same as its real world counterpart.**
- **Benefits**
  o It helps companies and organisations to understand a physical object or a process well.
  o It helps in testing a solution or a design in simulation using the digital twin.
  o It saves developers time and energy by simulating real-world scenarios.

Accuracy of Digital Twin
- The drone scanners utilised only **8 minutes** to gather the data, achieving accuracy with up to **1-centimeter** geotagging precision.
- A total of **600 GB of data was captured** for the creation of the digital twin

Mohammed Quli Qutub Shah's Tomb
- Built by the **Qutub Shahis,** these tombs are considered to be among the oldest historical monuments of Hyderabad.
- Built in **1602**, it is one of the **largest tombs at the Qutb Shahi heritage park complex.**
- It is one-of-its-kind place in the world where the whole dynasty is buried at a single spot.
- These are erected in the memory of the **departed kings of Golconda.**
- They are located **one kilometre north of Golconda Fort's** called **Banjara Darwaza**.
- They resemble **Persian, Pathan and Hindu** architectural styles
- **Material Use**: Grey Granite, with stucco ornamentation.

Muhammad Quli Qutb Shah (1581- 1611)
- He was the **fifth king of the Qutb Shahi dynasty** who laid the foundation of **Hyderabad**.
- A contemporary of **Tulsidas**, he blended the best traditions of the two streams of thought and life to impart a new halo to his poetry.
- He is justifiably the **first poet in Deccani Urdu** with at least fifty thousand shers to his credit.

9. Kutch villagers' treasure hunt helps unearth Harappan site near Dholavira - Times of India

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Indus Valley Civilization
• Harappan pottery

News:
- **Morodharo yielded a large quantity of Harappan pottery**, similar to those found in dholavira.

Morodharo
- It is a fortified settlement **dating back to the Harappan era.**

- It is located in Gujarat

Features

- The settlement looks mature (2,600-1,900 BCE) to late (1,900-1,300 BCE) Harappan.
- The fortification measures 102 m east to the west and 58 m north to the south.
- It has a 10x10 m platform on the south-west side and a well on the north-east.
- Burial cairns, **which are mounds of stones to demarcate a boundary**, are also found here.
- Harappan pottery with perforated jar sherds, reserved slipware, and terracotta cakes were unearthed.
- All these items have a **striking resemblance to those found in Dholavira.**

Indus Valley Civilization Important Sites

- Kalibangan (Rajasthan), Lothal, Dholavira, Rangpur, Surkotda (Gujarat), Banawali (Haryana), Ropar (Punjab).
- Harappa (on river Ravi), Mohenjodaro (on the Indus River in Sindh), Chanhudaro (in Sindh).
- The civilization was first discovered during an excavation **campaign under Sir John Hubert Marshall** in 1921–22 at Harappa following the discovery of seals by J Fleet.
- Harappan ruins were discovered by Marshall, Rai Bahadur Daya Ram Sahni and Madho Sarup Vats.
- The Indus Valley cities show a level of sophistication and advancement not seen in other contemporary civilizations.
- There were two parts: a **citadel and the lower town.**
- Most cities **had a Great Bath.**

10. Venur prepares for Lord Bahubali Mahamastakabhisheka after 12 years- Times of India

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

News:

Prelims Takeaway
• Jaininsm
• Lord Bahubali

- **Jalabhisheka has been performed to Lord Bahubali during 'Mahamastakabhisheka Mahotsava'** (grand consecration) held once in 12 years, at Venur in Karnataka

Mahamastakabhisheka

- The word Mahamastakabhisheka is a combination of three words viz: Maha (great), Masthaka (head) and Abhisheka (anointing) which literally means 'the head anointing ceremony'.
- The ceremony is called **Mahamastakabhisheka (also referred as Grand Consecration) and not Mastakabhisheka because the ceremony is performed only once in 12 years.**

- The Mahamastakabhisheka Mahotsava is an anointing ceremony of the statue of Lord Bahubali.
Lord Bahubali
- Lord Bahubali was the **son of lord Rishabhanatha who was the first of the 24 Jain Tirthankaras.**
- Jain mythology holds up Bahubali as the one who succeeded in attaining liberty from worldly desires through a long period of sustained meditation.
- The sculpture of Lord Bahubali is **in an upright posture of meditation known as Kayotsarga** which stands for renunciation, self-control and subjugation of the ego as a reflection of his life.
- This is the **digambara form of Bahubali which represents complete victory over earthly desires** and needs, which forms the edifice for spiritual ascent towards divinity.

11. Telangana: 1,300-year-old temples from Badami Chalukyan period discovered - Times of India

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Badami Chalukyas
• Panchakuta Temples

News:
- Recently, two **Badami Chalukya temples,** estimated to be between 1,300 to 1,500 years old, and a **label inscription** dating back to the 8th or 9th century AD were recently unearthed in **Mudimanikyam village, Nalgonda district,** along the banks of the **Krishna river.**
- The temples and inscription provide valuable insights into the region's rich history.
Historical Significance
- These temples are unique examples of **Kadamba Nagara style** in the **Rekha Nagara format,** a rare architectural style in Telangana.
- This showcases the **influence of the Badami Chalukya period** in the region.
- Researchers emphasise the significance of these temples in **preserving the cultural heritage of Telangana.**
- They suggest minimal restoration and conservation to maintain their historical integrity.
Inscription Details
- The label inscription, found on a **pillar of a group of five temples,** known as **Panchakuta,** in the village, dates back to the 8th or 9th century AD.
  o However, these temples are **no longer in use,** with one missing the Shivalinga and another containing a Vishnu idol.
- It bears the term **'Gandaloranru'**, possibly a **heroic title,** suggesting its association with the **Badami Chalukya period.**

12. Earth's early evolution: Fresh insights from rocks formed 3.5 billion years ago - Down To Earth

Relevance: Salient features of world's physical geography.

Prelims Takeaway
• Archaean Age
• Cratons
• Singhbhum Craton

News:
- Earth's age is approximately **4.5 billion years,** characterised by **vast oceans** and **frequent volcanic eruptions.**
- Despite substantial knowledge, gaps persist, particularly regarding the **geological processes of early Earth.**
Exploring Ancient Rocks
- **Ancient volcanic and sedimentary rocks,** dating back 4 billion to 2.5 billion years, hold vital clues.
- These rocks, found in **cratons,** offer insights into **past Earth processes.**
- The **Singhbhum Craton** in India, dating back 3.5 billion years, provides a significant case study.

Cratons
- They are **ancient continental pieces** dating back billions of years, offering insights into **Earth's early geological processes.**
- They host **diverse rock groups,** including greenstones and granites, preserving evidence of past volcanic and sedimentary processes.

Comparative Study

- Studying cratons like the Singhbhum Craton in India, South Africa, and Australia provides a window into the **Archaean age,** about 4 billion to 2.5 billion years ago.
- Researchers compared the Singhbhum Craton with **counterparts in South Africa and Australia.**
- Comparative analysis of cratons reveals **commonality in explosive-style volcanic eruptions** around 3.5 billion years ago.
- Understanding these early processes aids in **reconstructing Earth's evolutionary history.**

Research Methodology

- Rocks from the Singhbhum Craton were studied in the **laboratory**, aided by **field-based studies** and **uranium-lead radiometric dating.**
- **Similarities** were noted between the geological features of the Singhbhum Craton and those of South Africa and Australia.
- **Key Findings**
  - **Submarine mafic volcanic eruptions** were prevalent **between 3.5 and 3.3 billion years ago.**
  - This contrasts with **silicic volcanism,** which was dominant around 3.5 billion years ago.

Significance of Discoveries

- Provides insights into **early tectonic activities** and **Earth's formative years**.
- **Unique geological features,** such as greenstone belts, provide invaluable information about **early habitable conditions** and the **emergence of life.**
- Comparative analysis helps construct a **comprehensive model of Archaean geological processes.**

13. How Rani Chennamma's revolt against the British inspired a national campaign for women's rights - Indian Express

Relevance: Modern Indian history from about the middle of the eighteenth century until the present – significant events, personalities, issues.

News:

Prelims Takeaway
• Kittur Rebellion
• Rani Chennamma

- Recently, several social groups across the country organised a national campaign **Naanoo Rani Chennamma** (I am Rani Chennamma too).
- **Purpose:** To commemorate 200 years of Rani Chennamma's rebellion against the British East India Company.

Rani Chennamma

- Chennamma was born in **Kakati**, a small village in today's Belagavi district of Karnataka.
- She became **queen of Kittur** (now in Karnataka) when she married **Raja Mallasarja** of the Desai family.
- After Mallasarja's death in 1816, his eldest son, **Shivalingarudra Sarja,** ascended the throne.
- Before his death in 1824, **Shivalingarudra adopted a child, Shivalingappa**, as the successor.
- However, the British East India Company refused to recognise Shivalingappa as the successor of the kingdom under the **'doctrine of lapse'.**

Doctrine of Lapse

- Introduced by **Lord Dalhousie** in **1848**, the Doctrine of Lapse aimed at expanding British territories in India.
- Under the doctrine of Lapse, **any princely state without a natural heir would collapse** and would be **annexed** by the Company.
- The policy was seen as illegitimate by many Indian rulers and played a role in the Indian Rebellion of 1857.
- Several states annexed due to this Doctrine, include Satara (1848), Jaitpur (1849), Sambalpur (1849), Udaipur (1850), Jhansi (1853), and Nagpur (1854).
- The princely state of Kittur was taken over by the British East India Company in 1824 by imposing the 'doctrine of lapse'.
  - This was even before it was officially articulated by Lord Dalhousie.

Kittur Rebellion

- **John Thackery,** the British official at Dharwad, launched an **attack on Kittur** in October 1824.

- In this battle British forces **lost heavily** and the Collector and political agent, St. John Thackeray was killed by the Kittur forces.
- Two British officers, Sir Walter Elliot and Mr. Stevenson, were also taken as hostages.
- However, the British army again attacked the Kittur Fort and **captured it.**
- Rani Chennamma and her family were **imprisoned** and jailed at the fort in **Bailhongal**, where she died in 1829.

14. IGNCA's 'language atlas' to shine a light on India's linguistic diversity - The Hindu

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

News:
- India is working towards promoting **education in mother tongues,** especially at the primary level.
- However, there's a lack of clarity regarding the actual **number of "active" languages** in the country.
- To address this, the Indira Gandhi National Centre for Arts (IGNCA) has planned to conduct a **linguistic survey** across India.

Prelims Takeaway
• Indira Gandhi National Centre for Arts (IGNCA)
• Language Atlas of India

Current Language Scenario
- India officially recognizes **22 languages** listed in **Schedule 8** of the Constitution.
- According to Census data, **97% of the Indian population** speaks one of these languages.
- Additionally, there are **99 non-scheduled languages** included in the 2011 Census, with around **37.8 million people** identifying one of these as their mother tongue.
- However, the **native languages of around 1.2 million people remain unaccounted** for, particularly those spoken by tribal communities.
  - due to the exclusion of languages with less than 10,000 speakers in the Census since 1971.

Historical Context
- The first Linguistic Survey of India was conducted by **Sir George Abraham Grierson in 1928**.
- The Indian map was redrawn after Independence, and therefore, the LSI includes languages and dialects that **may not be a part of contemporary Indian States.**
- The most detailed linguistic data was recorded in the **1961 Census,** which included even **languages with a single speaker.**
- The book "Tribal and Indigenous Languages of India" documents that the 1961 Census of India recorded **1,554 languages** being spoken in the country.

Proposed Linguistic Survey
- The IGNCA aims to conduct a comprehensive linguistic survey to create the **Language Atlas of India.**
- The survey would involve various ministries and stakeholders, including the Ministries of Culture, Education, Tribal Affairs, etc. apart from various language communities.
- Collaborators for the survey include institutes like the Central Institute of Indian Languages, National Museum, etc.
- The survey will focus on documenting the **number of languages, dialects, scripts, extinct or endangered languages.**
- It will be carried out in **two phases,** starting with state-wise data collection and then region-wise analysis.
- The survey also aims to **digitally archive audio recordings** of all languages spoken.

Significance
- Language preservation is crucial for **conserving local wisdom, knowledge, stories, and culture,** especially among tribal communities.
- The survey will serve as a **valuable database for future policy decisions** regarding language and education.

GS II

15. ED arrests Hemant, Champai to take over as CM - The Hindu/ One more Opp leader falls: ED arrests Soren for 'money laundering', he quits as Jharkhand CM - Indian Express

Relevance: Structure, organisation and functioning of the Executive and the Judiciary—Ministries and Departments of the Government; pressure groups and formal/informal associations and their role in the Polity.

News:

Prelims Takeaway
• Enforcement Directorate (ED)
• Ministry of Finance

- The **Enforcement Directorate (ED) arrested Hemant Soren** in a land scam case after he resigned as Jharkhand Chief Minister.

Key Highlights

- Resignation followed over seven hours of ED questioning at his official residence in Ranchi.
- The case revolves around alleged purchase and sale of tribal land with forged documents between 2020 and 2022.
- Hemant Soren has **challenged his arrest in the Jharkhand High Court,**

Political Transition

- **The ruling alliance, led by JMM,** aims to form the government with the support of 43 MLAs, currently awaiting the Governor's response.

Governor's Refusal and Opposition's Stand

- Attempts by the alliance to meet the Governor for a parade of MLAs to prove majority were refused.
- **JMM members assert their numerical strength** and oppose any move towards President's rule in Jharkhand.

Directorate of Enforcement (ED)

- The Directorate of Enforcement (ED) is a multi-disciplinary organization
- It is mandated with investigation of offences of money laundering and violations of foreign exchange laws.
- It functions under the **Department of Revenue of the Ministry of Finance.**
- The origin of this **Directorate goes back to 1st May, 1956**
  - when an 'Enforcement Unit' was formed in the Department of Economic Affairs for handling Exchange Control Laws violations under Foreign Exchange Regulation Act (FERA), 1947.

16. South Africa says 5 countries confirm joining BRICS grouping - Indian Express

Relevance: Important International institutions, agencies and fora- their structure, mandate.

News:

Prelims Takeaway
• BRICS
• Argentina

- **Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates** have confirmed they are joining the BRICS bloc after being invited last year

Key Highlights

- The five countries were extended **invitations along with Argentina**
  - At a summit in August in Johannesburg to join the bloc comprising Brazil, Russia, China, India and South Africa.
- Members say the move would help reshuffle a world order they view as outdated.
- **Argentina has since declined** the invitation to join.
- With respect to the BRICS confirmations, five out of the six have been confirmed.

BRICS

- BRICS is an acronym for the grouping of the world's leading emerging economies, **namely Brazil, Russia, India, China, and South Africa.**

- In 2001, **the British Economist Jim O'Neill coined the term BRIC** to describe the four emerging economies of Brazil, Russia, India, and China.
- The grouping was formalised during the **first meeting of BRIC Foreign Ministers in 2006.**
- South Africa was invited to join BRIC in December 2010, after which the group adopted the acronym BRICS.
- The BRICS brings together five of the largest developing countries of the world
  o representing 41% of the global population, 24% of the global GDP and 16 % of the global trade.

17. CBSE Class 10, 12 Plan: 3 languages, 7 other subjects in Class 10; 6 papers in Class 12- Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• National Credit Framework
• NIOS

News:
- The Central Board of Secondary Education (**CBSE) is reported to have proposed significant changes to the academic framework** for secondary and higher secondary education

Key Highlights
- It includes **a shift from studying two languages to three in Class 10**, with the requirement that at least two must be native Indian languages
- Similarly, for Class 12, the proposed changes involve students studying two languages instead of one
  o With the condition that at least one must be a native Indian language.
- Overall, they would have to clear examinations in six subjects instead of five to graduate from high school.

National Credit Framework (NCrF)
- Based on the inter-ministerial committee report, **the Union Ministry of Education (MoE) unveiled the draft NCrF in 2022.**
- **The NCrF is a set of guidelines** to be followed by schools, colleges and universities in adopting the credit system.
- It also brings the **entire school education system under the ambit of credits for the first time.**
- So far, only the National Institute of Open Schooling (NIOS) followed a credit system. The NCrF also covers skill and vocational education.
- The document lists theoretical, applied sciences or vocational and skill disciplines that can count towards credits earned during school education.

18. EPFO's new survey seeks details on women workers to boost their share in workforce - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• National Technical Committee
• Ministry of Personnel, Public Grievances and Pensions

News:
- The Centre plans to introduce the **Public Examination (Prevention of Unfair Means) Bill, 2024** during the ongoing session of Parliament.

Scope of the Bill
- The Bill aims to address issues related to **paper leaks and organised cheating in public examinations,** covering various exams such as UPSC, SSC, Railways, NEET, JEE, CUET, and others.

Enforcement and Penalties
- The Department of Personnel and Training (DoPT) under **the Ministry of Personnel, Public Grievances and Pensions will oversee the Bill.**
- The proposed penalties include a minimum of three to five years of imprisonment

o with a higher range (five-10 years) for organized crimes. A minimum fine of Rs 1 crore is proposed for organized crimes.

Protection for Candidates
- The Bill protects candidates from liability under its provisions, ensuring they remain covered by existing administrative provisions of examination authorities.

National Technical Committee
- The Bill proposes the establishment of a high-level National Technical Committee on Public Examinations to develop:
  o Protocols for digital platforms
  o Enhance IT security
  o Conduct electronic surveillance, and set national standards.

Need for the Bill
- The absence of a national-level law to deal with unfair means in public examinations necessitates the proposed legislation.
- The Bill aims to deter individuals, groups, or institutions engaging in unfair practices that adversely impact the public examination systems.

19. Affordable housing scheme for middle class to be launched - The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• PM-SVANidhi
• PMAY

News:
- Giving a boost to affordable housing, the government announced a **new scheme to help "deserving" sections of the middle class buy or build their own houses.**

Key Highlights
- The **Union Finance Minister also gave a push to rural housing** and said two crore more houses would be made under the flagship Pradhan Mantri Awas Yojana (PMAY)-Rural.
- Despite the challenges resulting from the COVID-19 pandemic, "implementation of PMAY (Rural) continued and we are close to achieving the target of three crore houses".
- **The PMAY is a credit-linked subsidy scheme** to facilitate access to affordable housing for low and moderate-income people.
- It has two components — **PMAY (Urban) for the urban poor under the Ministry of Housing and Urban Affairs, and PMAY (Rural)** for rural India under the Ministry of Rural Development.
- The total allocation to the Housing and Urban Affairs Ministry for 2024-25 is ₹77,523 crore, up from ₹76,431 crore in 2023-24.
- PM-SVANidhi, a micro-credit scheme for street vendors being run by the Housing and Urban Affairs Ministry,
  o has provided credit assistance to 78 lakh street vendors, out of which 2.3 lakh have received credit for the third time.

20. Net zero gain for job guarantee scheme - The Hindu/ Job guarantee scheme outlay stays at ₹ 86,000 cr, no change in PM-Kisan - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• MGNREGS
• Budget

News:
- **₹86,000 crore budget** was allocated for the **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**

Key Highlights
- The budget for the scheme for **the financial year 2024-25 has been hiked by ₹26,000 crore** in comparison to the 2023-24 Budget estimates
  o Though it is the same as the revised estimates for the ongoing financial year (2023-24).
- So, **the net gain for the rural employment scheme** could be zero or even negative.

- The government has argued that **MGNREGS is a dynamic scheme and the dues are cyclically paid.**
- But for the last two years, the **Centre has halted the programme in West Bengal,** claiming corruption in implementation of the scheme.
- "To meet the employment needs of registered households under MGNREGS, **a crucial ₹3 lakh crore is essential.**
- However, the allocated budget falls significantly short at a mere ₹86,000 crore.
- Considering the outstanding dues in West Bengal that need clearing and the additional work requirements for the workers in the State this year,
  - Coupled with the historical trend of 15 to 20% of the budget being spent on clearing past dues, the allocation seems increasingly inadequate.
- This shortfall raises serious concerns as it not only jeopardises the guaranteed right to work under MGNREGS
- but also constitutes a gross violation of this fundamental entitlement,"

21. Mamata denies allegations in CAG report, writes to PM- The Hindu

Relevance: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.

News:

Prelims Takeaway
• Supreme Audit Institution of India
• CAG

- After the Comptroller and Auditor General (**CAG) released a report alleging fraud and siphoning of funds by the West Bengal government,**
- Chief Minister wrote to the Prime Minister, stating that the allegations were false and her government had provided all utilisation certificates.

Comptroller and Auditor General of India

- It is a **constitutional authority** which heads the Indian Audit and Accounts Department (IA&AD).
- The two entities are known as the Supreme Audit Institution of India (SAI).
- Article 148 provides for an independent office of the CAG.

Role of Audits in a Democracy like India

- Transparency and Accountability
- Preventing Financial Mismanagement
- Improving Efficiency and Effectiveness
- Global Standards and Collaborations

Way forward

- Streamlining Audit Processes
- Efficient Workflow
- Digital Transformation
- Promoting Transparency and Accountability
- Timely Reporting

22. Centre likely to foot bill for PM rooftop solar scheme -The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• National Thermal Power Corporation
• Pradhan Mantri Suryoday Yojana

News:

- As part of a renewed thrust to increase adoption of household rooftop solar systems **(h-RTS) through the Pradhan Mantri Suryoday Yojana**
- The **Centre is likely to bear the entire cost** of setting up such systems for households that consume less than 300 units of electricity a month.

Key Highlights

- This could potentially cost at least ₹1 lakh crore, and in a departure from the existing approach to h-RTS
- It will see Union government companies — **as opposed to the current set-up of individual State-run power distribution companies** — taking up the responsibility of powering beneficiary households.

Hassle-free installation

- For implementation, public sector units of the **Power Ministry such as the National Thermal Power Corporation (NTPC)** will be charged with identifying households that consume less than 300 units a month in States.
- This won't be challenging as about 85% of Indian households, on average, use 100 to 120 units a month.
- This done, **they will install RTS with eligible householders** having to pay effectively nothing.

23. Law panel suggests retaining criminal defamation provision -The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• Law Commission
• Bharatiya Nyaya Sanhita

News:

- The **22nd Law Commission has recommended that criminal defamation** should **be retained** within the scheme of criminal laws in India,

Key Highlights

- The panel submitted its report to the Ministry
- In its report, the Law Commission argued that the right to reputation is derived from Article 21 of the Constitution
  - That guarantees the right to life and personal liberty and that is why it has to be protected.
- "Reputation is something which can't be seen and can only be earned.
- It's an asset which is built in a lifetime and destroyed in seconds.
- The whole jurisprudence around the law on criminal defamation has the essence of protecting one's reputation and its facets
- Referring to the issue of punishment, it said the Bharatiya Nyaya Sanhita has added a provision of **community service as an additional punishment.**
- This law gives a balancing approach, **wherein it has safeguarded the interest of the victim and has also neutralised the scope of misuse by giving an alternate punishment of community service**

Law Commission

- Law Commission of India is **neither a constitutional body nor a statutory body**, it is an executive body established by an order of the Government of India.
- Its major function is to work for legal reforms.
- The Commission is established for a fixed tenure and works as an **advisory body to the Ministry of Law and Justice.**
- Its membership primarily comprises legal experts.

24. GHAR (GO Home and Re-Unite) Portal for Restoration and Repatriation of Child launched by NCPCR - PIB

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- The **Ministry of Women and Child Development** has introduced two portals, namely the **"Track Child Portal"** and the **"GHAR - GO Home and Re-Unite"** to address the **issue of missing and found children.**

Track Child Portal

- It is developed by the **Ministry of Women and Child Development.**
- Implemented with support from the Ministry of Home Affairs, Ministry of Railways, and other stakeholders.
- It enables **tracking of the missing and found children** in all States/UTs.
- The portal is integrated with the **Crime and Criminal Tracking & Network Systems** (CCTNS) for **efficient matching of FIRs.**
- One component of TrackChild Portal has **"Khoya-Paya"** where **any citizen can report** for any missing or sighted children.

GHAR - GO Home and Re-Unite (Portal for Restoration and Repatriation of Child)

- It is developed and launched by the **National Commission for Protection of Child Rights (NCPCR).**
- **Purpose:** To digitally monitor and track the restoration and repatriation of children as per the protocols under the Juvenile Justice Act, 2015 and Rules thereof.

Key Features of GHAR Portal

- **Digital tracking and monitoring of children** who are in the Juvenile Justice system and have to be repatriated to another Country/State/District.
- **Digital transfer of cases** of children to the concerned Juvenile Justice Board/Child Welfare Committee of the State for **speedy repatriation** of children.
- Where there is a **requirement of a translator/interpreter/expert,** request will be made to the concerned State Government.
- Child Welfare Committees and District Child Protection Officers can ensure proper restoration and rehabilitation of children by digitally monitoring the progress of the case.
- A **checklist format** will be provided so that the children who are being hard to repatriate or children who are not getting their monetary benefits can be identified.
- **List of Government implemented schemes** will be provided, so that the Child Welfare Committees can link the child with the schemes to strengthen the family and ensure that the child remains with his/her family.

Prelims Takeaway
- Track Child Portal
- GHAR - GO Home and Re-Unite
- Crime and Criminal Tracking & Network Systems (CCTNS)
- National Commission for Protection of Child Rights (NCPCR)

25. Union Minister of Coal, Mines and Parliamentary Affairs Shri Pralhad Joshi launches C-CARES, web portal of CMPFO - PIB

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- Recently, the Union Minister of Coal, Mines, and Parliamentary Affairs inaugurated the **C-CARES web portal.**

C- CARES Portal

- It is developed and designed by the **Centre for Development of Advanced Computing (C-DAC).**
- The portal signifies a significant step in **Coal Mines Provident Fund Organization (CMPFO)'s digitization** journey.
  - Coal Mines Provident Fund Organization is an **autonomous organisation** under the aegis of **Ministry of Coal** established in the year 1948.
  - **Objective:** Administering Provident Fund and Pension schemes for the purpose of providing social security to the coal sector workers.

Prelims Takeaway
- C- CARES Portal
- Coal Mines Provident Fund Organization (CMPFO)

C-CARES Portal Features

- The portal will allow CMPF subscribers and coal companies to **login and perform various functions** tailored to their needs.
  - The subscribers can access and view their individual details and subscription status
  - The coal companies can submit contribution details, subscribers' particulars and claims for online settlement and payment.
- It will also ensure **paperless working, timely and accurate settlement of claims, improved record management, reduction in processing time, instilling confidence in subscribers and pensioners** and **grievance redressal.**
- The portal serves as a **public service platform,** benefiting CMPF subscribers and pensioners in the coal sector.

26. Red Sea crisis: India turns to West Asia to replace crude supply from the US - Indian Express

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

News:

Prelims Takeaway
• Oil supplying Countries bordering Red Sea
• Crude Oil Imports to India Country Wise

- India's crude oil imports from Iraq reached **a 21-month peak** in January, 2024.
- It is driven by **disruptions in US oil supply** due to escalating freight rates amidst the Red Sea crisis.

Shift in Import Patterns

- Indian refiners, unable to secure US crude, **turned to West Asia** for oil supply.
- US crude, **a significant supplier**, was absent in January, 2024contrary to the average daily imports of 205,000 barrels in 2023.

Impact of Red Sea Crisis

- Disrupted freight routes prompted Indian refiners to seek closer **alternatives in West Asia.**
- Unlike US routes, West Asian oil cargoes **bypassed the Red Sea**, mitigating risks.

Increase in Imports

- India's crude imports from Iraq surged by a fourth to 1.19 million barrels per day in January, 2024 the highest since April 2022.
- UAE and Saudi Arabia also **experienced spikes** in oil exports to India.

Security Concerns

- **Attacks on vessels** in the Red Sea by Yemen's Houthi rebels heightened security risks.
- **Major shipping lines** opted for longer, safer routes, impacting global trade and energy supplies.

Stability of Russian Supplies

- Russian oil shipments remained **stable, unaffected** by Red Sea tensions.
- **Urals crude**, a staple in Indian imports, maintained consistent supply levels.
- **Payment issues** affected **Sokol (Russian Oil Firms) crude deliveries,** leading to increased reliance on Iraq and UAE oil.

Shift in Supplier Dynamics

- Russia emerged as India's primary oil supplier following discounts offered **post-Ukraine invasion.**
- Traditional suppliers like **Iraq and Saudi Arabia** faced displacement in India's import hierarchy.

27. CBSE urges schools to prepare for National Credit Framework roll-out - The Hindu

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

Prelims Takeaway
• Central Board of Secondary Education (CBSE)
• National Credit Framework

- The Central Board of Secondary Education (CBSE) is spearheading a shift towards a **credit-based system,** aligning with the **National Credit Framework.**

Sample Framework
- The board is set to notify a new set of credit framework for schools next year from **class nine to twelve.**
- The framework allocates **additional hours** for subjects like Physical Education, Health, Art Education, and a third language, alongside the compulsory subjects.

Expansion to Ten Subjects
- As per the existing regulations, a student has to **pass in 5 subjects** (two languages and three main subjects - maths, science and social science) to pass.
- Starting from the academic year 2024-2025, students in **classes Nine and Ten** will be required to **study ten subjects.**
- These include three languages (two native to India), one interdisciplinary subject, and others mandated by the new National Curriculum Framework (NCF).

Credit Management
- All credits accrued by students will be **stored digitally in academic lockers,** facilitating easy access and reconciliation, even for students pursuing education abroad.
- The integration of credits aims to **streamline assessment and equivalence** across different education levels.

Implementation and Assessment
- CBSE is encouraging schools to begin **implementing the credit system internally,** with emphasis on project work, peer-learning, and field trips.
- Credits will be reflected in **students' marks statements with predefined grades,** ensuring accountability and transparency.

28. 7th session of the Codex Committee on Spices and Culinary Herbs held at Kochi - PIB

Relevance: Important International institutions, agencies and fora- their structure, mandate.

News:
- Recently, the 7th session of the **Codex Committee on Spices and Culinary Herbs (CCSCH)** took place in Kochi.

Prelims Takeaway
• Codex Alimentarius Commission (CAC)
• Codex Committee on Spices and Culinary Herbs

Key Outcomes
- CCSCH7 concluded with finalizing **quality standards for five spices** viz. small cardamom, turmeric, juniper berry, allspice, and star anise.
- The committee finalized the **first group standard for 'spices derived from fruits and berries,'** covering juniper berry, allspice, and star anise.
  - For the first time, it successfully implemented a strategy of grouping spices.

Codex Committee on Spices and Culinary Herbs
- It was established as one of the **Commodity Committees under the Codex Alimentarius Commission (CAC)** in 2013.
- India has **hosted this Committee since the beginning.**
- **Spices Board India** serves as the **secretariat organisation** which organises the Committee's sessions.

Codex Alimentarius Commission (CAC)
- The CAC, jointly established by **FAO and WHO,** is tasked with **formulating internationally accepted food standards.**
- It is an international, intergovernmental body which is **based in Rome.**
- Membership of the Commission is open to **all Member Nations and Associate Members of FAO and WHO** which are interested in international food standards.
- The Commission meets in regular sessions once a year, alternating between Geneva and Rome.

- **Funding:** Through the regular budgets of WHO and FAO, with all work subject to the approval of the two governing bodies of the parent organisations.
- The Commission works in the **six official languages of the UN.**

Global Impact of CAC Standards

- CAC standards are **recognized by the WTO** as international reference points for resolving food safety and consumer protection disputes.
- These standards, including those developed by CCSCH, are **voluntary** and member countries of the CAC adopt and use them as **reference standards** to align their national standards.
- It contributes to **harmonising food standards globally, promoting fair trade**, and **enhancing food safety.**

29. Water pollution curbs: Bill allowing exemption to industrial units tabled - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- The Centre recently introduced a bill to amend the existing **Water (Prevention and Control of Pollution) Act, 1974.**
- It would be applicable to **Himachal Pradesh and Rajasthan,** and any other state that passes a resolution under the Water (Prevention and Control of Pollution) Act, 1974.

Prelims Takeaway
• Water (Prevention and Control of Pollution) Act, 1974
• State Pollution Control Board

Key Amendments Proposed

1. Nomination Norms for Chairpersons

- Currently, the Act mandates that the **State government nominates the chairman** of the **State Pollution Control Board.**
- However, the Bill introduces a provision for the **Central Government** to **prescribe the manner in which these chairpersons are nominated.**

2. Decriminalisation of Minor Offenses

- The existing Act stipulates **imprisonment of up to three months** for certain offences. This includes
  o Not informing the State Board about abstraction of water from a stream or well in a substantial volume
  o Not providing information about construction, installation or operation of the disposal system.
- The Bill proposes to **replace this with fines** ranging from Rs10,000 to Rs15 lakh, effectively decriminalizing these offenses.

3. Other Provisions

- It empowers the Centre to **exempt certain categories of industrial plants** from restrictions on new outlets and discharges.
- It also **enables the Centre to "issue guidelines"** on matters relating to grant, establishment of any industry, etc.

30. Deadly Fungal Infection 'Candida Auris' Spreading In US Rapidly - NDTV

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

- A deadly fungal infection, **Candida auris,** is rapidly spreading in the United States.
- Despite its rarity, medical experts warn of its high fatality rate, drug resistance, and ease of spread in healthcare settings.

Prelims Takeaway
• Candida auris
• Antimicrobial Resistance (AMR)

Candida auris (C. auris)

- It is an **emerging multidrug-resistant yeast (fungus)** that represents a global health threat.
- Scientists first discovered C. auris **in Japan in 2009,** since then, it has spread quickly to other countries.
- It can **cause infections in various parts of the body,** including the bloodstream, open wounds, and ears.
- The infection poses significant risks, especially for those with **weakened immune systems or using medical devices** like feeding tubes, breathing tubes, or catheters.

Symptoms and Transmission

- The symptoms vary depending on the **site and severity of the infection,** and it can be challenging to distinguish from bacterial infections.
- Individuals may carry Candida auris **without showing symptoms,** a condition known as **colonization**.
- Colonized individuals **can still spread the fungus to others,** making infection control measures crucial in healthcare settings.
- It can also spread through **contact with contaminated surfaces or equipments.**

Preventive Measures and Treatment

- Infected or colonized patients should be **isolated**, and caregivers should adhere to **strict hygiene protocols.**
  o It includes wearing gloves and gowns, using disinfectants, and practicing hand hygiene.
- Most C. auris infections are treatable with **antifungal drugs.**
- However, some C. auris infections have been resistant to all three main classes of antifungal medications' often requiring the **use of combination therapies.**

Global Concern

- Candida auris cases have **surged worldwide,** with a significant increase reported in recent years.
  o In 2022, it infected 2,377 people, compared to 53 cases in 2016.
- The rapid spread has led the CDC and WHO to designate it as a **growing threat to public health,** with 1,471 cases reported in 2021 alone.

31. Iran announces 15-day visa-free policy for Indian tourists-The Hindu

Relevance: India and its neighbourhood – International relations.

News:

- Iran has announced the initiation of a **15-day visa-free policy f**or Indian tourists visiting the country.

What is the Policy?

- Indian citizens would be allowed to enter Iran **with ordinary passports** once every **six months**
- The maximum period of stay is 15 days which **will not be extended.**

Prelims Takeaway
- Henley Passport Index
- Visa Free Access to Indians

Other Features of the Policy

- The visa abolition only applies to individuals entering the territory of the Islamic Republic of Iran for **tourism purposes.**
- If Indian nationals wish to stay for a longer period or **make multiple entries** within a **six-month period** require other types of visas.
- The visa abolition outlined in this approval specifically applies to Indian nationals who enter the country **just through the air border.**

Other countries allowing Visa Free Access to India

- Iran has become the **latest country** in the past few months to give visa-free access to India tourists.

- **Vietnam, Thailand, Sri Lanka** have also eased visa rules for Indian tourists.
- In 2023, Malaysia's Prime Minister Anwar Ibrahim announced that visitors from **India and China** will be granted 30-day visa-free entry into Malaysia from December 1.
- The visa exemption in Malaysia is still subject to security screenings for records of **crime or violence.**
- Similarly, **Thailand** announced that Indian tourists will be allowed visa-free entry to the country for a **period of six months** starting November 10.
- Thailand agreed to exempt tourists from **India and Taiwan** from requiring an entry visa to stay in Thailand for up to 30 days, **effective till May 10, 2024.**
- Moreover, **Sri Lanka** has also allowed visa-free entry to visitors from seven countries, including **India, China and Russia.**

32. Affluent sub-castes among backward classes may be excluded from quota list, observes Supreme Court-The Hindu

Relevance: Mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

News:

Prelims Takeaway
• Punjab Scheduled Caste and Backward Classes (Reservation in Services) Act of 2006.
• Article 341 and 342 of the Constitution of India
• Indira Sawhney v Union of India

- A seven-judge Constitution Bench questioned why affluent sub-castes among backward classes **should not be "excluded"** from the reservation list.
- The court observed that these castes should be **made to compete with the general category.**

Observations of the Court

- These advanced sub-castes could exit the domain of reservation to make room for sub-castes who were relatively **more marginalised or most backward.**
- The court interpreted that **exclusion implicit** in reservation.
- The 'forwards' among 'backwards' should make ground for the marginalised.
- This will lead the nation to the **substantive equality** and not formal equality,
- States can identify and sub-classify groups within the Scheduled Caste (SC) category who **deserve greater reservation.**

The Case of Punjab Government on Reservation

- The Punjab government is defending its law that **sub-classifies groups within the Scheduled Caste (SC)** category to provide greater reservation.
- Punjab argues that states have the **authority to identify sub-castes** within SCs and grant them more reservation based on their level of marginalization.
- This power of the President of India **does not take away the power** of the States
  o To identify more backward sub-castes or groups among them who require special attention and benefits.
- The State defends the validity of the **Punjab Scheduled Caste** and **Backward Classes (Reservation in Services) Act of 2006.**
- The act gives preference to specific sub-groups within the SC category. This provision was **initially struck down by the State High Court** based on a previous Supreme Court judgment.
- However, Punjab argues that sub-classification aids equality by targeting the **most marginalized within the SC community.**
- The state emphasizes that its goal is **inclusivity** and ensuring benefits reach all backward groups.
- The **debate** includes discussions on
  o Whether reservation leads to exclusion
  o The efficiency of government
  o The varying degrees of marginalization within backward communities.

- The Supreme Court bench is considering these arguments regarding the **constitutionality** and **effectiveness** of sub-classification within reservation policies.
- The President, under **Articles 341 and 342,** has designated castes and tribes for the entire nation.

33. After Uttarakhand, Rajasthan will table UCC Bill, say ministers-The Indian Express

Relevance: Important aspects of governance, transparency and accountability,
News:
- The states of Uttarakhand and Rajasthan are considering the implementation of the Uniform Civil Code (UCC).

Rajasthan After Uttarakhand on UCC
- Following Uttarakhand's initiative, Rajasthan's ministers have indicated their plans to introduce the UCC Bill in the **upcoming Assembly session**.
- The Rajasthan Government expressed the **intention to introduce** the UCC in Rajasthan.
- The Government emphasised the **need for a uniform law applicabl**e to everyone, citing damage caused by disparate laws and advocating for national unity.
- There is the proposal to establish a **Draft Committee for the UCC** in a forthcoming cabinet meeting, ensuring adherence to **constitutional procedures**.
- There is the hope of aspirations for **nationwide adoption** of UCC

Overview of Uttarakhand's UCC Bill
- The Uttarakhand Assembly **recently tabled** the UCC Bill.
- Key provisions include:
  - Exemption of **Scheduled Tribes** from the UCC's scope.
  - Proposal for **a unified law** concerning **marriage**, **divorce**, **inheritance** of property, and **live-in** relationships, applicable to all citizens irrespective of religion.

Prelims Takeaway
- Article 44 of the Constitution of India
- Uttrakhand' s Bill on UCC

34. Karnataka, Kerala bring campaign against 'financial atrocities' of Centre to Delhi-The Indian Express

Relevance: Issues and challenges pertaining to the federal structure,
News:
- The Karnataka government, led by CM , is set to stage a **sit-in protest at Jantar Mantar in Delhi**
  - Denouncing the alleged **biased fiscal policies** of the Centre.

Solidarity of other States with Karnataka
- Kerala Government will **also join the protest** against the Centre's neglect of the state's revenue rights.
- The Tamil Nadu Government also supported **a united front against** what they perceive as unjust fiscal policies by the Centre.

Key Issues Raised
- Karnataka's protest emphasizes the **perceived financial injustices** inflicted on the state by the Central government
- The Government cited reductions in revenue shares and **faulty GST implementation.**
- Kerala's grievances center on the **alleged slashing of its borrowing limit** and reductions in **revenue shares,**
  - Prompting the state **to take legal action** against the Union government.
- Tamil Nadu accuses the Centre of exploiting its powers **to limit state borrowing capacity**
- It alleged unfairly imposition of restrictive **conditions on funding for state-owned enterprises** by the Centre Government.
- These states allege discriminatory fiscal policies favoring BJP-led states.
- All protesting states demands for a collective response to uphold the principles of fiscal federalism.

Response of Centre Government

Prelims Takeaway
- Fiscal Federalism
- The Right to Protest

- Tax devolution follows the recommendations of the Finance Commission.
- The Centre Government alleged the political grounds for such protest instead of having any some economic basis.

35. Raising judges' retirement age on performance not practical: Govt to panel - Indian Express

Relevance: Structure, organization and functioning of the Executive and the Judiciary
News:
- The government recently opposed the suggestion to **extend the retirement age** of Supreme Court and High Court judges **based on performance appraisal.**

Committee Recommendation
- In August last year, the Standing Committee on Law and Personnel in its report on **'Judicial Processes and their Reforms'** proposed a **performance-based tenure extension system for judges** beyond the current retirement age.
- It suggested assessing judges' performance considering factors like **health, quality, and quantity of judgments** before extending their tenure.
  - According to constitutional provisions, Supreme Court judges retire at the age of 65 years, while judges of the high courts retire at 62.

Government's Response
- The government disagrees with the recommendation, stating it might not be **practical** and may result in **"undue favouritism".**
- It will further **erode the powers of Parliament** and **empower the Judiciary** through the Supreme Court Collegium (SCC) to take decisions on the enhancement of age.
- Performance-based evaluations may **lead to favouritism and susceptibility to external pressures,** compromising judicial impartiality.
- This would also **strain limited resources** in the judiciary and executive involved in the appointment process.

Prelims Takeaway
• Supreme Court Collegium (SCC)
• Retirement of Judges

36. Shri Dharmendra Pradhan launches EdCIL Vidyanjali Scholarship Programme - PIB

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States
News:
- Recently, the Union Minister of Education and Skill Development and Entrepreneurship inaugurated **EdCIL Vidyanjali Scholarship Programme.**

Vidyanjali Scholarship Program
- The Vidyanjali Scholarship Program **aligns with the NEP 2020,** aiming to provide education access and opportunities to economically disadvantaged students.
- **Objective:** To ensure high-quality education access by aiding the smooth transition from secondary to higher education, providing financial aid to meritorious Navodaya Vidyalaya students facing economic constraints.
- Initially, the program targets **students in grades XI and XII** enrolled in Navodaya Vidyalayas nationwide.
- It embodies a comprehensive **societal approach towards education empowerment,** particularly for economically disadvantaged students.
- It seeks **support and funding** from various **non-governmental partners and private sources** such as CSR grants, national and international donors, and impact investors.

Vidyanjali Fintech Platform
- A dedicated fintech platform has been developed for Vidyanjali, through which sponsorships will be transferred to students via **Direct Benefit Transfer (DBT).**

Prelims Takeaway
• Vidyanjali Scholarship Program
• Educational Consultants India Limited (EdCIL)
• National Education Policy, 2020

- This platform will serve as a **central hub** for student applications, progress tracking, grant disbursement monitoring, fund utilisation tracking, impact reporting for SDG realisation, recognition of notable student achievements, and public acknowledgment of funders' support, among other functionalities.

37. HAMAS CEASEFIRE PLAN: WHAT ARE THE THREE STAGES IT PROPOSES - Indian Express

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

Prelims Takeaway
• Israel - Hamas Conflict
• Hamas Ceasefire Plan

News:
- Hamas recently proposed a **ceasefire plan** responding to mediation efforts led by Qatar, Egypt, the United States, and Israel.
- The proposal outlines **three phases,** each lasting 45 days aiming **to end the ongoing conflict in Gaza.**

Three Phases of the Plan
- These phases include the **exchange of Israeli hostages** captured by Hamas, the beginning of **Gaza's reconstruction, complete withdrawal of Israeli forces**, and the **exchange of bodies and remains.**
- **Specific categories of hostages would be released** in the first phase in exchange for **Palestinian women and children from Israeli jails.**
  o This includes women hostages, males under 19, the elderly, and the sick.
- The subsequent phases involve the **release of remaining hostages and the exchange of remains.**
- By the end of the third phase, Hamas would expect the sides to have **reached agreement on an end to the war.**

Additional Requests by Hamas
- Hamas also seeks the **release of 1500 prisoners,** with a third selected from Palestinians serving life sentences in Israeli jails.
- The truce would also involve **increased food and aid flow** to alleviate the humanitarian crisis in Gaza.

38. Rs 4,797 cr PRITHVI to boost atmosphere, polar and ocean research, says Rijiju - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• PRITHvi VIgyan (PRITHVI)

News:
- The Union Cabinet recently approved Rs 4,797 cr research scheme aimed at **enhancing research efforts in ocean, atmospheric, and polar sciences.**

PRITHvi VIgyan (PRITHVI)
- PRITHVI, led by the **Ministry of Earth Sciences (MoES),** is an **umbrella scheme to support ongoing research projects till 2026.**
- The scheme **encompasses research across various domains** such as atmosphere, hydrosphere, cryosphere, geosphere, and biosphere.
- Ongoing research projects now consolidated under PRITHVI include
  o Atmosphere and Climate Research-Modelling Observing Systems and Services (ACROSS)
  o Ocean Services, Modelling Application, Resources and Technology (O-SMART)
  o Polar Science and Cryosphere Research (PACER)
  o Seismology and Geosciences (SAGE)
  o Research, Education, Training, and Outreach (REACHOUT)
- It also introduces opportunities for Indian scientists to **collaborate with international experts,** fostering global partnerships in research endeavours.

Addressing Global Climate Change Challenges

- With the escalating impacts of climate change worldwide, **understanding the interconnected roles** of atmosphere, ocean, and poles becomes imperative.
- The amalgamation of research areas under PRITHVI **streamlines budget allocations and facilitates flexibility in fund utilisation** across different research domains.
  - o Earlier, research in all these key areas were being carried out under different sub-heads for which different budget allocations were to be made.

39. Will scrap Free Movement Regime on Myanmar border, says Amit Shah - The Hindu/ Free movement along border with Myanmar being suspended: Shah - Indian Express

Relevance: India and its neighbourhood- relations.
News:

- Recently, the Union Home Minister announced the decision to **scrap the Free Movement Regime (FMR)** between India and Myanmar.
- **Purpose:** To enhance internal security and preserve the demographic structure of North-East States bordering Myanmar.

Border States' Response

- The Manipur and Arunachal Pradesh governments **supported the decision.**
- Mizoram and Nagaland had **differing views** due to the social, economic, and cultural ties between their populations and those across the border.

Free Movement Regime (FMR)

- The FMR, initiated as part of the **Act East policy** in **2018,** aimed to **strengthen Indo-Myanmar ties.**
  - o The border, drawn by the British in 1826, divided people of the same ethnicity without their consent.
- It was a mutually agreed arrangement that **allowed tribes** living along the border to **travel 16 km into each other's territory without a visa.**
- It facilitated **people-to-people contact, boosted local trade,** and addressed **historical border demarcation issues.**
- Despite benefiting local communities, the FMR faced criticism for **unintentionally aiding illegal immigration, drug trafficking**, and **gun running.**

Prelims Takeaway
• Free Movement Regime (FMR)
• Act East Policy

40. Union Cabinet approves new fisheries scheme - The Hindu/ Cabinet approves Rs 6,000-crore fishery scheme - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
News:

- Recently, the Union Cabinet approved the **Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY).**

Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)

- It is a central sector sub-scheme under **Pradhan Mantri Matsya Sampada** aimed at **formalizing the fisheries sector** and **supporting fisheries micro and small enterprises.**
- Over Rs 6,000 crore investment will be made **over the next four years (2023-24 to 2026-27)** in all States/Union Territories under PM-MKSSY.
- A **National Fisheries Digital Platform** will be established to provide **work-based identities** to 40 lakh small and micro-enterprises in the fisheries sector.
- The Cabinet approved the **extension of FIDF for another three years until 2025-26.**
  - o within the approved fund size of Rs 7,522.48 crore and budgetary support of Rs 939.48 crore.

Pradhan Mantri Matsya Sampada Yojana (PMMSY)

- PMMSY was launched in September 2020 with an aim to **double the income of fish farmers and fishers** in the country.

Prelims Takeaway
• Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)
• Pradhan Mantri Matsya Sampada Yojana (PMMSY)

- It focuses on **sustainable development of India's fisheries sector** and is a part of the **Atmanirbhar Bharat scheme.**
- In order to facilitate access to institutional credit, fishermen are provided with **insurance coverage, financial assistance** and a facility of **Kisan Credit Card (KCC)** as well.

Objectives
- **Harness the potential of the fisheries sector** in a sustainable, responsible, inclusive and equitable manner
- **Enhance fish production and productivity** through expansion, intensification, diversification and productive utilisation of land and water
- **Modernise and strengthen the value chain** including post-harvest management and quality improvement
- **Double fishers' and fish farmers' incomes** and generate meaningful employment
- Enhance the contribution of the fisheries sector to **agricultural Gross Value Added (GVA) and exports**
- Ensure **social, physical and economic security** for fishers and fish farmers
- Build a robust **fisheries management** and **regulatory framework**

Implementation Strategy
- It is implemented as an **umbrella scheme** with two separate components namely
  o **Central Sector Scheme:** The project cost will be borne by the Central government.
  o **Centrally Sponsored Scheme:** All the sub-components/activities will be implemented by the States/UTs, and the cost will be shared between the Centre and State.

41. Lok Sabha clears Bills to make additions to ST lists of Odisha, A.P. - The Hindu/ House passes Bills to amend SC, ST lists in Andhra, Odisha - Indian Express

Relevance: mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

News:
- Recently, two Bills which seek to **modify the list of SCs and STs in Andhra Pradesh and Odisha** were passed by the Lok Sabha.
- The Bills had already been cleared by the Rajya Sabha.

Prelims Takeaway
• Particularly Vulnerable Tribal Groups (PVTGs)
• Process and Benefits of Inclusion in the ST List
• Reservation Policy

Expansion of the List
- In Odisha, it will add four Particularly Vulnerable Tribal Groups (PVTGs) in the list.
- The new communities added include **Pauri Bhuyan, Paudi Bhuyan, Chuktia Bhunjia, Bondo** and **Mankidia.**
- In Andhra Pradesh, three PVTGs viz. **Bondo Porja, Khond Porja** and **Parangiperja** are being added to the list of STs.

Process of Inclusion in the ST List
- The process begins with the **recommendation from the respective State governments.**
- These recommendations are then sent to the **Tribal Affairs Ministry,** which reviews and sends them to the **Registrar General of India** for approval.
- This is followed by the **National Commission for Scheduled Tribes' approval** before the list is sent to the **Cabinet for a final decision.**

Benefits in the Inclusion in the ST List
- It will enable members of the communities to **derive benefits meant for STs** under the existing schemes of the government.
  o These include post-matric scholarship, overseas scholarship and the national fellowship, besides education, concessional loans from the National Scheduled Tribes Finance and Development Corporation, and hostels for students.
- In addition, they will also be entitled to **benefits of reservation** in services and admission to educational institutions as per the government policy.

42. Women head only 5% of Information Commissions: report - The Hindu

Relevance: Polity

News:

- A report compiled by the **'Satark Nagrik Sangathan' (SNS)** highlighted a **lack of diversity in the leadership of Information Commissions,** particularly the minimal representation of women.

Gender Disparity

- Since the passage of the Right to Information Act in 2005, merely **9% of all information commissioners** across the country **have been women.**
- **Only 5%** of Information Commissions have been **headed by women.**
- Currently, **no Information Commission** is led by a woman.
- **12 Information Commissions,** constituting around 41%, have **never had a woman commissioner** since their establishment.

Composition Overview

- Of the approximately 465 commissioners for whom background information was available
  - The majority, 58%, were retired government officials.
  - Lawyers or former judges accounted for 14%, including 11% advocates or from the judicial service and 3% retired judges.
  - 11% had a background in journalism
  - 5% were academics, and 4% were social activists or workers.

Performance Issues

- Several Information Commissions are observed to return a significant number of cases **without issuing any orders.**
- Many commissions exhibit a notably **low rate of case disposal per commissioner.**
- The report also emphasizes the **issue of delays in making timely appointments** to Information Commissions.

43. Low Budget outlay hurting MGNREGS, says House panel - The Hindu/ Govt allocated 22% less funds for MGNREGA in RE for FY24: House panel - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation

News:

- According to a Parliamentary committee report, the Finance Ministry has allocated **22% less funds for MGNREGA** in the revised estimates for the financial year 2023-24.

Revised Estimates

- The Rural Development Ministry had initially sought Rs 1.1 lakh crore, but the Finance Ministry revised it downward to Rs 86,000 crore.
- The Ministry of Rural Development proposed the increased amount based on the **demand-driven nature of MGNREGA.**
- The committee observed that **daily wages under MGNREGA are inadequate** and **vary across states,** with the lowest wages in states like Madhya Pradesh and Chhattisgarh.
- The parliamentary committee also acknowledged the demand for **raising the guaranteed number of workdays from 100 to 150** and recommended a practical study on the matter.

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

- It is one of the largest **work guarantee programmes** in the world launched in **2005** by the **Ministry of Rural development.**
- **Objective:** To guarantee **100 days of employment** in every financial year to **adult members of any rural household** willing to do **unskilled manual work.**
  - Some households, particularly Scheduled Tribe households in forest areas, are entitled to 150 days of work.
  - Additional work can be provided in areas affected by drought or natural calamities.
- The act aims at addressing the **causes of chronic poverty** through a **rights-based framework.**

- If any rural adult fails to get work within **15 days** of demanding it, an **'unemployment allowance'** is given.
- The act mandates **Gram sabhas** to recommend the works that are to be undertaken and **at least 50%** of the works must be executed by them.
- At least **one-third** of beneficiaries need to be **women**.
- The **Centre** bears **60% of the cost of the materials used for MGNREGS work** and the **remaining 40%** is provided by the **State governments.**
- **Data**:
  o As of 2022-23, there are **15.4 crore active workers** under the MGNREGA.

44. Self-reporting of mental disorders in India 'lower than burden' - The Hindu

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

Prelims Takeaway
• Mental Health
• National Mental Health Programme (NMHP)

- Access to healthcare and financial protection for individuals with **mental disorders** in India are **influenced by social determinants.**
- This is affecting the country's progress towards **Universal Health Coverage (UHC).**

Low Self-Reporting Rates

- A study by researchers from IIT Jodhpur highlights **low self-reporting rates for mental health issues in India.**
- Based on the 75th Round National Sample Survey (NSS) 2017-2018, self-reporting of mental illness was **less than 1%.**
- NSS data collected from over 5,55,000 individuals, indicating a significant gap in recognizing mental health concerns.

Out-of-Pocket Expenses

- The study emphasizes **substantial out-of-pocket expenses** associated with seeking mental health services.
- **Reliance on the private sector** leads to higher expenses, particularly impacting individuals with lower incomes.
- Individuals with higher incomes were **1.73 times more inclined to report health problems** compared to those with lower incomes, uncovering a socioeconomic divide.

Economic Burden

- **Middle-aged individuals** are particularly affected, with mental illness **affecting productivity** and **economic impact** on the country.
- Families spend a considerable amount monthly on **treatment and travel expenses,** exacerbating the economic burden.
  o Families had to spend nearly Rs 1,000 – Rs 1,500 a month mainly for treatment and travel to access care.
- The private sector plays a major role in providing mental health services, but only a small percentage of individuals have **health insurance coverage.**
  o A mere 23% of individuals hospitalised for mental disorders had health insurance coverage at the national level.

Link Between Education, Income, and Mental Disorders

- Low levels of education and income are closely associated with mental disorders, contributing to impoverishment.
- Individuals with **lower income, poor education, and limited employment opportunities** are **more vulnerable** to mental disorders due to adverse social and economic determinants of health.

Associated Stigma

- **Stigma in society** acts as a significant barrier to reporting mental health issues and seeking treatment.

- o NMHS findings revealed that nearly 80% of persons suffering from mental disorders, had not received any treatment despite the presence of illness for more than 12 months.
- Stigma associated with mental disorders prevents **access to treatment, education, work, and marriage opportunities,** affecting both individuals and their families.

45. Can Preamble be amended keeping date intact, asks SC - The Hindu/ Can Preamble be amended without altering date, asks SC - Indian Express

Relevance: Constitution of India —historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

Prelims Takeaway
• Preamble
• Kesavananda Bharati Case

News:
- The Supreme Court recently probed whether the **Preamble of the Indian Constitution** could have been **amended without altering the date of its adoption** on November 26, 1949.

Background
- The Preamble underwent **one amendment** in December 1976, through the **42nd Constitutional Amendment,** during the Emergency, by the Indira Gandhi government.
- This amendment **introduced the terms 'socialist' and 'secular'** and replaced the phrase 'unity of the nation' with **'unity and integrity of the nation'.**
- Originally, the text of the Preamble declared India as a **'sovereign, democratic republic'.**

Legal Inquiry
- The Bench was hearing a petition filed to **delete the words 'socialist' and 'secular'** from the Preamble.
- The judges are questioning whether it would have been possible to **modify the Preamble** while keeping the **original date of adoption intact.**
- The **Kesavananda Bharati case** establishes the Preamble's amendability, provided it doesn't violate the Constitution's basic structure.
- The Supreme Court schedules further hearings on the matter for the week starting April 29, 2024.

46. BCI powers should be restricted to eligibility for practising: panel - Indian Express

Relevance: Statutory, regulatory and various quasi-judicial bodies.

Prelims Takeaway
• Bar Council of India (BCI)
• Higher Education Commission of India (HECI)

News:
- Recently, the Parliamentary Standing Committee on Personnel, Public Grievances, Law And Justice presented a report titled **"Strengthening Legal Education in View of Emerging Challenges Before The Legal Profession"** in the Rajya Sabha.

Restricting BCI's Role
- The report suggests restricting the Bar Council of India's (BCI) role to **granting basic eligibility for practising at the Bar.**
- It criticizes the BCI for reckless **proliferation of substandard law colleges** due to its unchecked power to inspect and grant recognition.

Independent Authority for Postgraduate Programs
- The panel recommends establishing an **independent authority for postgraduate legal programs,** emphasizing the need for relevance beyond courtrooms.
- It argues that the BCI lacks the power and expertise for necessary changes in legal education.

Creation of National Council for Legal Education and Research

- It also proposed the formation of a **"National Council for Legal Education and Research"** under the **Higher Education Commission of India (HECI).**
  o This suggests a separation from the BCI's jurisdiction.
- However, the HECI Bill, which excludes medical and law colleges, is yet to be introduced in Parliament.

Uniform Curriculum

- The panel advocates for a **uniform curriculum across law colleges** to replace the current practice of different syllabi by affiliating universities.
- It highlights the need for **consistency among law students** and recommends the BCI to define this uniform curriculum for undergraduate courses.

Quota Implementation

- The panel observed that premier law colleges have not implemented **quota for SCs, STs and OBCs in undergraduate and postgraduate courses** especially in all-India seats.
- Therefore, the report suggests that the BCI should consider **withdrawing recognition** if NLUs and other colleges fail to implement it.

47. PM-SVANidhi boosted annual income of street vendors by ₹23,000: Study - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- Recently, a study was conducted by the Centre for Analytical Finance of the Indian School of Business (ISB) to **assess the impact of the PM SVANidhi scheme.**
- It was commissioned by the Union Ministry of Housing and Urban Affairs.
- The study covered **5,141 vendors** across 100 urban local bodies in 22 states.

Prelims Takeaway
• PM-SVANidhi
• Non-Banking Financial Company
• Non - Performing Assets (NPAs)

Key Findings

- **60.65 lakh first-term loans,** 16.95 lakh second-term loans, and 2.43 lakh third-term loans have been disbursed under the scheme so far.
- **For 95% of the vendors** surveyed, the **PM-SVANidhi loan was their first-ever bank loan,** and for 72%, it was their first business loan.
- The first tranche of Rs. 10,000 led to an **additional annual income of 23,460** for each beneficiary.
- **94% of beneficiaries** who availed the first loan of 10,000 **used it for business investments.**
  o The figure was 98% for those who availed the second loan.
- **13.9%** of all disbursed loans were classified as **non-performing assets (NPAs).**
  o The highest NPAs were recorded during the Covid-19 pandemic, declining over time.
- The **debt-to-income (DTI) ratio of the beneficiaries (9%)** was lower than expected for small businesses, indicating their high creditworthiness.
- However, there was **no significant improvement** in street vendors accessing **formal credit** from other sources.
  o Only 9% of beneficiaries had loans from other financial institutions.

PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) Scheme

- It is a **Central Sector Scheme** i.e. fully funded by the **Ministry of Housing and Urban Affairs.**
- **Objectives**
  o To facilitate collateral free working capital loan to street vendors
  o To incentivize regular repayment and reward digital transactions
- The Scheme is available to **all street vendors** engaged in **vending** in **urban areas.**
- **Eligibility:** Beneficiaries belonging to only those States/UTs which have notified Rules and Scheme under Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014.

- **Lending Agencies:** Microfinance Institutions, Non-Banking Financial Company, Self Help Groups
  - Due to their ground level presence and proximity to the urban poor including the street vendors.

Early Repayment

- On timely/early repayment of the loan, an **interest subsidy of 7% per annum** will be credited through direct benefit transfer on a six monthly basis.
- **Rise of the credit limit** on timely/ early repayment of loans
- There will be **no penalty on early repayment** of loan.

48. India to leverage US-led partnership to get critical mineral assets from abroad - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

News:

- The Union Mines Ministry has proposed to **circulate critical mineral block proposals**

Prelims Takeaway
- Critical mineral
- KABIL

Key Highlights

- It was received by partner countries in the **US-led Minerals Security Partnership** (MSP) with **central public sector** undertakings or PSUs
  - To allow them to acquire critical mineral assets abroad.
- The ministry has also recommended that **PSUs give a clear financial mandate to relevant subsidiaries** to expedite the acquisition process
- The MSP is a **US-led collaborative effort involving thirteen countries** including the UK, Australia, France, and Germany, and the European Union
  - Which aims to catalyse public and private investment in critical mineral supply chains globally.
- The **collaboration is currently engaged in fostering a critical minerals and metals** cooperation forum for :
  - The sharing of expertise
  - Building a robust battery materials supply chain
  - Jointly developing a minerals processing facility in South America.
- **KABIL** is a central public sector enterprise (CPSE) under **the mines ministry**
  - Which on January 15 signed an agreement with a state-owned company in Argentina to explore and develop five lithium blocks in the South American country.
- NTPC is looking at acquiring lithium, cobalt, graphite, and high-purity limestone assets abroad through its subsidiary NTPC Mining Limited.

49. Ensure fair, equitable evaluation process in NExT: House panel - The Hindu

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

- **The National Exit Test (NExT) s**hould be brought in only after meticulous due diligence

Prelims Takeaway
- NEXT Regulations, 2023
- National Board of Examinations

Key Highlights

- Keeping in mind the diverse background of medical colleges from which the first batch of NExT aspirants will come
  - The Parliamentary Standing Committee on Health and Family Welfare said in its report on the quality of medical education in India
- The Committee, under the chairmanship of **Bhubaneswar Kalita**, explained that
  - Presently, it is medical colleges which conduct final-year MBBS examinations.
- At the same time, **the responsibility for NEET PG and FMGE** — which are licensing and qualifying examinations for those who have completed their undergraduate medical degrees —

o Falls under the purview of the National Board of Examinations (NBE), overseen by the Director-General of Health Services within the Health Ministry.

- The **National Medical Commission Act** now provides for the **NExT to enhance the competence of graduating MBBS students who obtain licenses to practice annually**.
- This initiative addresses the current emphasis on clearing the NEET-PG, which is predominantly theoretical and necessitates rote memorisation.
- In June 2023, the National Medical Commission developed the **NMC Exit Test Regulations 2023 (NEXT Regulations, 2023).**
  - o The test was to replace the final MBBS examination
  - o act as a licentiate exam for grant of registration to practice medicine, and provide a basis for entry to postgraduate courses instead of NEET PG.

Mentor institutes
- The Committee recommended that **the government divide India into zones, with reputed institutes**
  - o Such as AIIMS to function as mentor institutes for all the other medical colleges in that zone.
- Mentor institutes shall play a significant role in **monitoring the standard of education** and the classes in the newer medical colleges as well as private institutions.

50. Appointing Deputy CMs not a breach of Constitution: SC - The Hindu

Relevance: Constitution of India —historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

News:
- The **Supreme Court dismissed a petition** challenging the appointment of Deputy Chief Ministers in States on the ground that **no such position exists in the Constitution.**

Prelims Takeaway
• Sardar Vallabhai Patel
• Deputy CM

Key Highlights
- A three-judge Bench headed by Chief Justice of India **found no harm in the appointment of Deputy Chief Ministers**
  - o Reasoning that they were after all Members of Legislative Assemblies (MLAs) of the States and Ministers of State governments, and never mind the nomenclature.
- Deputy Chief Ministers are **first and foremost Ministers** in the government of the State.
- A person who holds the **office of the Deputy Chief Minister** must at any event, within a stipulated period, be an MLA.
- persons **appointed did not draw a higher salary** and were like any other Minister in the government, and may just be more senior than the others.

The post of Deputy CM
- Deputy CM is a political post, and it's not a constitutional post like the Vice President of India.
- Its origin can be traced to the post of Deputy Prime Minister which was appointed in 1947 post-independence, **Sardar Vallabhai Patel is the first Deputy PM of India.**
- This led to the development of the post of Deputy CM in India.
- The **appointment and removal of Deputy CM** is entirely at **the discretion of the Chief Minister.**
- The Chief Minister can appoint more than one Deputy CM.
- For example: Maharashtra has two Deputy CMs and Andhra Pradesh has five Deputy CMs.
- There is no fixed tenure as the Chief Minister may reshuffle the portfolio or remove a deputy CM at any point of time.

51. RuPay, UPI rolled out in Mauritius, Sri Lanka - The Hindu/ UPI launched in SL, Mauritius; uniting partners, says PM Modi - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

News:

- **RuPay cards and Unified Payments Interface** (UPI) connectivity between India and Mauritius, as well as **UPI connectivity between India and Sri Lanka were established**

Key Highlights

- Objective: To **deepen financial integration** and to facilitate digital payments among citizens of the three countries.
  - o An Indian traveller to Mauritius will now be able to pay a merchant in Mauritius using UPI.
  - o Similarly, a Mauritian traveller will be able to pay a merchant in India using the Instant Payment System (IPS) app of Mauritius.
- With the adoption of RuPay technology, the MauCAS card scheme of Mauritius will enable banks in Mauritius to issue RuPay cards domestically.
- Such cards can be used at ATMs and PoS terminals locally in Mauritius as well as in India.
- With this, Mauritius becomes the first country outside Asia to issue cards using RuPay technology.
- **Indian RuPay cards would also be accepted at ATMs** and PoS terminals in Mauritius
- The digital payments connectivity with Sri Lanka will enable Indian travellers to **make QR code-based payments at merchant locations in Sri Lanka using their UPI apps.**
- These projects had been developed and **executed by NPCI International Payments Ltd (NIPL)** along with partner banks / non-banks from Mauritius and Sri Lanka, under the guidance and support of the RBI.
- The above facilities have been made operational through select banks/non-banks/ third party application providers in India, Mauritius and Sri Lanka.
- The collaborations on India's digital payments connectivity with Mauritius and Sri Lanka through UPI and RuPay will
  - o deepen financial integration
  - o strengthen the long historical cultural, and economic relations of India with Mauritius and Sri Lanka

52. BREAKTHROUGH - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

News:

- **Qatar has released eight veterans of the Indian Navy** who were sentenced to death on espionage charges.
- Seven of the eight former Indian Navy personnel have now returned to India.

India – Qatar Bilateral Relation

- The two countries have had friendly relations for decades.
- In 2021, India was among the top four **export destinations for Qatar;**
- It is also among the top three sources of Qatar's imports.
- India's total imports from Qatar in FY2022-23 were valued at $16.81 billion, of which LNG imports alone were worth $8.32 billion, or 49.5%.
- **Qatar is India's largest source** of liquefied natural gas (**LNG**).
- India's exports to Qatar were valued at just $1.97 billion in FY2022-23.
- The **major exports include** cereals, copper articles, iron and steel articles, vegetables, fruits, spices, and processed food products.
- In January 2024, India and Qatar agreed to prolong their LNG supply agreement, extending it until 2048.
- India's Petronet has secured a monumental deal to continue purchasing 7.5 million tonnes of LNG annually from Qatar starting in 2029.
- This agreement, hailed as **the world's largest extension for liquefied natural gas**, builds on an original 25-year contract initiated in 1999, with deliveries commencing in 2004.

53. Report by law panel suggests plan to tackle epidemics - Indian Express

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:
- The **286th Law Commission Report** recommended creation of an Epidemic Plan and Standard Operation Procedure to address future epidemics

Key Highlights
- It underlines that there is no clear demarcation between **the powers of the Centre, state, and local authorities during an epidemic**
  o Which leads to uncoordinated responses.
- Highlighting the limitations of the **Epidemic Diseases Act, 1897 (EDA), the 286th Law Commission Report states**
  o The management, control and prevention of epidemic diseases cannot be restricted to a century-old law.
- The report notes that the EDA was not designed to combat modern issues with the spread of infectious diseases.
- it states, can result in infectious diseases rapidly turning into epidemics or pandemics.
- After the Covid-19 pandemic, the Law Commission suo moto decided to extensively examine the existing legal framework
  o To tackle what it calls "significant deficiencies in addressing the containment and management of future epidemics in the country".
- The report claims that as a **colonial-era legislation, the EDA has great potential for abuse.**
- The most dramatic change suggested is the creation of an Epidemic Plan and a **Standard Operating Procedure to address the spread of infectious diseases.**
- This, the report states, would make sure the powers and obligations of different levels of government are clearly demarcated
  o So that there is a coordinated response to any public health emergency.
- The report recommends that the EDA must include provisions to ensure that the Epidemic Plan is prepared, enforced, and revised at regular intervals.
- The report states that the **plan should include provisions on quarantine, isolation, and lockdowns**
  o While ensuring that the measures are implemented fairly, without violating the fundamental rights of citizens.
- It should also contain provisions on
  o Privacy-friendly disease surveillance
  o Regulating the distribution
  o Availability and transport of medical supplies
  o Proper dissemination of information to the public
  o Medical testing and research for vaccinations and medicines
  o The safe disposal of infectious waste among a variety of other subjects.
- The report suggests the creation of a Standard Operating Procedure (SOP) which will **"ensure proper and coordinated response to any epidemic with pre-defined powers**.

54. Centre rules out MSP law, invites farmers to talks - The Hindu/ MSP issue: what govt committee set up in 2022 has done so far - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:
- The Centre yet again made it clear that **announcing a guaranteed minimum support price (MSP),** the key demand of the farmers, **will not be possible.**

Key Highlights
- As the protests by farmers belonging to the Samyukt Kisan Morcha
  - Non-Political (SKM-NP), a splinter group of the Samyukt Kisan Morcha (SKM), and the Kisan Mazdoor Morcha (KMM)
- Escalated into a full-blown conflict with the security forces at various points on the Haryana-Punjab border
- The government, however, offered a third round of talks with the leaders of the groups.
- Heavy police deployment was also witnessed on Delhi's borders with Uttar Pradesh.

The MSP
- It is a guaranteed price for their produce from the Government.
- **MSP is a form of market intervention** by the Government of India to insure agricultural producers against any sharp fall in farm prices.
- MSP in India is a **price floor set by the government** to ensure that farmers receive a minimum price for their agricultural produce, thereby safeguarding their income and encouraging agricultural production
- The government announces **MSPs for 22 mandated crops** and **Fair and Remunerative Prices (FRP) for sugarcane.**
- The mandated crops are 14 crops of the kharif season, 6 rabi crops and two other commercial crops

55.   Govt. revises guidelines for community radio stations - The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:
- Minister of Information and Broadcasting released the **revised policy guidelines for setting up community radio stations** at the Regional Community Radio Sammelan (South).

Prelims Takeaway
• Community Radio
• Minister of Information and Broadcasting

Key Highlights
- The revised guidelines allowed a single institution to **set up a maximum of six stations in different districts of operation**
  - increased the advertising time for the stations from seven minutes to 12 minutes per hour,
  - increased the rate of advertisement from ₹52 per ten seconds to ₹74 per ten seconds.
- Pointing out that the **first community radio was launched in 2004** by former Deputy Prime Minister L.K. Advani
- There were **481 community radio stations** in India at the moment,

Community Radio
- It serves as a platform for airing local voices on various community issues, **including health, education, agriculture, and more.**
- It empowers marginalised communities and preserves local culture and heritage by broadcasting in local languages and showcasing local talent.
- Community Radio plays a pivotal role in **promoting community empowerment and facilitating positive social change.**

56.   India, UAE ink pacts on linking digital payment platforms, trade, energy - Indian Express

Prelims Takeaway
• Comprehensive Economic Partnership Agreement
• Bilateral Investment Treaty
• India-Middle East Economic Corridor

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

- UPI

News:

- Recently, the Indian Prime Minister met the UAE's President in Abu Dhabi and **signed several pacts.**
- These **include** bilateral investment promotion, port infrastructure development, power trade, interlinking of digital payment platforms like the UPI, credit and debit card.

Key Agreements Signed

- A **Bilateral Investment Treaty** and a **Comprehensive Economic Partnership Agreement** to promote investments.
- An intergovernmental framework agreement on the **India-Middle East Economic Corridor** furthering regional connectivity.
- Agreements on **interlinking of digital payment platforms** viz. UPI (India) and AANI (UAE) to facilitate seamless cross-border transactions between the two countries.
- Pact on **interlinking domestic debit/ credit cards** - RuPay (India) with JAYWAN (UAE).
  o This will enhance the universal acceptance of RuPay across the UAE.
- Pacts on energy, an MoU on cooperation in the field of **electrical interconnection and trade.**
  o This opens new areas of collaboration in the field of energy, including energy security and energy trade.
- An MoU on cooperation in **digital infrastructure projects** creating a framework for wide ranging cooperation and facilitating sharing of technical knowledge, skills and expertise.
- MoUs in the cultural domain to promote cultural exchange and collaboration such as **cooperation in heritage preservation and museums.**
- Agreements on **port infrastructure development** to enhance connectivity and trade facilitation.

57. MEA told to monitor organ transplantion process for foreigners - The Hindu/ Govt readies mechanism to monitor organ transplants for foreigners - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- The Union Health Secretary has urged the Ministry of External Affairs to appoint a **nodal person to oversee the transplantation of organs** in foreigners to curb the illegal buying and selling of organs.

Prelims Takeaway
• National Organ and Tissue Transplant Organization (NOTTO)
• Transplantation of Human Organs Act, 1994

Concerns Raised

- Recent concerns regarding the **authenticity of documents** establishing the relationship between donors and recipients have prompted this action.
- Media reports highlighted irregularities in documentation, including the issuance of **'Form 21' certificates** by the Myanmar embassy on plain paper.
- The veracity of such documents, including identity papers and proof of residence, has been questioned, indicating potential illegitimacy.

Significance of Form 21

- Form 21 plays a crucial role in the **authorization process for organ transplants.**
- It serves as **evidence of the genuine relationship** between donors and recipients.
- It contains essential details such as names, addresses, photographs etc.
- It also requires **embassy certification of the relationship's authenticity.**

Future Measures and Implications

- Officials are currently finalising the mechanism for monitoring transplantation cases involving foreign nationals.
- A nodal person is likely to oversee all such cases to ensure compliance with regulations and prevent illegal activities.

58.   'Specific duration' clause in draft India-EFTA pact may affect drug industry - The Hindu

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources

Prelims Takeaway
• EFTA
• Patented Drugs

News:
- A clause in a draft free trade agreement text being negotiated between India and the **European Free Trade Association (EFTA) Switzerland, Iceland, Liechtenstein and Norway**
- It could delay access to affordable, generic versions of patented drugs in India by a minimum of six years

Key Highlights
- There is also a line that suggests this should **apply not only to 'new' chemical drugs but also a class of drugs called 'biologics drugs,**
  - Monoclonal antibodies, vaccine formulations — that involve complex mixtures of organic and inorganic entities, and are harder to make copies of.
- Many Indian biotechnology **companies are developing biologics drugs.**
- This is mostly because India's generic drug industry has over the years made affordable versions of expensive drugs and become a large global supply itself.
- **The Indian pharma industry is the third largest** in the world and produces over 60,000 generic drugs across 60 therapeutic categories and had an annual turnover of ₹3.4 lakh crore,
- "These effectively means that drugs such as bedaquiline (for TB) under provisions of data exclusivity wouldn't be available

"Balanced solutions"
- India's Commerce Minister for negotiations on the TEPA, following which they had reached **"balanced solutions" to concerns around the agreement.**
- While details of these solutions are not public, intellectual property (IPR) concerns are a major sticking point.
- **Patented drugs give exclusive marketing rights** to the inventor, or whoever files for the patent first, for 20 years.
- This has often resulted in essential drugs and medicines being unaffordable in several countries, including in India.

'Data exclusivity'
- He current practice, whereby generic drug makers make a copy-cat, establish that it's for all practical purposes the same drug
  - Rely on the published clinical trial data to prove that it is safe and effective, ceases to be legal.
- even extend to drugs that have not been patented in India and require generic manufacturers to either wait out the exclusivity period or repeat expensive clinical trials.
- For instance, **Colchicine, a traditional medicine used for gout saw its price rise by 5000% in the United States**
  - After one company was granted data exclusivity rights blocking other companies' rights to manufacture it.
- The India EFTA text is a broad-ranging agreement that has been negotiated between India and the four countries since 2008
  - To increase investment by these countries in India and reduce tariffs, on a range of exports from these countries.

59.   No more adjournment letters in after-notice bail cases: SC - The Hindu

Relevance: Structure, organization and functioning of the Executive and the Judiciary—Ministries and Departments of the Government; pressure groups and formal/informal associations and their role in the Polity.

News:

- **Adjournments, denounced as a major factor for pendency**, delay in court hearings, and a money-drainer for litigants, is no longer going to be easy in the Supreme Court.

Key Highlights

- A circular issued by the Supreme Court said it would not entertain letters of adjournment from lawyers in bail and anticipatory bail cases for which notice had been earlier issued by the court.
- Letters of adjournment are **last-minute requests by parties for postponement of cases** listed before a Bench of the court.
- The case, when called for hearing in the day, is usually adjourned if all the parties agree.
- Usually, they do it as a **matter of professional courtesy.**
- The court said such letters seeking adjournment would also not be entertained in cases
  - in which exemption from surrendering has already been granted;
  - cases in which an interim order favouring the party seeking the adjournment is already in operation;
  - and in matters in which suspension of sentence has been sought.
- This would mean that the parties must necessarily appear in court in these categories of cases and the Bench would take a decision, in its own discretion
- The court had in turn constituted a committee of judges to prepare a **standard operating procedure (SoP) on adjournments.**

60. Panagariya chairs first meeting of 16th Finance Commission - Indian Express

Relevance: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure

News:

- Recently, the **16th Finance Commission (XVI-FC)** convened its inaugural meeting under the **Chairmanship of Arvind Panagariya.**

Terms of Reference (ToR)

- During the meeting, it **discussed its Terms of Reference,** as per the order by the President of India and notified by the Ministry of Finance.
- **Terms of Reference (ToR) approved by the Cabinet**
  - The distribution between the Union and states of the net proceeds of taxes
    - which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution
  - The allocation between states of the respective shares of such proceeds
- **Other Terms of Reference (ToR):** The principles governing
  - The grant in-aid of the revenues of states out of the Consolidated Fund of India
  - The sums to be paid to states by way of grants-in-aid of their revenues.
- Suggest measures needed to **augment the Consolidated Fund of a State** to supplement the resources of panchayats and municipalities as per ToR.

61. Rare Case Of Bubonic Plague In US, It Killed 50 Million In 14th Century - NDTV

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

- Recently, officials in the US state of Oregon said they are dealing with a **rare human case of bubonic plague** that was likely transmitted by a pet cat.

Bubonic Plague

- Bubonic plague is one type of plague that gets its name from the **swollen lymph nodes (buboes)** caused by the disease.
    - Plague is an infectious disease caused by a specific type of bacterium called Yersinia pestis, a zoonotic bacterium usually found in small mammals and their fleas.
- Called the **Black Death,** it killed millions of Europeans during the Middle Ages.
- Plague can be a very severe disease in people, with a **case-fatality ratio of 30% to 60%** for the bubonic type, and is always fatal for the pneumonic kind when left untreated.
- **Symptoms:** The symptoms include
    - Sudden high fever and chills
    - Pain in the areas of the abdomen, arms, and legs
    - Headaches
    - Large and swollen lumps in the lymph nodes(buboes) that develop and leak pus.
- **Transmission:** It is transmitted between animals and humans
    - by the bite of infected fleas
    - direct contact with infected tissues
    - inhalation of infected respiratory droplets.
- The incubation period of bubonic plague is **usually 2 to 8 days.**
- **Treatment:** It can be treated and cured with antibiotics such as Ciprofloxacin, levofloxacin, moxifloxacin, Gentamicin and Doxycycline.

62. India has rejected demand for data exclusivity in drug development in FTA talks: Commerce Secretary - The Hindu

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

News:

Prelims Takeaway
• Free Trade Agreement (FTA)
• TRIPS Agreement
• European Free Trade Association (EFTA)

- India has dismissed the request for **'data exclusivity'** during ongoing discussions with the **European Free Trade Association (EFTA)** for a free trade agreement.

The Background

- The EFTA, comprising **Switzerland, Norway, Iceland, and Lichtenstein,** have consistently pushed for **data exclusivity since 2008** in trade negotiations with India.
    - EFTA is an inter-governmental organisation for the promotion and intensification of free trade.
- India rejects it as such a clause would impede its **thriving generic drug industry.**
- It has been pivotal in providing **affordable alternatives to expensive medications** globally.
    - India's generic drug industry is estimated at about USD 25 billion and the country exports 50% of its produce.

Data Exclusivity

- It involves a provision in the draft agreement proposing a **minimum six-year embargo on clinical trial data** produced during drug testing and development.
- This clause would compel manufacturers seeking to **replicate a drug** to
    - either generate their own data, which is costly
    - or wait out the embargo period before selling their version in India.
- Through it, innovator firms can **prevent competitors from obtaining marketing licenses for low-cost versions** during the exclusivity period.
- This regulation could also **impact drugs not patented in India.**

- Data exclusivity is beyond the provisions of the **TRIPS agreement** under the WTO (World Trade Organisation).

63. EU rules policing digital content kick in today; harsh punishments for violation- The Hindu

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

News:

Prelims Takeaway
• Digital Services Act
• EU

- Digital companies will have nowhere to hide after the **EU's landmark content law enters into full force with the risk of heavy fines for any violations.**

Key Highlights

- The new rules, known as the **Digital Services Act (DSA), kicked in last year for the world's largest platforms**
  o Including Facebook and TikTok, but will now apply to all except the smallest companies.
- When the **European Union proposed the law in 2020,** the objective was simple:
  o To tame the wild west online, where Brussels felt companies were not doing enough to block illegal content or acting sufficiently to protect consumers.
- Brussels has already bared its teeth, showing the tech titans that it means business.
- There have been a wave of probes launched by the European Commission to quiz the largest platforms on how they are addressing an array of concerns from consumer protection to children's activity online.
- So far, the **EU has launched formal infringement proceedings** against tech billionaire Elon Musk's X over "illegal content and disinformation".
- Punishment for violations of the DSA will be harsh.
- Those that **breach the rules could be fined up to 6% of their global annual turnove**r, or even banned in the EU for serious and repeated violations.
- The **EU will officially be able to hit companies with sanctions,** including fines, for any violations
- The DSA has faced a slew of legal challenges from Amazon and Zalando over their designations as "very large" firms, and from Meta and TikTok over a fee to pay for enforcement.

64. Coaching centers can't use misleading ads: draft guidelines- The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

Prelims Takeaway
• CCPA
• Consumer Protection Act

- The Central Consumer Protection Authority (**CCPA**), has **released draft guidelines for the "Prevention of misleading advertisemen**t in coaching sector

Key Highlights

- The Central Consumer Protection Authority (CCPA) **is an arm of the Union Consumer Affairs Ministry,**
- It will bring such offenses under the radar of **the Consumer Protection Act.**
- Such guidelines were initiated after widespread complaints against **certain coaching centers for**
  o Making false claims without acknowledging the individual efforts of the students and creating a false sense of urgency
  o fear of missing out that may heighten anxieties amongst students, or parents will be considered as misleading under the new guidelines.

Central Consumer Protection Authority (CCPA)

- CCPA is a **regulatory body established in 2020** based on the provisions of the **Consumer Protection Act, 2019.**
- It will have a **Chief Commissioner as head,** and only two other commissioners as members
- The CCPA will have an **Investigation Wing** that will be headed by a Director General.

- District Collectors too, will have the power to investigate complaints of violations of consumer rights, unfair trade practices, and false or misleading advertisements.
- It will Inquire or investigate matters relating to violations of consumer rights or unfair trade practices suo moto
  - Or on a complaint received, or on a direction from the central government.
- **Pass an order for refund the prices of goods or service**s so recalled to purchasers of such goods or services
  - Discontinuation of practices which are unfair and prejudicial to consumer's interest".
- Impose a penalty up to Rs 10 lakh, with imprisonment up to two years, on the manufacturer or endorser of false and misleading advertisements.

65. Use Chabahar port, India tells Central Asian countries- The Hindu

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Prelims Takeaway
• Chabahar port
• Shahid Beheshti

News:
- **India has urged Central Asian countries to use the port of Chabahar** located on the southeast coast of Iran to enhance connectivity and trade with India and other countries in the world.

Key Highlights
- **Participating in the sixthRegional Dialogue of Secretaries of Security Council**s/National Security Advisers on Afghanistan in Kyrgyz capital Bishkek
  - India's Deputy National Security Adviser called for an "inclusive and representative" government in Afghanistan
  - said the approach towards the Taliban-ruled country should be based on consensus.
- During his interaction with d**elegates from Iran, Russia, Kyrgyzstan, Kazakhstan and Turkmenistan,**
  - India invited "Central Asian neighbors to utilize the Chabahar port as well as the Shahid Beheshti terminal at the port for maritime trade with India and other countries of the world
- **India has not recognised the Taliban outfit** which came to power in August 2021 after the end of the U.S. occupation.
- Participating in dialogue india committed to providing humanitarian assistance, ensuring formation of a truly inclusive and representative government
  - combating terrorism and drug trafficking and preserving the rights of women, children and the minorities

66. With no Census data to depend on, government scrambling to assess population of vulnerable tribes - The Hindu

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections

Prelims Takeaway
• PM-JANMAN
• PVTGs.

News:
- With the 2021 Census indefinitely delayed, **the government's attempt at using the PM Gati Shakti portal**
- It is aimed to **estimate the total population of Particularly Vulnerable Tribal Groups** (PVTG) across the country hitting one wall after another.

Key Highlights
- The information on population is crucial to the **implementation of the government's ₹24,000 crore PM-JANMAN package for PVTGs.**
- When the package was launched in November 2023 to ensure that PVTG villages had all basic facilities and infrastructure
  - the government said there were around 28 lakh PVTG people in the country.

- The government said its g**oal was to plug infrastructural gaps in the around 22,500 habitations they occupy.**
- But by the time the operational guidelines were released in January 2024, the Tribal Affairs Ministry claimed the total population of PVTGs stood at 36.75 lakh.
- By the end of January, the government had further revised the total population tally — pegging it at 44.64 lakh as of January 31, 2024.
- Neither of these estimates had included data from Bihar and Manipur, with officials saying that population of some habitations are yet to be fed into the portal for the rest of the States as well.
- some **districts are using population data from ration distribution charts**, others are using data from as far back as the 2011 Census or surveys conducted in 2015 by government institutes;
- Some infrastructure projects like building connecting roads and anganwadis under the JANMAN package require a population criteria to be met before being sanctioned.
- The Tribal Affairs ministry has told all Ministries working on PM-JANMAN that the population data on the portal is not meant to be static and that it is subject to revision
- The latest available government data from January shows that there are at least 12.70 lakh PVTG households across the country.

67. Government may rejig its stance on Aadhaar as birth date proof, with risk riders - The Hindu

Relevance: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

News:

Prelims Takeaway
• EPFO
• Aadhaar

- **To avoid inconvenience to the public and beneficiaries** of government schemes and quell a sense of anxiety about a recent directive to cease the usage of Aadhaar as a proof of 'date of birth

Key Highlights

- the Unique Identification Authority of India (UIDAI) is **likely to issue a clarification soon**
  - that those relying on the ID proof for age may do so after undertaking a "risk-based assessment".
- The UIDAI, in a December 2023 missive, asked all agencies that use Aadhaar to **authenticate identities to delete it from the list of acceptable documents f**or verifying a person's date of birth.
- The authority said this was an iteration of its stated position and had been highlighted by different High Court judgments.
- Now, Aadhaar cards come with a prominent disclaimer that they are **"a proof of identity, not of citizenship or date of birth".**
- UIDAI would not withdraw the directive but would soon issue an advisory for agencies that
  - rely on Aadhaar authentication for welfare benefits and KYC (Know Your Customer) compliance purposes.
- "The birth date and even the address mentioned in Aadhaar are only a reasonable assessment of the age and location of an individual, based on documents provided at the time of enrolment.
- But it cannot be construed as foolproof evidence for either of those details
- **it is up to the concerned entity to decide whether to accept them o**r seek more documents after assessing the risks involved in their use cases for Aadhaar authentication
- The date of birth can be verified by using documents such as birth certificates or school-leaving certificates
  - wherever knowing the precise age is critical, be it opening a bank account for a minor or a senior citizen,
  - or transferring pension benefits, he pointed out. Even a passport or driving licence can be used to confirm a person's age.

Evaluating Impact

- Some entities like t**he Employees' Provident Fund Organisation (EPFO) have already scraped Aadhaar's use as birth date proof,**
- while other departments and user agencies are still evaluating the impact.

- Aadhaar is being used for registrations under the GST regime as well, but the date of birth is not vital in those cases.

68.   Why have fresh protests erupted in Senegal? - The Hindu

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

Prelims Takeaway
• Senegal
• Map Based Questions

News:
- **President Maky Sall postpones presidential elections** originally set for February 25, citing a dispute between the National Assembly and the Constitutional Council.

Key Highlights
- Opposition legislators forcibly removed from parliament, allowing Sall an additional 10 months in office, **sparking nationwide protests.**
- Critics denounce the **move as a Constitutional coup d'état.**

Repeat of Previous Violence
- Sonko, barred from the Presidential race in January, had previously received a two-year prison sentence for alleged immoral behavior.

President Sall's Controversial Stance on Term Limits
- Sall, who took office in 2012 amid resistance against his predecessor's third term, justifies a potential third term based on a reinterpretation of the constitutional clock.
- Speculation arises about Sall's motives to consolidate power between the delayed elections.

Senegal's Democratic Record
- Senegal historically known for **smooth power transitions in its multi-party democratic system.**
- Never experienced a military coup or civil war since gaining independence in 1960.
- President Sall played a key role in regional efforts to remove Yahya Jammeh in the Gambia, promoting democratic governance in the West African region.

Concerns About Regional Stability
- Senegal's departure from its democratic tradition contrasts with neighboring countries facing military takeovers (Guinea, Burkina Faso, Mali, Niger).
- Calls for major powers to reconsider their role in the region to address the recurring threat of military dictatorships in African countries.

69.   Greek PM Mitsotakis to attend this week's Raisina Dialogue - The Hindu/ Greek PM's India visit on Feb 21; focus on strategic ties - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Prelims Takeaway
• Raisina dialogue
• Greece

News:
- **Greece's Prime Minister** will travel to Delhi next week **as the chief guest for the Ministry of External Affairs' (MEA) annual Raisina Dialogue.**

Key Highlights
- Greek's PM will be one of several international dignitaries arriving for the conference **organised by the Observer Research Foundation (ORF)**
  - o   and is expected to include several Foreign Ministers and Deputy Foreign Ministers from European countries, including Latvia, Romania, Estonia, Serbia
  - o   and the Netherlands, and neighbouring countries like Nepal, Vietnam, as well as other Ministers from other parts of the world.
- **The Raisina Dialogue coincides this year with the G-20 Foreign Minister's Meeting hosted by Brazil on February 21-22**
  - o   and while the External Affairs Minister will stay in Delhi to host the conference, most G-20 Foreign Ministers are expected to be in Rio de Janeiro.
- According to sources, Ukraine's Deputy Foreign Minister is also expected to speak at the event.

- **"India-Greece relations have been elevated** to '**Strategic Partnership'** during PM Modi's visit to Greece in August 2023.
- They are based on shared cultural values, commitment to foster economic growth, collaboration in the fields of security and defence, shipping, maritime and marked by convergence on regional and global issues
- India and Greece have been negotiating a migration and mobility agreement to facilitate legal "skilled migration" between the two countries since 2022, but have yet to conclude it.
- This is the ninth edition of the Raisina dialogue, organised by the MEA-ORF since 2016.
- Previous editions have had keynote addresses by leaders of Denmark, Rwanda, Israel, the European Commission, Italy, and others.

70. How long will 5 members override 188 nations: India on UNSC reform - Indian Express

Relevance: Important International institutions, agencies and fora- their structure, mandate.

News:

Prelims Takeaway
• UNSC
• Security Council Reform

- India has questioned **how much longer can the will of five permanent members of the powerful UN body continue** to override the collective voice of the world organisation's 188 member states.

Key Highlights

- India's Permanent Representative at the UN Ambassador, speaking at the Inter-Governmental Negotiations on Security Council Reform
  o stressed that "equity" must be the cornerstone of global efforts to reform the 15-nation UN body.
- "**Equity demands that every nation**, irrespective of its size or power, be afforded an equal opportunity **to shape global decision-making**
- the five permanent members of the Council – **China, France, Russia, the UK and the US**
  o whose exclusive veto rights have the power to impact decision-making in the Security Council on matters of maintenance of international peace and security.
- **The Council's other 10 members are elected for two-year terms** to the non-permanent category and they do not have veto powers.
- Expanding only in the non-permanent category of the Council will not solve the problem.
- It will in fact widen the difference between permanent and non-permanent members even more, thereby perpetuating inequities instead of removing

71. Why was there a political deadlock in Northern Ireland? - The Hindu

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

News:

Prelims Takeaway
• Map based question

- **Northern Ireland** (NI) **recently formed a new government,** ending a political hiatus since the 2022 elections.

Why the Delay in Government Formation?

- The DUP, part of the Conservative-led government, **objected to the internal trade border between NI and the rest of Britain**
  o leading to a boycott of Stormont since the 2022 elections.
- **The border in the Irish Sea resulted from the 2020 withdrawal agreement**, aiming for a clean break with the EU.
- After negotiations, NI now operates under the dual jurisdiction of the UK and the EU.

The 2023 Windsor Framework

- **Addressing concerns over the UK's withdrawal protocol,** the Windsor framework simplified paperwork for goods between NI and Great Britain.
- The Command Paper proposed in January further eases procedures, exempting 80% of goods from checks and establishing a body to preserve NI's status in the UK's internal market.

- However, **companies from Great Britain will continue to face more paperwork due to NI's dual jurisdiction.**

Challenges Ahead

- Brexit-related pressures persist, and political deadlock hinders compulsory coalitions between unionists and nationalists.
- **The Irish Prime Minister calls for reform of the system**, suggesting a need to reevaluate the current arrangement to address ongoing challenges in NI's political landscape.

72. CrPC remedy not barred by 1986 law: SC - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• The Muslim Women (Protection of Rights on Marriage) Act 2019
• Section 125 of the CrPC, 1973

News:

- **The Muslim Women (Protection of Rights on Divorce) Act, 1986**, enacted by the government **does not** say that a **divorced Muslim woman cannot file a petition** under Section 125 of the CrPC, 1973

Key Highlights

- The act was enacted by government in the **aftermath of the Shah Bano case judgement**
- It says that muslim **women can seek maintenance from her former husband**
- The Supreme Court observed as it reserved decision on the question as to which of these two laws would prevail.
- The Act does not say no petition under Section 125 shall be filed by Muslim women.

The Muslim Women (Protection of Rights on Marriage) Act 2019

- **The Act makes all declarations of talaq,** including in written or electronic form, to be void (i.e. not enforceable in law) and illegal.
- The Act makes a **declaration of talaq a cognizable offence**, attracting up to three years imprisonment with a fine.
- **The offence will be cognizable only if information relating to the offence is given by married woman** (against whom talaq has been declared), or any person related to her by blood or marriage

73. Maharashtra clears 10% quota for all Marathas - The Hindu/ Third time lucky? Why the new law is unlike two previous bids to provide reservation to Marathas - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• State Backward Class Commission
• Constitution Bench

News:

- The Maharashtra Assembly has unanimously passed a Bill to set **aside 10% reservation for the Marathas** under socially and educationally backward categories in jobs and education

Key Highlights

- The Bill was formulated based on a **report of the Justice (retired) Sunil B Shukre** -led Maharashtra State Backward Class Commission (MSBCC).

Narayan Rane committee

- In a first bid for a special law for Marathas, the government brought in an ordinance giving 16% reservation in government jobs and education to the community, ahead of the 2014 elections.
- It was based on the recommendations of a **Narayan Rane-led committee**, which was not a statutory backward class commission.

Gaikwad Commission

- The Gaikwad panel gave its report in November 2018, after a survey of 43,629 families
- The report said that 76.86% of the Maratha families were engaged in agriculture and agriculture labour (combined)

- o 6% were in government and semi-government services, 3% in private services, 4% in trade and industry, and 9% in non-agricultural physical labour.
- The legislation was first challenged in the Bombay High Court, which ruled that the quota granted under the Act was not "justifiable
  - o And reduced it to 12% in education and 13% in government jobs.
- The matter went to the Supreme Court, and in May 2021, a Constitution Bench struck down the quota altogether
- the Court "**left it open to the State to collect relevant data to find out whether a particular case or community** is to be included in the backward class".
- It was based on this that the **Justice Shukre panel was formed**
  - o With the Shinde government's brief for it being to go in for a large-scale survey,
- It calls for separate reservation to the Marathas to increase their representation in government jobs and developed sectors.

74. Small scale fishing should be exempted from WTO talks - Indian Express

Relevance: Important International institutions, agencies and fora-their structure, mandate.

News:

Prelims Takeaway
• WTO
• National Fishworkers Forum

- The **National Fishworkers Forum (**NFF's) asking it to protect the interest of small fishermen at **WTO**

Key Highlights

- Farmers send a request to the commerce ministry **to push the World Trade Organization (WTO) to keep small-scale fishing out of fisheries subsidies** negotiations later this month.
- Commerce Ministry officials maintain that India will push against any form of curbs on its subsidies to poor fishermen at the WTO
  - o Also seek a moratorium on fishing subsidies from advanced countries including the US and EU during the upcoming inter-ministerial.
- India is the **only country where small-scale fishers fish in large numbers**

Fishermen are not responsible for decline in fish

- It is because of other factors like **industrial pollution, global warming and coastal degradation which has affected the fishers**
- NFF further told the government that there is a need for a **robust domestic fisheries policy**
  - o Aligns with international negotiations and without a cohesive national policy to define small-scale, artisanal and indigenous fish worker rights
  - o Their unique characteristics and fishing methods, India's position at the WTO may lack the necessary foundation for effective representation.
- The Agreement on Fisheries Subsidies (**AFS**) was signed in 2022 **at the 12th Ministerial Conference (MC12) of the WTO**
  - o But covered only illegal, unreported and unregulated (IUU) fishing and overfished stocks – consisting two out of the three pillars under consideration.
- Under the AFS, **only a two-year special and differential treatment (S&D) exemption** was made available for **developing** countries and **least developed** countries (LDCs).

75. 'INDUS-X' summit: India, US looking at advancing defence collaboration - The Print

Prelims Takeaway
• 'INDUS-X' Summit

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

News:

- India and the United States are set to strengthen their strategic cooperation during the two-day **'INDUS-X' summit.**
- The summit would be specifically focused on **advancing bilateral defence innovation and collaboration.**

• India's Innovations for Defence Excellence (iDEX)

India-US Defence Acceleration Ecosystem (INDUS-X)

- It was launched in **June 2023,** during the state visit of the Prime Minister of India to the US.
- It aims to drive **strategic technology partnerships** and **defence industrial cooperation** between **India** and **the US.**
- **Objectives**
  - Expand strategic technology partnerships and defence industrial cooperation.
  - Establish a defence innovation bridge encompassing joint challenges, academia engagement, industry-startup connect, and investment in defence projects.
- The initiative aims to explore possibilities for **co-producing jet engines, long-range artillery, and infantry vehicles.**
- It is organized by **India's Innovations for Defence Excellence (iDEX)** and the **US Department of Defence.**
  - This is in collaboration with the US-India Business Council and the Society of Indian Defence Manufacturers (SIDM).

Key Defence Agreements

- India and the US have strengthened their defence and strategic ties in recent years through key agreements such as **LEMOA, COMCASA, and BECA.**
- These agreements **enhance interoperability** and **facilitate the exchange of high-end military technology and logistics.**

76. WHO launches digital health platform agreed upon in India's G20 presidency - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- Recently, the **World Health Organization (WHO)** initiated the **Global Initiative on Digital Health (GIDH).**
- This is in alignment with one of the priority areas set during **India's G20 presidency** in 2023.

Prelims Takeaway
• Global Initiative on Digital Health (GIDH)
• Ayushman Bharat Digital Mission
• World Health Organisation (WHO)

Global Initiative on Digital Health (GIDH)

- It will serve as a platform for **sharing knowledge and digital products** among countries.
- It consists of **four main components** viz.
  - country needs tracker
  - country resource portal (a map of resources available in a country)
  - transformation toolbox for sharing quality-assured digital tools
  - knowledge exchange platform

India's Commitments

- The Union Health Minister highlighted India's commitment to digital health and emphasized the significance of establishing an institutional framework for it.

- He said the platform will help in **democratising digital health technologies,** especially for countries of the **Global South.**
- He also mentioned India's Ayushman Bharat Digital Mission's efforts in creating an **electronic health record system.**

Digital Transformation Amid the Pandemic

- India's representative to the UN, highlighted India's digital transformation during the pandemic.
  - including case tracking via digital platforms and managing a massive vaccination drive through the CoWIN platform.
- He emphasized the issuance of digital vaccination certificates and the success of initiatives like Ayushman Bharat Digital Mission and E Sanjeevni teleconsultation platform.

WHO's Objectives and Support

- The WHO General director stated that GIDH will **support countries in three ways**
  - by listening to their needs
  - by aligning resources to avoid fragmentation and overlap
  - by providing quality assured products
- He also stressed on the need for **common standards** and **shared vision** to prevent fragmentation and overlap in digital health tools.

Potential and Scope of Digital Health

- The Deputy Secretary-General of the International Telecommunication Union highlighted the vast potential of digital health.
- While nearly half the world's population lacks access to health services, nearly 90% have access to a 3G connection.
- This underscores the opportunity for **leveraging digital technology to bridge gaps in healthcare access.**

77. Let's proceed with IMEC despite Gaza war, Greek PM tells India - The Hindu

Relevance: bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

News:

Prelims Takeaway
• IMEC Corridor
• Haifa port

- **India and Greece should persevere with th**e "**peace project",** said the Greek Prime Minister in New Delhi.

Key Highlights

- Greek prime minister said that **Despite the Israeli war in Gaza "destabilising" plans for the India-Middle East Economic Corridor (IMEC)**
- "The war in Gaza and turmoil in the Middle East is undoubtedly destabilising but it does not undermine the powerful logic behind IMEC.
- "Launched during India's G-20 chairmanship, the IMEC corridor will contribute significantly to the development of humanity in the long run.
- the founding members of the initiative, including India, European Union, France, Germany, Italy, Mauritius, the UAE and Saudi Arabia,
  - have been unable to meet, as stipulated by the MoU for the past six months due to the conflict in Gaza.
- Israel's Haifa port, owned by India's Adani Group, was expected to be a key trading point for the ship-and-rail route proposed under IMEC from India's west coast,
  - through the UAE and Saudi Arabia to Jordan and Israel, before reaching Greece's Piraeus Port and on to the rest of Europe.

IMEC Corridor

- The proposed IMEC will consist of Railroad, Ship-to-Rail networks and Road transport routes extending across two corridors, that is,
  - The East Corridor – connecting India to the Arabian Gulf,
  - The Northern Corridor – connecting the Gulf to Europe.

- The IMEC corridor will also include an electricity cable, a hydrogen pipeline and a high-speed data cable.
- India, the **US, Saudi Arabia, UAE, the European Union, Italy, France, and Germany are signatories**.

Ports to be Connected
- India: Mundra (Gujarat), Kandla (Gujarat), and Jawaharlal Nehru Port Trust (Navi Mumbai).
- Middle East: Fujairah, Jebel Ali, and Abu Dhabi in the UAE as well as Dammam and Ras Al Khair ports in Saudi Arabia.
- **Railway line will connect F**ujairah port (UAE) to Haifa port (Israel) via: Saudi Arabia (Ghuwaifat and Haradh) and Jordan.
- Israel: Haifa port.
- Europe: Piraeus port in Greece, Messina in South Italy, and Marseille in France.

78. Tribal Affairs, Ayush Ministries sign pact on health screening - The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

Prelims Takeaway
• Ekalavya Model Residential Schools
• Poshan Vatikas

- Ministries of Tribal Affairs and AYUSH **jointly launch a National level Project for Screening and Health Management of tribal students** through Ayurvedic Interventions

Key Highlights
- The Minister suggested the inclusion of medicinal plant gardens on lines of **Poshan Vatikas in Eklavya Model Residential Schools (EMRS)**
  - o to raise awareness among future generations about the importance of tradition in ensuring good health.
- The Ministry of AYUSH, in collaboration with its Central Council for Research in Ayurvedic Sciences (CCRAS)
  - o has undertaken this health initiative for tribal students in partnership with the Ministry of Tribal Affairs and ICMR-National Institute of Research in Tribal Health (NIRTH), Jabalpur.
- It aims to cater to the **healthcare requirements** of students residing in EMRS across tribal areas in the country.
- This project aims to benefit students **aged 10-18 years** enrolled in **classes 6th to 12th** in 55 identified EMRS across 14 States of the country.
- The screenings will focus on **identifying issues such as Anaemia, Haemoglobinopathies, Malnutrition, and Tuberculosis.**

Ekalavya Model Residential Schools (EMRSs)
- It play a crucial role in providing **quality education to Scheduled Tribes (ST) children in remote areas**
- It enables them to **access higher education** and **employment opportunities** across various sectors.
- These schools emphasize not only academic education but also the **holistic development of students,** including their health.
- Currently, there are 402 functional EMRSs across the country, each offering state-of-the-art facilities for quality education, sports training, and skill development.

79. Centre allocates ₹20 crore to bail out poor prisoners - The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

Prelims Takeaway
• National Crime Records Bureau
• Prison Reforms

- The Union government has allocated an annual fund of ₹20 crores **to bail out poor prisoners languishing in prisons across the country due to financial constraints.**

Key Highlights
- The **Ministry of Home Affairs has urged Heads of Prisons of all States** and Union Territories to utilise the funds to provide relief to poor prisoners
  - o Who are either unable to pay the fine imposed on them or are unable to secure bail due to financial constraints.
- The initiative was part of the Centre's priority in "**reaching the last mile: no one to be left behind"** under which the "Support to Poor Prisoners Scheme" was launched in May last.
- The Union Home Minister had written to Chief Ministers of all States and UTs soon after the scheme was launched and requested them to take full advantage of the initiative.

Poor response from States
- The Ministry said the **National Crime Records Bureau (NCRB) was appointed as the Central Nodal Agency (CNA) for implementing the scheme.**
- The NCRB had opened **an account in a nationalised bank for the "Support to Poor Prisoners Scheme"**
- all States and UTs were advised to open a subsidiary account for further transactions in coordination with the CNA.
- The committees, with the assistance of District Legal Services Authority and prison authorities, should examine cases of eligible prisoners
  - o have the power to sanction the amount required for paying fine/bail amount, etc., within the parameters of the guidelines prescribed under the scheme.

80. 12 re-elected MPs between 2004-19 have criminal cases'- The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:
- A total of 12 out of 23 **Members of Parliament re-elected from 2004 to 2019 have criminal cases against them**, according to a report by the Association for Democratic Reforms (ADR) and National Election Watch.

Prelims Takeaway
• Association for Democratic Reforms
• MP, MLA

Key Highlights
- Nine of the 12 face serious charges such as murder, attempt to murder and dacoity.
- The report was prepared after an analysis of the self-sworn affidavits of 23 re-elected MPs from 2004 to 2019.
- Of 17 BJP MPs who were re-elected, seven (41%) had criminal cases against them and all three Congress MPs re-elected faced criminal cases.
- The lone re-elected MP from the All India Majlis-e-Ittehadul Muslimeen (AIMIM) had a criminal case against him as did the MP from Shiv Sena.
- Four of the re-elected MPs had declared their educational qualifications to be between Class 10 and 12 while 18 have declared educational qualification of graduation or above and one re-elected MP is a diploma holder.

Judicial Measures against criminalisation of politics
- In 2002, Supreme Court gave a historic ruling in **Union of India (UOI) vs. Association for Democratic Reforms** that every candidate, contesting an election to the Parliament, State Legislatures or Municipal Corporation,
  - o Has to declare their criminal records, financial records and educational qualifications.
- In 2005, the Supreme Court in **Ramesh Dalal vs. Union of India** held that a sitting t (MP) or (MLA) shall also be subject to disqualification from contesting elections
  - o If he is convicted sentenced to not less than 2 years of imprisonment by a court of law.
- In 2013, in **Lily Thomas vs. Union of India**, the Supreme Court held that Section 8(4) of The Representation of the People Act, 1951 is unconstitutional

- o Which allows MPs and MLAs who are convicted to continue in office till an appeal against such conviction is disposed of.
- In 2013 in People's **Union for Civil Liberties vs. Union of India case Supreme Court**
  - o Asked Election Commission to provide 'none of the above' choice to voters to exercise their right to express no confidence against all candidates in fray.
- In 2014 Supreme Court recommends to PM/CMs not to include persons, against whom charges have been framed in serious offences, in their council of Ministers.
- In 2016, Supreme Court refers to 5-judge Constitution bench whether framing of charge in heinous crimes against an MP or MLA would disqualify him.
- This also meant **whether a person against whom charges framed in serious offences be debarred from contesting elections**

81. Govt. unveils 4 web portals for news publishers - indian express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• The Central Bureau of Communication
• Ease of doing business

News:
- The Union Information & Broadcasting Minister l**aunched four online portals of the Central Bureau of Communication, the Registrar of Newspapers for India, the New Media Wing, and the Digital Addressable System of the Ministry.**

Key Highlights
- The Minister said the initiative was aimed at **ensuring ease of doing business** by fostering a more conducive business environment for newspaper publishers and TV channels
  - o Enhance transparency and efficiency in government communication, provide easy access to authentic government videos
  - o Create a comprehensive database of local cable operators for streamline regulatory processes in the sector in future.
- The four portals include '**Press Sewa' for registration of newspapers and periodicals and 'NaViGate Bharat' f**or videos on the entire gamut of the government' development-related and citizen welfare-oriented measures.
- The other portals are for registration of local cable operators and a transparent empanelment, media planning and e-billing system.

The Central Bureau of Communication
- It is the **nodal agency of the Government of India for advertising** by various Ministries and organizations of Government of India
  - o Including public sector undertakings and autonomous bodies.
- It works under the administrative control of the Information and broadcasting ministry.
- **HQ: New Delhi.**
- It was set up on 8th December, 2017 by **integration of three erstwhile media units of Ministry of I&B,**
  - o Namely Directorate of Advertising & Visual Publicity (DAVP), Directorate of Field Publicity (DFP) and Song & Drama Division(S&DD), all involved in interpersonal communication.
- It undertakes campaigns to inform and educate rural and urban people about the Government's policies and programmes through available vehicles of communication
  - o Print, Audio Visual, Outdoor, Digital and New Media.

82. Russia used up most of its rupee balance in Indian banks: Indian officials- The Hindu

Prelims Takeaway

Relevance: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

- Map based question
- Vostro account

News:

- **Russia has used up most of its rupee balance,** that had piled up in special vostro accounts of Indian banks on account of payments made largely for Russian defense purchases

Key Highlights

- The rupee balance has been **used up by Russia through multiple avenues including payments for Indian imports**
  - Which increased about 39% to $4.05 billion in CY23
  - Investments in infrastructure projects
  - Investments in the equity market
  - Purchase of government securities

Exploring projects

- "The two countries are exploring projects where **Moscow can invest, which could be on the lines of the India-Russia joint venture Vande Bharat deal**
  - To manufacture and maintain 120 trains for the Indian Railways.
  - The area of heavy engineering holds a lot of scope,
- The Russian media has also written about a deal per which the Goa shipyards in India will build 24 cargo ships for operation in the Caspian Sea with the participation of the Russian Export Center by 2027.
- Such deals between **Russia and India could ensure continued usage of rupee balances by Russia**
- India and Russia put in place a rupee payment system to circumvent the sanctions.
- Under the mechanism, **a number of Russian banks, opened their rupee vostro accounts with authorized dealer banks in India**
  - Such as UCO, HDFC and ICICI, for enabling rupee trade between the two countries.
- As India's exports were **insignificant compared to the imports, the piling up of unused rupee payments in the banks became a problem**.
- Russia even considered suspending some of its defense sales to India at one point of time

83. India's stance on data transfers at WTO spooks semiconductor industry giants - The Hindu

Relevance: Important International institutions, agencies and fora- their structure, mandate.

News:

- Recently, a global consortium of semiconductor industry groups appealed to India to reconsider its plan to **impose duties on cross-border digital e-commerce** and **data transfers.**

Prelims Takeaway
• E-commerce
• World Trade Organization (WTO)
• World Semiconductor Council (WSC)

The Background

- This plea comes ahead of a **World Trade Organization (WTO) meeting** in Abu Dhabi, where ministers from various countries will discuss **trade-related issues.**
- This includes extending a **moratorium on applying duties on electronic transmissions,** in place since 1998.
- **Developing nations** like India, South Africa and Indonesia are set to oppose efforts by the US and Europe **to extend the moratorium.**

Concerns Raised

- The collapse of the moratorium could result in **tariffs on digital e-commerce** and **chip design data transfers,** exacerbating chip shortages and raising costs.

- The **World Semiconductor Council (WSC)** highlights that such tariffs would **hinder India's semiconductor industry growth** and its efforts to **attract investment.**
  - especially considering India hosts over 20% of the world's semiconductor design workforce.
- India's stance to renew the moratorium is seen as crucial for **signalling a favourable investment climate** to semiconductor companies.

India's Perspective
- India argues that physical goods, once governed by traditional tariff rules, should now incur duties due to their **availability as digital services.**
- Developing nations are **facing massive loss in potential revenue** with such imports from developed countries on the rise.

84. India will not rush into signing free trade deals: Goyal - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

News:
- The UK is still pushing to advocate for a more **extensive opening of the Indian economy** under the **free trade agreement (FTA)** being negotiated.
- With general elections looming and the Model Code of Conduct (MCC) expected to come into effect soon, signing the deal before the elections appears unlikely.

Prelims Takeaway
• Free Trade Agreement (FTA)
• Bilateral Investment Treaty (BIT)
• Model Code of Conduct (MCC)

Key Points of Contention
- India's **high tariff regime** has been a concern for trade partners, with it having one of the highest import tax rates globally.
- The UK seeks **reductions in duties on cars and whisky**, while India aims for **improved access for its service sector workforce** in the UK.
- Talks are also progressing on the **proposed bilateral investment treaty (BIT).**

FTA Potential and Significance
- The FTA with the UK holds significance as the **first comprehensive deal with a major western country,** promising deeper economic integration.
- It serves as a **model for future agreements** with larger western trade partners like the European Union and European Free Trade Association (EFTA).
- Economic integration with the West becomes crucial amid the **global supply chain reset** post-COVID-19 and efforts to diversify away from dependence on China.

Free Trade Agreement (FTA)
- An **agreement** between countries or regional blocks **to reduce or eliminate trade barriers,** through mutual negotiations with a view to **enhancing trade.**
- It includes **goods, services, investment, intellectual property,** competition, government procurement and other areas.
- This **concept** of free trade is the opposite of **trade protectionism or economic isolationism.**
- FTAs can be **categorised** as
  - Preferential Trade Agreement
  - Comprehensive Economic Cooperation Agreement (CECA)
  - Comprehensive Economic Partnership Agreement (CEPA)

Impact of FTA on the Global Economy
- By blending **local production** with foreign trade, FTAs help **boost growth in economies.**
- As **selected goods** are produced by every country at **lower costs** due to FTAs, international trade increases **production** and **consumption.**
- FTAs also help **diversify supply chains** by making it easier for more businesses to **conduct business across borders.**

85. Why has Assam decided to repeal its Muslim Marriage Act? - Indian express/ Assam to repeal Muslim Marriage Act, Opposition terms it 'unconstitutional' - The Hindu

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- It was announced that the **Assam state Cabinet has decided to repeal the Assam Muslim Marriage and Divorce Registration Act of 1935.**
- In the meeting, the Cabinet approved the 'Assam Repealing Ordinance 2024' which will repeal the 89-year-old Act.

Key Highlights

What is the Act meant for?

- Enacted in 1935, the **Act lays down the process for registration of Muslim marriages and divorces.**
- A 2010 amendment replaced the word 'voluntary' in the original Act with 'compulsory', **making registration of Muslim marriages and divorces compulsory in the state of Assam.**
- The Act authorises the state to grant licences to "any person, being a Muslim" to register marriages and divorces, with Muslim registrars deemed to be public servants.
- It lays down the process through which marriage and divorce applications can be made to the registrar, and the process for their registration.
- Crucially, the **Act is in line with the Muslim personal law.**

What is the Assam government's rationale behind repealing the Act?

- The Assam government said that the Act contains provisions allowing marriage registration even **if the bride and groom have not reached the legal marriageable age of 18 and 21, respectively.**
- Under Muslim personal law, the marriage of a bride who has attained puberty is considered valid. Puberty is presumed, in the absence of evidence, on turning 15 years old.

86. Kerala takes a pioneering step to curb antimicrobial resistance - The Hindu

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:

No prescription, no antibiotics

Kerala's Operation AMRITH prohibits over-the-counter (OTC) sales of antibiotics without a prescription

- Kerala has implemented the 2011 H1 rule that prohibits OTC sales of all classes of antibiotics
- Kerala's high doctor-patient ratio even in villages may help in enforcing the H1 rule
- Over 50-70% of antibiotic prescriptions by doctors are deemed unnecessary and irrational
- Reducing the incidence of hospital-acquired infections will sharply and quickly reduce the demand for antibiotics
- All hospitals should be made to report rates of hospital-acquired infections to the State government
- Rationalising antibiotic use in hospitals, and banning growth-promotional use of antibiotics in poultry and fish farms, and agriculture will have a big impact
- Curbing antimicrobial resistance requires a multipronged approach. Enforcing the OTC regulation alone will not be sufficient

Mandatory: A prescription is required even for first-line antibiotics

87. 'Countries should be aware of degrees of terrorist financing' - The Hindu

Relevance: Important International institutions, agencies and fora-their structure, mandate.

News:
- The **Financial Action Task Force (FATF) plenary** has concluded with discussions on key issues like money laundering, terrorism financing, and proliferation financing.

Prelims Takeaway
• Financial Action Task Force (FATF)
• Foreign Contribution (Regulation) Act

Modification to Assessment Methodology
- The FATF has modified its assessment methodology, emphasizing **risk-based measures** to **safeguard vulnerable Non-Profit Organizations (NPOs)** from terrorist financing abuse.
- These changes aim to **prevent unintended consequences** arising from the incorrect application of FATF requirements.

Recommendation 8
- In October 2023, changes to Recommendation 8 were agreed upon to enhance the protection of NPOs from terrorist financing abuse.
- Updates to best practices aim to assist countries, the non-profit sector, and financial institutions in implementing **effective risk-based measures without disrupting legitimate NPO activities.**

Other Outcomes
- The plenary also issued new **risk-based guidance** for implementing **Recommendation 25** on beneficial ownership and transparency of legal arrangements.
- **Identification of jurisdictions with significant virtual asset activity** was conducted to assist in implementing FATF requirements.

88. India completely stops Ravi river water flow to Pakistan. Historical context and significance- The Economics times

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

News:
- The completion of the **Shahpur Kandi barrage has effectively ceased the flow of water from the Ravi river into Pakistan**, according to a report.

Shahpur Kandi Dam Project
- It is located on the **Ravi River in Pathankot district, Punjab**, downstream from the existing Ranjit Sagar Dam.
- The water released by **Ranjit Sagar Dam is utilized for generating power from this project.**
- The main purpose behind the construction of this dam is power generation and irrigation in Punjab and J&K States.
- It is constructed by the irrigation department of the Government of Punjab.
- The project consists of a 55.5 m high concrete gravity dam, a 7.70 km long hydel channel, two head regulators, and two powerhouses.
- The total output **capacity of the project is 206 MW.**

Indus Waters Treaty
- India and Pakistan signed the IWT in September, 1960 after nine years of negotiations, with the World Bank being a signatory to the pact.
- The treaty sets out a mechanism for cooperation and information exchange between the two sides on the use of the water of the Indus River and its five tributaries Sutlej, Beas, Ravi, Jhelum, and Chenab.

89. Govt. launches project aimed at anemia control in girls-The Hindu

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

News:
- The Centre launched an **initiative to improve nutrition in adolescent girls using Ayurveda.**

Key Highlights
- The project for anemia control under **Mission Utkarsh** will be a **joint public health initiative by the Ministries of Ayush and Women and Child Development**
- It would be launched in **five aspirational districts first as a pilot project.**
- The two ministries signed an MoU for the scheme.
- Under Mission Utkarsh, 15 central ministries or departments will work to elevate districts at the bottom, to State and national averages.
- This project will cover approximately **10,000 Anganwadi Centres in the five districts.**
- Ayush systems, backed by evidence from institutions like ICMR, will offer cost-effective solution to tackle anemia

Anemia Mukt Bharat initiative
- The initiative aims to create awareness about the causes and consequences of anemia among policymakers, healthcare providers, communities, and individuals.
- Improve the **delivery and quality of anemia-related healthcare services**, particularly at the primary healthcare level.
- Ensure timely diagnosis and **treatment of anemia through regular screening and health check-ups.**
- Promote appropriate and balanced nutrition, including dietary diversification, consumption of iron-rich foods, and nutritional supplementation for vulnerable groups.
- **Emphasize breastfeeding and complementary feeding** practices to address anemia in infants and young children.

- **Encourage the fortification of food staples s**uch as rice, wheat, and salt with essential micronutrients, including iron and folic acid.

90. Film certification overhaul: Online applications, more women in Board - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
- Cinematograph (Amendment) Act, 2023
- Central Board of Film Certification (CBFC)

News:
- The Ministry of Information and Broadcasting is set to implement **changes to the film certification process,** aiming to modernize and streamline it.
- These changes align with the provisions of the **Cinematograph (Amendment) Act, 2023.**

Key Changes
- **Online Application Process:** The entire certification application process will be shifted online, enhancing accessibility and efficiency.
- **Enhanced Representation**
  o The Central Government may take such steps as it thinks fit to **appoint women members** in the **Censor Board.**
  o So that there is due representation for women where **one-third of the members in the Board shall be women** and **preferably half** shall be women.
- **Sub-Categorization of Parental Guidance Certificate**
  o The **'UA' category** will now feature **age-based indicators,** such as **'UA 7+', 'UA 13+', and 'UA 16+'** indicating the recommended age for viewing without parental guidance.
    ▪ The 'U' (unrestricted public exhibition), 'A' (restricted to adults) and 'S' (restricted for specialised viewing) categories of certification have been left unaltered.
- **Elimination of Third Parties**
  o **Third-party involvement** in the certification process will be **eliminated** to curb allegations of bribery and corruption.
  o Applications can only be submitted through the **online portal** of the Board, hereinafter referred to as the e-cinepramaan portal.
- **Perpetual Validity of Certification:** Certificates granted by the CBFC will be perpetually valid, eliminating the need for recertification every ten years.
- **Recertification and Change of Category**
  o Filmmakers can apply for **recertification or a change in category** for television exhibition or other media through the online portal.
  o However, while re-certifying a film, the board may direct the applicant to carry out some excisions or modifications in the film.

91. Constitute a panel to administer Murugha math: SC - The Hindu

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

Prelims Takeaway
- POCSO Act
- Sri Jagadguru Murugharajendra Bruhan Math, Chitradurga.

News:
- The Supreme Court directed the **Karnataka government to constitute a committee to administer the 12th century Sri Jagadguru Murugharajendra Bruhan Math**, Chitradurga.

Key Highlights
- The court directed the State to ensure that neither the petitioner nor the pontiff should have anything to do with the management of the math/institution in question.

- He further submitted that the **pontiff was accused of sexually assaulting two minor girls staying in hostels run under the aegis of the math.**
- The administrator was appointed as the pontiff- Shivamurthy Murugha Sharanaru was arrested in September 2022 **following cases registered against him under the POCSO Act.**

POCSO Act

- It came into effect on 14th November 2012 which was enacted in consequence to **India's ratification** of the **UN Convention on the Rights of the Child in 1992.**
- The aim of this special law is to address offences of sexual exploitation and sexual abuse of children, which were either not specifically defined or in adequately penalised.
- The Act defines a child **as any person below the age of 18 years**.
- The Act provides punishment as per the gravity of offence.
- The Act was further reviewed and amended in 2019 to Introduce more stringent punishment including the death penalty for Committing sexual crimes on children, with a view to deter the perpetrators & prevent such crimes against children.
- The Government of India has also notified the POCSO Rules, 2020.

92. At WTO, India asserts fish subsidies for developing nations - The Hindu/ Current approaches for addressing overfishing flawed: India at the WTO - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

Prelims Takeaway
• UNCLOS
• WTO

- India urged the members of the World Trade Organization (WTO) to **introduce a moratorium on subsidies** by Distant Water Fishing Nations
- It was for **fishing related activities** beyond their exclusive economic zone (EEZs) for a period of at least 25 years.

Key Highlights

- This came during the WTO negotiation session on fisheries subsidies in the ongoing Abu Dhabi Ministerial Conference-13
- During the negotiations, India reiterated its long-held positions that responsible and sustainable fisheries is a practice ingrained
  - in the ethos and practices of India's large and varied fishing community.
- In that context, **any comprehensive agreement on fisheries subsidies should keep in mind the interests and welfare of the fishing community**
  - that depends on the marine resources for their livelihood and sustenance.
- India stressed that historically, while subsidies to the fisheries sector has led to over exploitation
  - subsidies are also vital for developing countries and small economies to develop
  - diversify their fisheries sector as well as to protect the food and livelihood security of their fishermen.
- The ministry added that **the negotiation is linked to the concept of sustainability and as such**
  - any comprehensive agreement on fisheries subsidies should be built on the principles of Common
  - But Differentiated Responsibilities and Respective Capabilities (CBDR- RC).
- It should also incorporate the provisions of Special and Differential Treatment (S&DT) appropriately, as is the case for all WTO agreements,
- There is an urgent case for capturing non-specific fuel subsidies and transfer of fishing rights to corporate fishing under Government to Government (G2G) payments within the ambit of the disciplines.
- Since the members had agreed to using the affirmative determination approach for negotiating disciplines on the overfished pillar
- There was no reason why the members **should not use the same approach in relation to the OCOF pillar.**

- IIndia reiterated that the sovereign rights of members for **sustainable management of fisheries within their EEZs**
  - as provided under the United Nations Convention on the Law of the Sea (UNCLOS) should be duly recognized and protected, the ministry added.

93. Nagaland govt.'s efforts to regulate coal mining hit Article 371A wall - The Hindu

Relevance: Structure, organization and functioning of the Executive and the Judiciary—Ministries and Departments of the Government; pressure groups and formal/informal associations and their role in the Polity

Prelims Takeaway
• Article 371A
• Nagaland's

News:
- **Article 371A of the Constitution of India** has been the **major hurdle i**n the Nagaland government's efforts **to regulate small-scale illegal coal mining activities in the State.**

Key Highlights
- Specific to Nagaland, Article 371A has **special provisions guaranteeing the protection of land** and its resources apart from the Naga customary law and procedure.
- Contractors and businesspersons conducting mining activities should bear the responsibility for land reclamation
  - by filling up the rat-hole mines and planting trees rather than leaving it barren
- Nagaland's **coal mining policy, first notified in 2006**
  - allows rat-hole mining as the coal deposits are too scattered for large-scale and coordinated operations.
- Leases called small pocket deposit licences are awarded to individuals.
- rat-hole mining can be undertaken only with the consent of the departments concerned, including that of Forest and Environment.
- State government awarded several rat-hole mining leases with proper forest and environment clearances and definite mining plans.
- This has not stopped people from operating such mines illegally.

94. Nepal-India official dialogue silent on landmark Pancheshwar project - The Hindu

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Prelims Takeaway
• Mahakali River
• Pancheshwar Multipurpose Project

News:
- India and Nepal signed the agreement on long-term power sharing but have not managed to make any forward movement on **the stalled negotiations over the landmark Pancheshwar Multipurpose Project (PMP).**

Key Highlights
- After the Joint Commission Meeting, the two Ministers witnessed the exchange of an agreement between the two governments on long-term electricity trade.
- The agreement aims to increase export of Nepali power to India to the level of 10,000 MW over a period of 10 years.
- However, the **Pancheshwar Multipurpose Project is aimed at generating around 6,480 MW energy (to be divided equally between two sides)**
  - along with water for irrigation of 130,000 hectares of land in Nepal and 240,000 hectares of Indian territory, respectively.
- While electricity is divided equally, India gets the lion's share of irrigation and flood control benefits.
- On the other hand, **Kathmandu feels water is 'white gold' and India should pay Nepal for it.**

Pancheshwar Multipurpose Project (PMP)
- It is a bi-national project between India and Nepal, aimed primarily at energy production and enhancing irrigation in both countries.

- It involves the construction of a 315-meter high dam **across the River Mahakali (Sarada in India).**
- It forms an 80 km long reservoir with a surface area of 116 km square and a total gross storage volume of about 11.35 billion cubic meters.
- This project underscores the progress of the Mahakali Treaty signed in February 1996 between India and Nepal
  - and includes provisions for the **integrated development of the Mahakali River basin.**

95. Row over Karnataka Bill: what changes it proposed to how temples are taxed - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Prelims Takeaway
• Goods and Services Tax
• The Karnataka Hindu Religious Institutions

News:
- The Karnataka government's attempt to tweak the law that **governs taxation of Hindu temples was stymied in the Legislative Council**

Key Highlights
- **The Karnataka Hindu Religious Institutions** and Charitable Endowments (Amendment) Bill, 2024 was introduced in the Legislative Assembly
- However, it was rejected two days later in the **Legislative Council.**
- The first and the most contentious was that it intended to divert "10% of the gross income of institutions whose gross annual income exceeds Rs 1 crore
  - to a common pool for the maintenance of temples, instead of the existing "10% of the net income of institutions whose gross annual income exceeds Rs 10 lakh
- Net income is calculated based on the profits of the temple after accounting for its expenses, whereas gross income simply refers to the total amount of money the temple makes.

Do Only Temples Have to Pay Taxes in India?
- According to the **Central Goods and Services Tax (CGST) Act,** any business/entity has to register themselves under **Goods and Services Tax**
  - If their aggregate turnover in a financial year exceeds Rs 40 lakhs (in all normal category states, except Telangana)
  - and Rs 20 lakhs (in special category states, except J&K and Assam).
- There is no separate tax for an entity/body belonging to a particular religion.
- All services provided by charitable and religious trusts are not exempt from GST. A few of them are
  - Services of transportation of passengers for a pilgrimage
  - Events, functions, celebrations
  - Shows against admission fee or tickets
  - Some activities which are exempt include:
  - Conduct of religious ceremony
  - Renting of precincts of a religious place meant for general public
- However, it must be noted that 'renting' should not apply to **'renting of rooms where charges are Rs 1000 or more per day**
- renting of shops for business and other commercial activities' and even 'renting of halls, space for Rs 10,000 or more per day.

96. CAG, ICAI to launch online courses to strengthen local bodies' accounting - Indian Express

Relevance: Constitution of India —historical underpinnings, evolution, features, amendments, significant provisions and basic structure.

Prelims Takeaway
• Comptroller and Auditor General of India (CAG)
• Local Government
• SDGs

News:

- Recently, the Comptroller and Auditor General of India (**CAG**), in collaboration with the Institute of Chartered Accountants of India (**ICAI**), launched a **series of online courses.**
- **Purpose:** To enhance the capabilities of accountants to bolster the accounting systems of panchayats and municipal bodies.

Key Highlights
- The online courses aim to **equip accountants** with the **requisite knowledge and skills** to **maintain standardized accounts** for various categories of **local governments.**
- By creating a pool of certified professionals, the initiative seeks to **enhance the capacity of local bodies** in **financial management.**
- This pool of professionals will play a crucial role in **ensuring the integrity and efficiency of financial management practices** at the grassroots level.

Significance of Grassroots Democracy
- The President of India emphasised the pivotal role of grassroots democracy in fostering a **vibrant** and **inclusive society.**
- With a vast network, India's grassroots governance system serves as the **foundation for implementing various schemes and projects** aimed at achieving SDGs.

Direct Devolution of Funds
- The Union Finance Commissions provide **direct devolution of funds to local bodies.**
- However, these bodies face several **unique challenges** in terms of their dependence on higher tiers of government for functions, funds, and functionaries.
- This necessitates innovative audit approaches tailored to the **specific needs of local governance.**

Evolution of Audit Methodologies
- In the era of interconnected governance, **audit methodologies must evolve** to keep pace with the complexities of modern governance.
- The partnership between CAG and ICAI reflects a **proactive approach** to enhancing financial governance and accountability at the grassroots level.

97. First Pey Jal Survekshan Awards to be conferred by President on 5th March - PIB

Relevance: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

News:
- Recently, the **Ministry of Housing & Urban Affairs** announced the inaugural **Pey Jal Survekshan Awards.**

Prelims Takeaway
• Pey Jal Survekshan Awards
• AMRUT Mitra Initiative

Pey Jal Survekshan Awards
- A total of **130 awards** will be conferred across various categories to cities and states for their **excellence in the water sector.**
  o This includes Pey Jal Gold, Silver, and Bronze City Awards signifying top performers in their respective population categories.
  o The awards extend to commendations for Best Water Body, Sustainability Champion, Reuse Champion, Water Quality, City Saturation, and AMRUT 2.0 Rotating Trophy of the Year.

Evaluation Criteria
- The evaluation, conducted under **AMRUT 2.0** in 485 cities, encompasses several parameters
  o such as access, coverage, water quality, sustainability, availability of SCADA/flowmeters, and reuse of treated water.
- Cities will be graded on a **star rating scale,** ranging from **5 stars** to **No star,** based on their performance across critical criteria.

Methodology of Pey Jal Survekshan
- It ensured clean water through **independent NABL lab testing** at the source and citizen-end.
- Utilizing **GIS-enabled web portal, geo-tagging**, and **infrastructure mapping,** the survey collected accurate and transparent data.

Expected Impact

- Pey Jal Survekshan results are anticipated to **drive ULB decision-making, enhance service delivery**, and **foster citizen engagement.**
- The initiative aims to **instill a sense of ownership** and **promote knowledge dissemination** about water conservation and optimal use.

AMRUT Mitra Initiative

- The event will also mark the launch of the AMRUT Mitra initiative, aiming to **actively involve women Self-Help Groups (SHGs)** in the **urban water sector.**
- **AMRUT Mitras,** designated from women SHGs, will be engaged in **executing AMRUT 2.0 projects,** focusing on various activities.
  - such as billing, collection, leak detection, plumbing works, and water quality sampling.
- The initiative aims to **promote inclusivity and diversity in the water sector** while ensuring **access to safe drinking water** for households and **addressing gender inequality.**

GS III

98. Mind and Matter - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

News:

Prelims Takeaway
• Brain-Computer Interface (BCI)
• Neuralink

- Recently, **Neuralink** achieved a significant milestone with the **successful implantation** of its **brain-computer interface (BCI) in a human.**
- This marks a crucial step toward human-computer interfaces that could potentially **address physical and cognitive limitations.**

Brain-Computer Interface (BCI)

- Neuralink builds upon the groundwork laid by previous laboratories and companies, dating back to the 1970s.
- The wireless device implanted includes **a chip and electrode arrays** designed to **interpret thoughts related to movement.**
- The ultimate goal is to **empower individuals with disabilities to control devices** through mere thought, particularly benefiting those who have lost limbs.

Associated Concerns

- **Privacy**
  - A primary concern revolves around **who will control the data extracted** from brains and ensuring it is not exploited.
  - **Regulatory frameworks,** similar to those for AI, should accompany BCI development.
- **Monopoly and Accessibility**
  - Avoiding a monopoly in the development of medical technologies is crucial.
  - **Publicly-funded research** can minimise costs, ensuring accessibility beyond those who can afford expensive interventions.
- **Ethical Dialogue:** As BCIs approach mass use, a dialogue involving experts, ethicists, and the public becomes important to **prevent misuse or excessive adoption.**

99. WHY BIRD FLU DEATHS OF ANTARCTIC PENGUINS IS A FLASHING DANGER SIGN - Indian Express

Relevance: Conservation, environmental pollution and degradation

News:

Prelims Takeaway
• H5N1
• Falkland Islands

- Recently, a highly lethal form of bird flu, **H5N1**, was identified in **Antarctic penguins** for the first time.
- The Falkland Islands Government reports over 200 dead or dying **gentoo chicks on Sea Lion Island,** highlighting the severity of the situation.

Challenges Facing Penguins

- Antarctic penguins are already under pressure due to **climate change, pollution, and commercial fishing.**
- **Three penguin species** in the region viz. emperor penguins, southern rockhopper penguins, and macaroni penguins - are listed as **vulnerable** or near threatened.

Extent of the Threat

- Prior to the arrival of H5N1 in the Antarctic region last fall, **highly pathogenic bird flu viruses had not been documented** there.
- Penguins likely have **little existing immunity,** and the virus could spread **rapidly** in large, crowded colonies, potentially causing mass mortalities.
- While H5N1 has been confirmed in gentoo penguins, its extent in other local penguin species remains unclear.

Global Impact and Concerns

- Scientists are alarmed by the potential spread of the virus in Antarctica, given its unprecedented toll on wildlife since emerging in 2020.
- The region serves as **critical breeding territory for over 100 million birds and marine mammals,** with concerns about the virus's potential immense impact on these populations.

100. Lakshadweep in focus, domestic tourism to get a boost - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
• PRASHAD
• MICE Promotion Bureau

News:

- Recently, a **special emphasis was laid on domestic tourism** by finance minister in her budget speech
- She asked all **state governments to take up comprehensive development of iconic tourist centres** along with branding and marketing them at a global scale.

Key Highlights

- There is also a renewed focus on port connectivity and infrastructure development on islands, including Lakshadweep
- On the archipelago of 35 islands, the government will undertake "projects for port connectivity, tourism infrastructure, and amenities on our islands, including Lakshadweep.
  - This will help in generating employment in the Union Territory, she said.
- Consequently, the **Ministry of Tourism's flagship Swadesh Darshan scheme** (for integrated development of tourist circuits around specific themes)
  - Has an increased outlay of Rs 1,750 crore for 2024-25, compared to Rs 818 crore in the previous year, and Rs 1,412 crore a year before that.
- In a first, the FM has also announced a framework for rating iconic tourist destinations based on the quality of facilities being offered
  - Also offering l**ong-term interest-free loans to states** for developing these destinations.
- Late last year, the ministry worked out a model for setting up a city-level **MICE Promotion Bureau at important destinations for facilitating and promoting the city as a MICE destination.**
- It also launched a dedicated brand called '**Meet in India'** to promote India as a conference tourism destination.
- The Ministry launched the 'Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive' **(PRASHAD) scheme in 2014-2015**
  - To provide financial assistance to states and UTs for infrastructure development at tourist destinations.

101. Concerns over GDP, spending cuts; fiscal deficit is bright spot - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
• Capex
• Fiscal Deficit

News:

- The Finance Minister presented the **interim Union Budget** for 2024-25, **focusing on achievements and providing a recap of the past decade.**

Muted GDP Growth Outlook
- The nominal GDP growth rate, **crucial for budget considerations, is anticipated to be 10.5%** for the upcoming year.
- A sluggish nominal GDP growth poses challenges for real GDP growth, estimating a range of 6% to 6.5% for 2024-25.

Fiscal Deficit Reduction
- Fiscal deficit, r**epresenting government borrowing from the market**, is a critical parameter.
- The government has successfully r**educed the fiscal deficit from 9.2% of GDP** in the post-COVID period to 5.8% in the current fiscal year.

Capex Target Unmet
- The government aimed for a capex target of Rs 10 lakh crore
  - But revised estimates reveal it fell short at Rs 9.5 lakh crore, raising concerns about its impact on overall economic growth.

Reduction in Health and Education Spending
- **Allocations for health and education,** crucial for development, have been **historically lower than required.**
- The government has not met budgeted targets for both sectors in the current fiscal year, with actual spending falling short.

Cuts in Core Schemes
- Major government schemes, particularly **those focused on marginalized sections** like SCs, STs, and minorities, **have experienced expenditure cuts**.
- Revised Estimates for key schemes show reductions, raising questions about the government's commitment to social welfare.

Income Tax as Top Revenue Source
- Traditionally reliant on market borrowings, the government's financial resources are shifting.
- Income tax collections are projected to contribute the most (19%) to government resources in FY25, surpassing corporate tax (17%), GST (18%), and borrowings (28%).

102. Viability gap funding for tapping off-shore wind leads green push - Indian Express

Relevance: Conservation, environmental pollution and degradation

News:
- Recently, the Finance Minister unveiled a significant move to tap into the untapped potential of **off-shore wind energy.**

Off-Shore Wind Energy Boost
- Off-shore wind turbines, situated in the middle of the sea for optimal wind exposure, promise higher conversion rates of wind energy to electricity.
- Despite higher construction and maintenance costs, the government aims to offset these by encouraging large-scale systems.

Prelims Takeaway
• Coal Gasification and Liquefaction
• Off-Shore Wind Energy
• Renewable Energy
• Electric Vehicles

Current Landscape and Future Prospects
- India presently lacks off-shore wind projects, but potential sites, particularly **off the coasts of Gujarat and Tamil Nadu,** have been identified.
- The announcement includes **viability gap funding** to facilitate the establishment of at least **one gigawatt of off-shore wind energy capacity.**
  - It acts as a **financial incentive** to attract investors, signalling the government's commitment to advancing clean energy technologies.

Budget's Green Initiatives
- **Off-Shore Wind Viability Gap Funding:** Intended to facilitate the establishment of off-shore wind farms, lowering entry barriers for investors.

- **Rooftop Solar Incentives:** Households installing rooftop solar systems will receive 300 units of free electricity every month, aiming to encourage widespread adoption.
- **Electric Vehicle (EV) Ecosystem Support:** The government plans to support expanding manufacturing and charging infrastructure for electric vehicles.
- **Compressed Biogas Blending:** Mandatory blending of compressed biogas in CNG and PNG in a phased manne. Financial aid for biomass collection from various sources was announced to boost electricity generation through biomass.
- **Biomass Aggregation Machinery Support:** Financial assistance will be provided for biomass aggregation machinery, enhancing biomass collection for increased biofuel production.

Coal Gasification and Liquefaction
- The Finance Minister also revealed plans to **establish 100 million tonnes of coal gasification and liquefaction capacity by 2030.**
- **Objective:** To reduce dependence on imported liquid or gaseous fuels like natural gas, methanol, and ammonia.
- While these processes do not inherently **make coal a cleaner energy source,** they aim to **enhance India's energy security** by minimizing reliance on external fuel sources.
- Critics argue that the budget falls short in **providing sufficient support for clean energy solutions.**

103. Negotiating BITs with trade partners to boost FDI - Indian Express

Relevance: Economy
News:
- In the Interim Budget speech, the Finance Minister highlighted India's efforts to negotiate new **Bilateral Investment Treaties (BITs).**
- **Objective:** To enhance foreign direct investments (FDI), especially in the face of declining FDI inflows.
- FDI equity inflows in India **decreased by 24%** to $20.48 billion in April-September 2023.

Prelims Takeaway
- Bilateral Investment Treaties (BITs)
- Free Trade Agreement (FTAs)
- Foreign Direct Investment (FDI)

Background
- New BITs became scarce after India adopted the **model BIT in 2016.**
- India aims to **pursue economic integration with western nations** through **free trade agreements and investment treaties.**
- The FM emphasized the importance of negotiating BITs to **encourage sustained foreign investment,** aligning with the **'first develop India'** spirit.
- **FDI inflow during 2014-23 reached $596 billion,** marking a golden era and doubling the inflow during 2005-14.

Challenges with BITs
- Trade partners raised concerns about India's insistence on the **'exhaustion of local remedies' clause** in the model BIT.
   - It advocates resolving investment-related disputes locally before resorting to international arbitration.
- **India's rank of 163** out of 190 countries in **ease of enforcing contracts** poses a challenge to FDI inflows.
   - It took 1,445 days and 31% of the claim value for dispute resolution.

Historical Perspective
- Prior to 2015, India had **BITs with 83 countries/regions.**

- India suspended BITs with 68 countries/regions post-2015, urging renegotiations based on the 2016 model BIT.
- **Six BITs are still in force,** with the suspension triggered by high-profile defeats in investor-state disputes.

104. India increases its tally of Ramsar sites to 80 by adding Five more wetlands to the list - PIB

Relevance: Conservation, environmental pollution and degradation
News:

Prelims Takeaway
• Ramsar Convention
• New Ramsar Sites
• World Wetlands Day 2024

- Recently, the government announced the designation of **five new Ramsar sites** in India on **World Wetlands Day.**
- Total Ramsar sites in India **increased to 80** from 75, with **Tamil Nadu having the most (16 sites),** followed by Uttar Pradesh (10 sites).

World Wetlands Day 2024

- **Theme: Wetlands and Human Wellbeing**, highlighting the essential role of wetlands in flood protection, clean water, biodiversity, and recreational opportunities.
- India, a Party to the Ramsar Convention since 1982, has seen a **significant increase in Ramsar sites,** reaching 80 from 26 in the last ten years.

New Ramsar Sites

1. **Ankasamudra Bird Conservation Reserve (Karnataka)**
   - It is a **man-made village irrigation tank** rich in biodiversity built centuries back.
   - It supports more than 1% of the biogeographic population of **Painted Stork and Black-headed Ibis.**
2. **Aghanashini Estuary (Karnataka)**
   - It is formed at the confluence of the **Aghanashini River with the Arabian Sea.**
   - The brackish water of the Estuary provides **diverse ecosystem services** including flood and erosion risk mitigation, biodiversity conservation and livelihood support.
   - The wetland helps in **traditional fish farming in the estuarine rice fields** (locally known as **Gazni rice fields**), bivalve shell collection and salt production.
3. **Magadi Kere Conservation Reserve (Karnataka)**
   - It is a man-made wetland constructed to **store rainwater for irrigation purposes.**
   - Harbours **two vulnerable species,** namely the Common pochard and River tern and **four near-threatened species,** namely the Oriental Darter Black-headed Ibis Woolly-necked Stork and Painted Stork
   - It is also one of the largest wintering grounds for the **Bar-headed goose.**
4. **Karaivetti Bird Sanctuary (Tamil Nadu)**
   - One of the largest inland wetlands of Tamil Nadu, it is a significant source of groundwater recharge for the area.
5. **Longwood Shola Reserve Forest (Tamil Nadu)**
   - It serves as habitat for the globally endangered **Black-chinned Nilgiri Laughing thrush, Nilgiri Blue Robin** and vulnerable **Nilgiri Wood-pigeon.**

105. KYC, fund laundering concerns said to spur RBI's Paytm unit ban- the Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
News:

Prelims Takeaway
• Paytm bank
• Reserve Bank of India

- The Reserve Bank of India's (RBI) **action directing Paytm Payments Bank Ltd.** (PPBL) to cease all new business transactions by February 29

Key Highlights

- Rbi asked bank to settling all pipeline transactions by March 15, **was triggered by major irregularities in the bank's compliance with Know Your Customer (KYC) norms**,
  - Thus exposing customers, depositors and wallet holders to grave risk, said people aware of the developments.
- RBI supervisors and external auditors are learnt to have found:
  - KYC details missing for a very large number of customers (running into lakhs)
  - PAN validation failures in lakhs of accounts
  - A single PAN used for multiple customers
  - In thousands of cases the same PAN was linked to more than 100 customers and in some cases to more than 1,000 customers

Money laundering concern
- The bank was also found to be involved in facilitating transactions running into crores of rupees
  - Well beyond regulatory limits in prepaid instruments with minimal KYC requirements, raising money laundering concerns
- An **unusually high number of dormant accounts were foun**d to have been used as 'mule accounts' to facilitate transactions.
- The recent direction from RBI is a part of the ongoing supervisory engagement and compliance process
- The payments **bank is accused of not adhering to the 'arm's length policy'** while dealing with the Promoter Group Entities.
- Its **financial and non-financial business were co-mingled** with its promoter group companies in violation of licensing conditions

Multiple issues

RBI action against Paytm Payments Bank said to have been triggered by irregularities in its compliance with KYC norms

- Auditors found PAN validation failures in lakhs of accounts, with a single PAN used by thousands of customers

- Bank seen to have enabled transactions worth crores in prepaid instruments, raising money laundering concerns

- An unusually high number of dormant accounts were found to have been used as 'mule accounts' to facilitate transactions

106. Navy foils piracy attempt off east Somalia, rescues 11 Iranians, 8 Pakistanis- The Hindu

Relevance: Security challenges and their management in border areas – linkages of organized crime with terrorism.
News:
- The **Indian Navy foiled a piracy attempt on an Iranian-flagged fishing vessel o**ff the east coast of Somalia
Key Highlights

Prelims Takeaway
• United Nations Convention on the Law of the Sea (UNCLOS)
• Maritime piracy

- "Information regarding piracy attempt on fishing vessel FV Omaril was monitored The
- **Indian naval remotely piloted aircraft (RPA)**, **undertaking surveillance** in the area
  o INS Sharda, deployed for anti-piracy mission in the region, was diverted to intercept the boat
- Seven incidents of hijacking of vessels on high seas by pirates have been reported during the last three years
- The Indian Navy has been proactively engaging with the regional and extra-regional navies and maritime forces

United Nations Convention on the Law of the Sea (UNCLOS)

- **Article 101 of the 1982 United Nations Convention on the Law of the Sea** (UNCLOS) determines that Piracy consists of any of the following acts:
- any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
  o on the high seas, against another ship or aircraft, or persons or property on board such ship or aircraft
  o against a ship, aircraft, persons, or property in a place outside the jurisdiction of any State;
- **any act of voluntary participation in the operation of a ship or** of an aircraft with knowledge of facts making it a pirate ship or aircraft;
- **any act of inciting or of intentionally f**acilitating an act described in subparagraph (a) or (b).

107. Financial institutions likely to run corpus to fund hi-tech companies - Indian Express

Relevance: Economy

News:

- The Indian government is set to collaborate with financial institutions such as NaBFID, NIIF, and SIDBI to implement its Budget announcement.
- It announced an allocation of **Rs 1 lakh crore corpus for research and innovation in sunrise sectors.**
- The funds are intended for **financing or refinancing private sector projects** dedicated to developing innovative technologies.

Prelims Takeaway
• National Bank for Financing Infrastructure and Development (NaBFID)
• Small Industries Development Bank of India (SIDBI)

Commercial Funding for Innovation

- The government aims to **support ventures** in specific areas where India can become **globally competitive** and **reduce dependence on importing cutting-edge technologies.**
- It will provide **cheap financing for innovative projects** in sunrise sectors with significant potential.
- The allocated funds are meant for **commercial, for-profit ventures** focusing on innovative technologies.

Long-Duration Loans and Zero Interest

- The government is considering offering **long-duration loans of up to 50 years** with **zero interest** to the financial institutions involved.
  o This financial support model is similar to capex for states.
- Financial institutions, in turn, may provide **credit at concessional rates** to other institutions or directly finance commercial ventures.

Future Prospects

- Discussions are ongoing among various ministries to **identify the sectors eligible** for funding.
- The success of indigenously developed technologies is **expected to create jobs** and contribute to making **India a world-class economy by 2047.**

108. Govt gives ₹ 9,000 cr to Exim Bank as loans extended to foreign countries turn NPAs - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

Prelims Takeaway
• Lines of Credit
• Exim Bank

- With loans to some countries extended through **Exim Bank of India being classified as "doubtful debt" in 2023-24,**
- The Ministry of External Affairs has provided Rs 9,013.72 crore to the financial institution after it invoked Government of India (GoI) guarantee on these loans.

Key Highlights

- **The Exim Bank had to invoke the guarantees** after decade-plus old loans extended to some African countries turned into non-performing assets.
- **Lines of Credit (LOCs) are given to other countries a**nd some of these to African countries have turned into NPAs.
- They have been classified as doubtful, but not written off
- The MEA has provided a further Rs 4,383.40 crore in 2024-25 towards payment to Exim Bank towards guarantees
  - o That may be invoked against doubtful debts, indicating more such loans to countries might get classified as NPAs in the coming years.
- Government-supported LOCs to countries of Asia (excluding Bangladesh, Nepal, Bhutan) Africa, Commonwealth of Independent States region and Latin American region are extended under the Indian Development and Economic Assistance Scheme.
- Once **guarantees are invoked by a financial institution** or a public sector undertaking,
  - o The **funds are paid out of the Guarantee Redemption Fund** established in the Public Account of India since 1999-2000.
- An equivalent amount will be recovered from the Guarantee Redemption Fund.
- For about four decades, the Department of Economic Affairs had been **extending Lines of Credit (LOCs) to "friendly developing foreign countries**
- These LOCs were 'Government-to-Government' credit lines as the agreements were signed between the Indian government and the government of the recipient country.
- Till 2003-04, the LOCs were G-to-G and accordingly, the full amount covered by the LOCs used to be provided in the Budget.
- Since 2003-04, **this system has been substituted by extending GoI-supported LOCs through Exim Bank of India.**

109. Reducing ammonia emissions through fertilizer management - The Hindu

Relevance: Conservation, environmental pollution and degradation
News:

Prelims Takeaway
• Ammonia
• Greenhouse Gas
• Kyoto Protocol

- Based on machine learning, recently, researchers have come up with detailed **estimates of ammonia emissions** from rice, wheat and maize crops.
- The study provides a **cropland-specific analysis,** emphasizing the environmental impact and health implications of atmospheric ammonia.

Ammonia Emissions: A Global Issue

- Atmospheric ammonia is a key **environmental pollutant** that affects ecosystems across the planet, as well as human health.
- Around **51-60% of anthropogenic ammonia emissions** can be traced back to **crop cultivation.**
  - o About half of these emissions are associated with three main staple crops: rice, wheat and maize.
- However, quantifying any potential reductions in ammonia emissions related to specific croplands at high resolution is challenging.

Machine Learning Approach

- Researchers utilized machine learning to model **ammonia output based on diverse variables.**
  - o These include climate, soil characteristics, crop types, irrigation, tillage, and fertilization practices.
- A comprehensive dataset derived from over 2,700 observations informed the model.

Global Ammonia Emission Estimates

- The machine learning model estimates global ammonia emissions at **4.3 teragrams (4.3 billion kilograms) in 2018.**
- Spatially optimizing fertilizer management, guided by the model, could potentially **reduce atmospheric ammonia emission**s from the three crops by **up to 38%.**
- It involves **deeper placement of enhanced-efficiency fertilizers** into the soil **during the growing season,** utilizing conventional tillage practices.
- Without effective management strategies, a potential increase in ammonia emissions **between 4.6% to 15.8% by 2100** is projected.

110. How many trees do we have? - The Hindu

Relevance: Conservation, environmental pollution and degradation

Prelims Takeaway
• India State of Forest Report
• National Forest Policy, 1988

News:
- Several years ago, an **analysis of the world's trees** was conducted, employing ground-based sample counts and satellite imagery.
- The study revealed a surprising estimate of **three trillion trees on Earth,** significantly higher than previous scholarly projections.

Global Tree Distribution
- On average, there are slightly **over 400 trees per human,** with **South American rainforests housing 15-20% of all trees.**
- The Boreal forests in Canada and Russia boast a high concentration of conifers, providing every Canadian resident with nearly 9,000 trees.
- In contrast, the Middle Eastern nation of Bahrain, with a population of 1.5 million, has a meagre 3,100 trees, averaging five trees per square kilometre.

Diversity in Oxygen Sources
- While trees are essential oxygen sources, **vast grasslands contribute almost as much oxygen as trees.**
- Additionally, **marine cyanobacteria and algae** play a significant role in **oxygen production,** contributing as much as land plants.

Carbon Sequestration
- Apart from oxygen production, trees play a **crucial role in carbon sequestration.**
- Millennia-old trees, turned into coal after submersion and burial, lock up carbon for an extended period.

India's Forest Cover
- India's estimate stands at **28 trees per person,** influenced by high population density and a history of deforestation.
  - Bangladesh, with three times the population density of India, has only six trees per citizen.
  - Nepal and Sri Lanka have slightly over a hundred trees per person.
- The **diversity in India's geography** results in large differences in natural forest cover.
- Moist tropical forests with dense canopies, high rainfall, and rich biodiversity are prominent in the Western and Eastern Ghats, the Northeast, and the Andaman and Nicobar Islands.
- 80% of the land area in Arunachal Pradesh is under forest cover; in Rajasthan it is less than 10%.

Forest Policy Goals in India
- Despite reforestation efforts, India is still working towards achieving its **Forest Policy goal** of one-third of the country under forest cover.
- The India State of Forest Report (ISFR) 2021 identifies **Karnataka, Andhra Pradesh, and Tamil Nadu** as the states with the **most significant improvement in forest cover.**

111. Unending woes - The Hindu

Prelims Takeaway
• Bottom Trawling
• Blue Revolution Scheme

Relevance: India and its neighbourhood- relations.

Context:
- Despite diplomatic efforts, the **persistent arrests of fishermen** from Tamil Nadu and Puducherry by the Sri Lankan Navy in the Palk Bay, coupled with **mid-sea attacks by armed civilians,** raise serious concerns.

Increasing Arrests and Detentions
- The detention of 23 fishermen and the seizure of two trawlers off Delft island bring the total arrests to 69 this year, compared to 240 in the entire previous year.
- Additionally, 34 fishermen have been released, but over 45 remain in custody, with concerns about the confiscation of expensive fishing equipment and vessels.

Destructive Bottom Trawling Accusations
- Sri Lankan northern province fishermen accuse Tamil Nadu fishermen of engaging in **destructive bottom trawling,** a practice **banned by Sri Lanka since July 2017.**
- Despite India's promises to address the issue through the **Blue Revolution Scheme and end bottom trawling,** the prohibited **practice persists.**

Challenges Faced by Indian Fishermen
- Fishermen also face challenges under the **Tamil Nadu Marine Fishing Regulation Act 1983.**
- Under it, **mechanised fishing boats** are permitted to fish only **beyond three nautical miles** from the coast.
- However, due to the **proximity of the International Maritime Boundary Line,** breaches occur.

Inconsistent Handling and Diplomatic Efforts
- Despite an agreement in 2016 to establish a **Joint Working Group (JWG) on Fisheries** that would meet every three months, **only five sittings have taken place,** with the last one in 2022.
- The Indian Prime Minister's call to treat the issue as a **"humanitarian concern"** underscores the **need for consistent efforts** from both sides.

Call for Tangible and Targeted Action
- **Tangible and targeted actions,** including promoting deep-sea fishing, abandoning bottom trawling, and resolving the issue through mutual compassion and regular diplomatic talks is necessary.
- Failure to address these concerns would **perpetuate the perilous conditions** for Indian fishermen in the Palk Bay.

112. India-made typhoid vaccine efficacy lasts for 4 years: study - The Hindu

- **Relevance:** Achievements of Indians in science & technology; indigenization of technology and developing new technology.
- **News:**

Prelims Takeaway
- Typhoid
- Types of Vaccines

Protective in children of all age groups under 12 years

The trial was carried out in in Malawi, Africa, a typhoid fever-endemic setting, in children aged nine months to 12 years

- Children were vaccinated with a single dose of the vaccine during the period February to September 2018
- 14,069 children received the typhoid vaccine while the remaining 14,061 children received the control vaccine (MenA)
- The efficacy at the end of 4.3 years of median follow-up was 70·6% in children aged nine months to two years
- The efficacy in children aged two-four years was 79·6%, while the efficacy was 79·3% in children aged five-12 years
- The absolute risk reduction was 5·1 typhoid infections per 1,000 vaccinated children
- The estimated reduction in vaccine efficacy over time was only 1·3% per year over four years
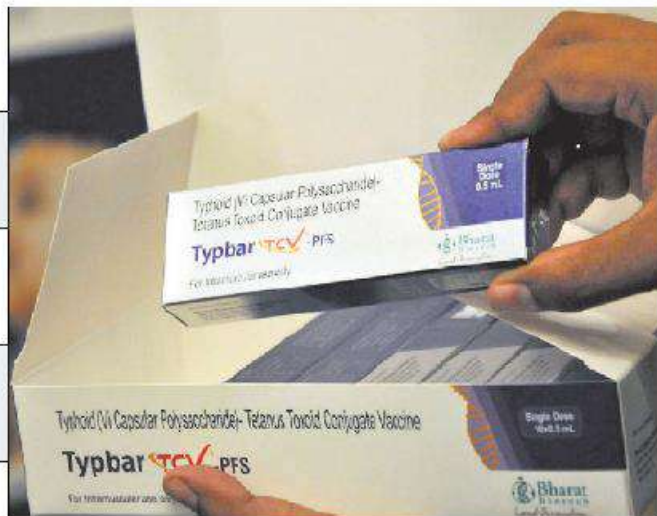
Greenlighted: Conjugated typhoid vaccine manufactured by Bharat Biotech received WHO prequalification in 2017

113. Indigenous CAR-T cell therapy now available for commercial use: 'first' patient declared free of cancer-The Indian Express

Relevance: Indigenisation of technology and developing new technology.

News:
- The commercial use of **CAR-T cell therapy** has shown significant advancements have been **observed in cancer treatment.**

About CAR-T Cell Therapy
- The **pioneering treatment** that genetically reprograms a patient's immune system to fight cancer
- The therapy is showcasing **promising results post-treatment.**
- It is a **revolutionary therapy** that modifies immune cells, specifically T-cells, into potent cancer fighters known as CAR-T cells.
- The therapy involves collecting and genetically modifying the patient's T-cells to express **chimeric antigen receptors (CARs)** specific to cancer cells.
- These modified cells are then infused back into the patient to target and attack cancer cells
- This offers a **targeted immunotherapy** approach.

Success of Therapy
- CAR-T cell therapy highlights its **efficacy in treating B-cell cancers,** particularly acute lymphoblastic leukaemia.
- Initial findings suggest promising **survival rates** and **lower remission rates.**
- This indicates the potential to reduce cancer-related mortality and **revolutionise cancer treatment.**

Indigenously Developed Therapy
- NexCAR19(the title of therapy) is **developed collaboratively** by ImmunoACT, IIT Bombay, and Tata Memorial Hospital.
- ImmunoACT's is the **first CAR-T cell therapy** to get CDSCO approval.

Prelims Takeaway
- CAR-T Cell Therapy
- Chimeric Antigen Receptors

- The **therapy received approval** from the Central Drugs Standard Control Organisation (CDSCO) in October 2023,
- The development of the therapy is marking **a significant milestone** in cancer treatment in India.

114. India's tax-to-GDP ratio to hit a record high of 11.7% of GDP in 2024-25: Revenue Secretary-The Hindu

Relevance: Government Budgeting.
News:

Prelims Takeaway
• Tax-to-GDP Ratio
• Corporate Taxation in India

- India's tax-to-GDP ratio is projected to **reach 11.7% in 2024-25.**

Relevance of the Rise in Ration
- This marks a **historic high.**
- This surge is attributed to an **increase in direct taxes**
- This aims for **a fairer tax structure.**

Efforts of the Government to raise the Tax Collection
- The government is making efforts to **simplifying** and **rationalizing** the tax regime to mitigate disputes, litigation, and intrusive enforcement methods.
- Direct taxes **are anticipated to play a pivotal role** in achieving this objective.
- Recent reductions in **corporate** and **personal income taxes** have been further given a flip to this effort.

The New Tax Regime
- The **introduction of a new tax regime** has made significant changes
- It is **offering a higher tax-free income** threshold but without deductions.
- It is expected to **attract a significant portion** of income taxpayers.
- Personal income tax collections have witnessed substantial growth, albeit with a **projected moderation by year-end.**

Prospects for GST Rationalization
- A Group of Ministers (GoM) tasked with reviewing the **GST rate structure** has been reconstituted.
- Continuous adjustments to **rationalize rates on various items** remain a priority for the GST Council.

Expectations for Future
- Revenue growth projections for **2024-25 are modest,** with a buoyancy rate expected to decline slightly.
- Tax revenues are forecasted to grow at a rate slightly higher than the **nominal GDP growth of 10.5%.**

Corporate Tax Regime
- The **deadline for new manufacturing units** to benefit from a reduced corporate tax rate is approaching,
  o With many companies having **already availed this benefit.**
- A significant portion of corporate tax income is being filed at the reduced **rate of 22%**, indicating uptake since its **introduction in 2019.**

115. India to see USD 67 billion investments in gas sector in 5-6 years: PM-The Hindustan Times

Relevance: Indian Economy and issues relating to planning, mobilisation of resources, growth, development and employment.
News:

Prelims Takeaway
• Green Hydrogen Mission
• Natural Gas Production in India

- Prime Minister, at India Energy Week 2024, projects significant **investment influx** into India's natural gas supply chain.
- The projection anticipates **USD 67 billion within 5-6 years**.

Reform-Driven Growth in Natural Gas Production
- Prime Minister highlights government **reforms propelling domestic natural gas production**
  o Aiming to elevate its share in the **energy mix to 15% by 2030** from the current 6.3%.
- India's trajectory towards **net zero carbon emissions by 2070** is underscored,

o Positioning natural gas as a cleaner alternative to coal in **electricity** generation, **fertiliser** production, **CNG** for automobiles, and **cooking**.

India's Energy Landscape and Growth Prospects
- India's robust economic growth fuels **escalating energy demands,**
  o Making it the world's **third-largest** consumer of **energy**, **oil**, and **LPG**, and the **fourth-largest** importer of **LNG** and **automobile** market.
- India's GDP growth rate surpasses **7.5%, outstripping** global estimates
  o positioning India as the **world's fastest-growing economy.**
- IMF forecasts align with India's potential ascent as the **third-largest global economy.**

Investment Opportunities in India's Energy Market
- PM urges global **investors to capitalize** on India's
  o Burgeoning energy **market**
  o Fostering **prosperity**
  o **Environmental sustainability**
- Government endeavors ensure **sustainable and affordable fuel** accessibility
- India's **energy mix expansion** encompasses conventional fuels alongside renewable sources like biofuels and hydrogen
  o With **record investments** earmarked for energy sector expansion.

Embracing Circular Economy and Biofuels
- PM highlights India's embrace of **circular economy principles**,
  o With ethanol blending initiatives
  o Global alliances fostering biofuel adoption
  o Unlocking economic opportunities worth USD 500 billion.

Environmental Commitment and Carbon Emission Reduction
- There are modest carbon emissions share in India despite its substantial population
  o with a focus on developing environmentally sensitive energy sources.

Renewable Energy Leadership and Solar Expansion
- India **ranks fourth globally** in renewable energy capacity,
  o with solar energy witnessing **exponential growth**
  o including a **nationwide mission** to install solar rooftop panels in one crore homes.
- India's strides in the **green hydrogen sector,**
  o envisioning India as **a hub for hydrogen production** and export
  o offering **lucrative opportunities** for investors and industries.

India Energy Week 2024: A Confluence of Energy Innovation
- The event was held from **February 6 to 9 in Goa.**
- It serves as India's **premier energy exhibition** and conference
- It unites stakeholders across the **entire energy value chain.**

116. Petronet LNG, QatarEnergy extend key LNG supply deal by another 20 years beyond 2028- The Indian Express

Relevance: Infrastructure – Energy, Ports, Roads, Airports, Railways etc.

News:

Prelims Takeaway
• DES Basis
• LNG Imports of India

- Petronet LNG and QatarEnergy have finalized a significant deal to extend the supply of **liquefied natural gas (LNG)** beyond the current contract expiration date.
- The contract extends the supply of **7.5 million tonnes per annum (mtpa)** of LNG for an additional **20 years, starting from 2028.**

Negotiation Process and Contractual Terms
- The negotiation process involved discussions between the **governments** of **India and Qatar**
- Under the new agreement, LNG supplies will transition from a **Free On Board (FOB)** basis to **Delivered Ex Ship (DES) basis,** with no fixed charge mentioned.
- The **pricing terms** under the new contract are expected to result in significant savings for Indian buyers,

o   Potentially saving around **$6 billion over the 20-year period.**

Impact on India's Energy Goals

- The extension of the contract aligns with India's aim to increase the share of **natural gas in its primary energy**
  o   **mix to 15 per cent by 2030** with little over 6 % at present.

Importance of the Contract

- The existing long-term agreement holds national importance, accounting for approximately **35 per cent of India's LNG imports.**
- Qatar remains the **largest exporter of LNG to India**, accounting for over half of India's LNG imports.
- India's LNG imports from Qatar play a significant role in its economy, with LNG imports alone valued at **$8.32 billion in FY23.**

Environmental Considerations

- Natural gas is viewed as **a cleaner alternative** to conventional petroleum fuels, aligning with India's energy transition objectives.
- The extension of the contract **ensures continued LNG supplies** to various sectors, facilitating India's energy security and economic development.

117. SC pulls up NGT for 'unilateral decisions', asks it to act with 'procedural integrity' - Indian Express

Relevance: Conservation, environmental pollution and degradation

News:

Prelims Takeaway
• National Green Tribunal (NGT)
• Supreme Court

- The SC recently delivered an uncommon rebuke to the NGT for its **unilateral decision-making.**
- The critique arises from the **NGT's actions against a Delhi-based business,** fining it without a fair hearing for environmental violations.

Observations by the Supreme Court

- The Supreme Court criticised the NGT's trend of unilateral decisions, lack of fair hearings, and imposing hefty fines without due process.
- It notes that the NGT's actions have frequently been challenged and stayed by the Supreme Court, undermining environmental protection efforts.
- The Court stresses the need for **procedural integrity and a balance between justice and due process** for the NGT to regain credibility in environmental protection.

Supreme Court's Decision

- The Supreme Court set aside the NGT's orders and remanded the case back to the NGT.
- It directed the NGT to issue notices, hear all affected parties, and then make appropriate decisions.

National Green Tribunal (NGT)

- It is a **specialised body** set up under the **National Green Tribunal Act (2010).**
- **Purpose:** For effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.
- With the establishment of the NGT, India became the **third country** in the world to set up a **specialised environmental tribunal**, only after Australia and New Zealand
- NGT is guided by the **principles of 'natural justice'.**
- It is mandated to make **disposal of applications** or appeals finally **within 6 months of filing** the same.
- An order/decision/award of Tribunal is executable as a **decree of a civil court.**
- An **appeal** against order/decision/ award of the NGT lies to the **Supreme Court,** generally within **ninety days** from the date of communication.
- The NGT deals with **civil cases** under the **seven laws** related to the environment.
  o   The Water (Prevention and Control of Pollution) Act, 1974,
  o   The Water (Prevention and Control of Pollution) Cess Act, 1977,
  o   The Forest (Conservation) Act, 1980,
  o   The Air (Prevention and Control of Pollution) Act, 1981,
  o   The Environment (Protection) Act, 1986,

- o The Public Liability Insurance Act, 1991 and
- o The Biological Diversity Act, 2002.

Structure of NGT
- The Tribunal comprises the **Chairperson**, the **Judicial Members** and **Expert Members**.
- They shall hold **office** for a term of **three years** or till the age of **sixty-five** years, whichever is earlier
- They are not eligible for **reappointment**.
- The **Chairperson** is appointed by the **Central Government** in consultation with the **Chief Justice of India (CJI).**
- A **Selection Committee** shall be formed by the **central government** to appoint the Judicial Members and Expert Members.

118. Biden govt. sets tighter standards for soot pollution - The Hindu

Relevance: Conservation, environmental pollution and degradation
News:

Prelims Takeaway
• Black Carbon (Soot)
• Pollution

- Recently, the USA announced **stricter regulations on soot pollution,** aiming to reduce fine particle matter from various sources **to prevent premature deaths.**
- The new rule sets a **maximum level of 9 micrograms of fine particle pollution per cubic metre of air,** down from 12 micrograms established a decade ago.

Beneficiaries of the Rule
- EPA Administrator said the rule would have **$46 billion in net health benefits by 2032,** including prevention of up to 800,000 asthma attacks and 4,500 premature deaths.
- The rule will especially **benefit vulnerable populations,** such as children, older adults and those with pre-existing health conditions.
- It is also expected to **benefit the low-income and minority communities** disproportionately affected by industrial pollution.

Various Responses
- Environmental and public health organizations view the new Environmental Protection Agency (EPA) rule as a significant **advancement in safeguarding citizens' health,** particularly future generations.
- However, industry groups express apprehensions, fearing **potential job losses and operational shutdowns** of power plants or refineries.
  - o They warn of increased compliance challenges and potential limitations on industrial projects due to the stricter standards.
- The administration dismisses industry concerns, citing **technological advancements and past successes** in meeting pollution standards.

Potential Economic Consequences
- Lowering the soot standard could lead to **challenges in obtaining permits for industrial expansion,** potentially affecting modernization projects.
- It could drive companies to **seek operations in countries with lax environmental regulations.**

119. MPC holds rates; sees FY25 inflation easing to 4.5%, growth at 7% - The Hindu/ RBI leaves repo rate unchanged, food inflation uncertainty persists - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
News:

Prelims Takeaway
• Monetary Policy Committee
• Inflation Targeting
• Inflation

- The **Monetary Policy Committee (MPC)** kept interest rates unchanged, emphasizing its commitment to **achieving 4% inflation** sustainably.
- Inflation is projected to **moderate to 4.5% in FY25,** with **real GDP growth forecasted at 7%** for the fiscal year starting April 1.

- Geopolitical events, supply chain disruptions, and volatility in international markets pose upside risks to inflation.

Inflation
- A **long-term increase** in the **general price level** of goods and services in a given economy.
- It considers the **pricing of most everyday or standard products and services.**
  - These include food, clothes, housing, recreation, transportation, consumer staples, etc.
- It is **positive** when it helps **improve consumer demand** and **consumption**, and **operate economic growth**.
- Even inflation is meant to keep **deflation in check** and is a **drag on the economy.**

Inflation Targeting
- It is a **central banking policy** that focuses on **altering monetary policy to attain a set annual inflation rate.**
- **Assumption: Preserving price stability**, which is achieved by managing inflation, is the greatest way to **generate long-term economic growth.**
- Under the RBI Act, 1934, the **Central Government, in consultation with the RBI,** determines the **inflation target** in terms of the **Consumer Price Index (CPI), once in five years.**
- It provides for the constitution of a **six-member Monetary Policy Committee (MPC)** to determine the **policy rate required to achieve the inflation target.**
- Currently, the RBI aims to **keep inflation at 4%** but will tolerate inflation between the **range of 2% to 6%.**

Monetary Policy Committee (MPC)
- Under **Section 45ZB of RBI Act, 1934**, the central government is empowered to constitute a **six-member Monetary Policy Committee (MPC).**
- **Objective:** To determine the Policy Rate required to achieve the inflation target
- The decision of the Monetary Policy Committee shall be **binding on the Bank.**
- **Composition:** The MPC shall consist of **6 members** viz.
  - RBI Governor as its ex-officio chairperson
  - Deputy Governor in charge of monetary policy
  - An officer of the Bank to be nominated by the Central Board
  - Three persons to be appointed by the Central Government
  - They must be persons of ability, integrity and standing, having knowledge and experience in the field of economics or banking or finance or monetary policy.

120. Kyasanur Forest Disease: the assault of the tick - The Hindu

Relevance: Science and Technology- developments and their applications and effects in everyday life.

News:
- Since the start of the year, two deaths have occurred in Karnataka due to **Kyasanur Forest Disease (KFD).**
- The total death toll from the disease exceeds 560 since its discovery.

Prelims Takeaway
- Kyasanur Forest Disease (KFD)

Kyasanur Forest Disease (KFD)
- Also known as **monkey fever,** KFD is a **viral infection** first noticed in **1956** in the forests of **Shivamogga district.**
- **Monkeys serve as indicators** of an outbreak, as they also get infected.
- The disease is believed to have become **active due to ecological changes.**

Transmission and Symptoms
- **Transmission:** Through contact with infective ticks, particularly among individuals visiting forest areas for various purposes.
- **Symptoms**
  - They typically appear three to eight days after a tick bite and include fever, headache, body pain, redness of the eyes, and gastrointestinal symptoms.
  - Severe cases may involve nosebleeds.

Diagnosis and Treatment

- Diagnosis is through **blood tests.**
- There is **no specific treatment** for KFD; doctors manage symptoms and monitor patients closely.
- Previous attempts to develop a vaccine were deemed ineffective, but the ICMR is reportedly collaborating with Indian Immunologicals for vaccine development.

Preventive Measures
- To prevent infection, the forest department is distributing **tick repellent oil (DEPA oil)** to families entering forested areas.
  - The oil must be applied to exposed skin.
- The government has also committed to **providing free treatment to patients.**

121. Meet HAPS: India's very own UAV that can fly 20 km high and float for months - Indian Express

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:

Prelims Takeaway
• High-Altitude Pseudo Satellite (HAPS) Vehicle
• Unmanned Aerial Vehicle (UAV)

- Recently, the **National Aerospace Laboratories (NAL)** in Bengaluru successfully completed the first test of a **solar-powered "pseudo satellite".**
- The successful test flight in **Karnataka's Challakere testing range** marks India's foray into **advanced unmanned aerial vehicle (UAV) technology.**

Key Features of HAPS
- The high-altitude pseudo satellite vehicle (HAPS) can fly at **18-20 km altitude,** surpassing commercial airplane heights.
- Powered by **solar energy,** HAPS can **sustain flight for months or even years,** resembling satellite capabilities at a fraction of the cost.
- HAPS also **eliminates the need for rocket launches,** reducing operational expenses compared to traditional satellites.

Rationale Behind HAPS Development
- The necessity for **continuous border surveillance** post-Doklam standoff in 2017 led to the development of **high-endurance, high-altitude flying instruments.**
- HAPS offers advantages over battery-powered UAVs and satellites in terms of **endurance** and **constant monitoring capabilities.**
- It can significantly increase India's surveillance and monitoring capabilities in the border areas.

Applications Beyond Surveillance
- HAPS can serve in **disaster management** and provide **mobile communication networks in remote areas.**
- A lot of other things that **satellites** are deployed to do can also be done by these vehicles.

Global Context and Competition
- Other countries like China, South Korea, and the UK are also exploring HAPS technology.
- Private companies, including Indian startups, are actively engaged in HAPS development.

122. Cabinet nod to spectrum for Railways without TRAI reply - The Hindu

Relevance: Science and Technology- developments and their applications and effects in everyday life.

News:

Prelims Takeaway
• Cellular Operators Association of India (COAI)
• Train Collision Avoidance System
• TRAI

- Recently, the Indian Railways has sought an additional 5 MHz of paired spectrum in the 700 MHz band **for safety purposes** following the Balasore incident.

- The Cabinet has decided to reserve the spectrum, keeping it out of auctions, pending allocation.

Previous Spectrum Grants

- Previous spectrum grants to Railways only provided **limited data transfer capacity,** not sufficient to allow trains to continuously upload video footage for safety purposes.
- This necessitated the **dumping of video footage** at railway stations with WiFi connections.
- Railways emphasised the need for **real-time data and video capture** from moving trains to **enhance safety measures.**

Request for Additional Spectrum

- Dumping data at stations with high-capacity WiFi does not fulfil the objective of real-time data capture, especially during emergencies.
- Telecom networks can become **congested during exigencies,** hindering relief and restoration operations.
- The spectrum allocation would enable the **implementation of various safety features** and **enhance passenger security, surveillance, and asset reliability.**

Opposition from Cellular Operators Association of India (COAI)

- COAI opposed free handouts of spectrum in the 700 MHz band, arguing that it's used for **commercial telecom operations** globally.
- It also expressed concerns about the **adequacy of spectrum availability** for technologies like 5G if allocated for non-telecom purposes.

TRAI's Recommendation

- TRAI suggested allocating a **smaller slice of spectrum** to Railways than requested and allowing telecom operators to utilize the spectrum without interfering with railway communications.
- Trains require **limited spectrum capacity for data transmission** along tracks, allowing for shared use of spectrum resources.

123. Quality Council of India and Open Network for Digital Commerce launch DigiReady Certification Portal to empower MSMEs and small retailers - PIB

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- Recently, the Quality Council of India (QCI) and Open Network for Digital Commerce (ONDC) announced the launch of the **DigiReady Certification (DRC) portal.**

Prelims Takeaway
• DigiReady Certification (DRC) Portal
• Open Network for Digital Commerce (ONDC)

DigiReady Certification Portal

- **Purpose:** Fostering digital inclusion in the Micro, Small, and Medium Enterprises (MSME) sector.
- It aims to **assess and certify digital readiness** of Micro, Small, and Medium Enterprises **(MSME) entities.**
- It is an **online self-assessment tool** for MSMEs to evaluate their preparedness.
- It will enable MSMEs to **seamlessly onboard as sellers on the ONDC platform,** thereby expanding their digital capabilities and business potential.
- **Assess various aspects of digital readiness,** including documentation, technology proficiency, workflow integration and order management.

Benefits of DigiReady Certification Portal

- It facilitates a **streamlined seller journey** for MSMEs and small retailers, ensuring they can integrate seamlessly into existing digitised workflows.
- It presents **additional business prospects** for sellers, allowing them to become integral to the digital ecosystem.

- It marks a pivotal moment in India's mission to **empower MSMEs** and **make e-commerce more inclusive and accessible.**

124. Transitioning to hyperlocal extreme weather forecasting - The Hindu

Relevance: Disaster and disaster management.
News:

- The **Ministry of Agriculture & Farmers Welfare** have initiated **the weather information network and data system (WINDS)** to generate long-term, hyper-local weather data

Key Points

- Accurately predicting rain, cyclones, heatwaves and drought are **critical to inform decision making on disaster management.**
- In India the **Indian Meteorology Department (IMD) is the principal government agency** in all matters relating to meteorology
  - It specialises in the incredibly complex science of predicting weather patterns by observing, modelling and interpreting a multitude of variables.
- However, in **tropical countries** like India, **weather variability** is inherently higher.
- IMD's forecasts have improved vastly in the last few years as it has upgraded to technologies
  - Similar to the ones used by the U.S., the U.K. and Japan, which are known to produce accurate forecasts.
- Yet, there are still many days and geographies for which **Indian forecasts go wrong,** especially during winter and summer monsoon.
- One of the major hurdles is the **lack of weather monitoring ground stations.**
- Currently, IMD operates around 800 automatic weather stations (AWS), 1,500 automatic rain gauges (ARG) and 37 doppler weather radars (DWR).
- This is against the total requirements of more than 3,00,000 ground stations (AWS/ARG) and around 70 DWRs.
- Currently, most of the **prediction software used in forecasting are based on the global forecasting system** and weather research and forecasting models,
- the Ministry of Agriculture & Farmers Welfare have initiated the
  - To generate long-term, hyper-local weather data.
- The system will also promote the data for wider applications in agriculture and other sectors, it will help in creating a national-level data base

Prelims Takeaway
- Indian Meteorology Department
- Weather information network and data system (WINDS)

125. India developing a new Earth system model to improve forecasts, track climate crisis impacts - Hindustan Times

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.
News:

- The **Indian Institute of Tropical Meteorology (IITM)** is collaborating with the Centre for Climate Change Research (CCCR) to develop **India's first Earth System Model (ESM).**

Development of Earth System Model

- The Earth System Model **integrates various components of the Earth system,** including the atmosphere, ocean, land, ice, and biosphere.
- **Objective:** To provide reliable future projections of global and regional climate, with a specific focus on Indian monsoon rainfall.
- An allocation of ₹192.28 crores has been sanctioned under the **Monsoon Convection, Clouds and Climate Change (MC4) sub-scheme** for developing the climate forecasting system.

Functionality of Earth System Model

- The ESM is designed as an **open-source software** to simulate interactions among different Earth system components.

Prelims Takeaway
- Earth System Model
- Monsoon Convection, Clouds and Climate Change (MC4) sub-scheme

- It utilizes **numerical weather prediction** and **data assimilation techniques** for accurate climate change predictions.
- The IITM-ESM incorporates elements from the Climate Forecast System (CFS) of the National Center for Environmental Prediction (NCEP, USA) to enhance its capabilities.
- The development of the model is ongoing and is anticipated to be **completed by 2025.**

Significance of Earth System Model

- It will aid in **understanding the complexities of climate change,** particularly focusing on the Indian subcontinent, with its diverse geographical features.
- By addressing regional climate change aspects, the model aims to provide **policy-relevant information** based on robust scientific analysis and assessments.

126. India examining reworking of Merchant Shipping Act - The Hindu

Relevance: Conservation, environmental pollution and degradation, environmental impact assessment.

News:

Prelims Takeaway
• Air pollution
• Merchant Shipping Act

- India is looking at **reworking its merchant shipping laws as it replaces the existing eponymous Act of 1958**.

Key Highlights

- The new provisions will look to include up-to-date international maritime conventions to which the country is a party
  - o Allow for easier registration of ships under Indian flag by NRIs, overseas citizens of India, corporates including limited liability partnerships
  - o Enable electronic registration of vessels and granting recognition to e-documents like log-books, record books.
- Merchant shipping refers to **activities that are carried out for commerce rather than for defence or warfare**.
- Changes to the law that have been proposed are currently being deliberated with the Ministry of Ports, Shipping and Waterways being the nodal ministry.

The proposals

- Proposed under the new provisions is a **three-tier dispute resolution mechanism.**
- It will look to resolve disagreements arising between ship-owners and salvors (those engaged in salvaging ships lost at sea)
  - o And also between sea-farers and owners or masters or agents of ship.
- The resolution mechanism will look "**to make the award of the shipping master enforceable instead of enforcement by a Magistrate**
- Previously ambiguous terms like "abandoned vessels" have been defined, while the new rules call for action against "unsafe vessels" too.
- The Centre has been empowered to direct port authorities and others to take measures in respect of abandoned vessels.
- **The Merchant Shipping Act of 1958** provided for registration of Indian ships and enabled provisions looking to accelerate the pace of development of the sector.
- **The Act is divided into 24 parts**, each part dealing with specific aspects of merchant shipping like:
  - o Registration of ships, sailing vessels and fishing vessels, National Shipping Board, manning of ships, engagement, discharge and repatriation of seamen and apprentices etc.
- Air pollution arising out of ships operating in the sea has also been covered with appropriate actions.

127. Industrial output witnessed mild recovery in December - The Hindu

- **Relevance:** Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
- **News:**

Prelims Takeaway
• Index of Industrial Production (IIP)
• Retail Inflation

In recovery mode

Industrial output growth recovered from an eight-month low of 2.4% in November 2023 to 3.8% in December 2023

■ **Consumer durables** production recovered in December, albeit aided by a 11.2% dip recorded a year earlier

■ **Consumer non-durables** also bounced back from a 3.6% contraction in November to rise a moderate 2.1% in December

■ **Consumption demand to remain** soft as past Interest rate hikes and RBI regulations dampen credit growth

128. Proposals for industry body rejected, Centre to regulate e-gaming - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- MeitY will now prepare a framework for **permitting and certifying online games which involve money.**
- This means, the Government of India will act as a **regulator for the online gaming sector** rather than an industry-led self-regulatory organisation (SRO).

Prelims Takeaway
• Online Gaming
• Self-Regulatory Organisation (SRO)

Rejection of Industry-Dominated SROs

- As per IT rules, **online real money games require approval** from a **regulatory body,** while those without monetary involvement do not need regulation.
- The government had notified the online gaming rules last year and had given 3-months to the industry to come up with proposals for SROs.
- However, the proposals received were **heavily dominated by gaming companies** and their **industry associations.**
- Therefore, MeitY rejected the SRO proposals emphasizing the **need for a neutral regulatory body.**

Different types of online gaming

1. **e-Sports**
   - These are video games that were **played privately or on consoles** in video game stores in the 1990s
   - Now, they are played **online** in a **structured manner** between professional players, either individually or in teams.
2. **Fantasy sports**
   - These are games in which the **player selects a team of real sports players** from several teams and **earns points** based on how well the players perform in real life.
3. **Online casual games**
   - These could be **skill-based,** where the outcome is heavily impacted by **mental or physical skill or chance-based**

- A game of chance may be considered as **gambling** if players bet money or **anything of monetary value.**

The Indian online gaming market

- The online gaming industry **grew exponentially** during the **Covid-19 pandemic.**
- The **revenue** of the Indian mobile gaming industry is expected to **reach $5 billion in 2025.**
- The industry in the country grew at a **Compound annual growth rate (CAGR) of 38% between 2017-2020,** as opposed to 8% in China and 10% in the US.
- India's percentage of **new paying users (NPUs)** in gaming has been the **fastest growing** in the world.
  - With 40% in 2020 and expected to reach 50% in 2021.
- According to a **FICCI report,** transaction-based games revenue increased by 26% in India, while the number of paying players increased from 80 million in 2020 to 95 million in 2021 (by 17%).

129. 'India susceptible to trade disputes without permanent solution for food security' - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

Prelims Takeaway
• WTO
• Bali ministerial

- India will be susceptible to trade disputes at the **World Trade Organization (WTO) and face increased push back over food subsidies**

Key Highlights

- **India will be susceptible to trade disputes at the World Trade Organization** (WTO if it fails to achieve a permanent solution on public stockholding for food grains
  - at the 13th ministerial conference in Abu Dhabi later this month
- A permanent solution at WTO will give India and a coalition of developing countries the flexibility to give out higher farm support.
- This assumes special significance as farmers are holding yet again protests in the national capital seeking a law to guarantee minimum support price (MSP) for all crops.
- However, giving out higher farm support could land India into legal disputes at WTO on account of distorting global trade.
- India is already **facing pushback from the Cairns Group**
  - a group of agricultural exporting countries that include Australia, Brazil and Canada
  - who claim that India's public stockholding (PSH) programme is highly subsidised, especially for rice, and that this is affecting food security of other countries.
- The main reason why India is very keen on a permanent solution is that some of the provisions in the peace clause are ambiguous.
- **India has invoked the 'peace clause' several times** at the WTO for breaching the prescribed 10 per cent subsidy ceiling on rice procurement.
- **India's subsidy on rice had exceeded** the threshold on multiple occasions forcing it to invoke the **'peace clause' agreed during the Bali ministerial in 2013**
  - which allows developing countries to breach the 10 per cent ceiling without invoking legal action by members.
- "Cairns Group is also pushing all countries to cut agriculture support by 50 per cent by 2030
  - which will result in countries such as India making huge sacrifices compared to developed countries

The peace clause

- It says that you are **distorting trade due to your subsidies but nobody will sue you provided you meet certain conditions.**

- The conditions include that a **country should not hurt the food security** of other countries or be trade distorting.
- These **conditions are vague in nature** and that is why India can be taken to dispute.
- This is the reason why India and other developing nations are pushing for a permanent solution

130. Food prices may keep inflation high - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
News:

Prelims Takeaway
• Retail Inflation
• Disinflation

A brief respite

The drop in retail inflation in January is seen as temporary with prices of vegetables, cereals and pulses still elevated

- Economists say high frequency vegetables price data so far suggest inflation may not fall any further
- Prices of vegetables and other food items have held firm through the first 10 days of the current month
- Last week, RBI Governor Das had cautioned that food price shocks may interrupt the disinflation process

131. NITI Aayog Launches Greening India's Wastelands with Agroforestry (GROW) Report and Portal - PIB

Relevance: Conservation, environmental pollution and degradation, environmental impact assessment.
News:

Prelims Takeaway
• United Nations Convention on Combating Desertification
• The Paris Agreement

- NITI Aayog **unveiled the Greening and Restoration of Wasteland** with Agroforestry (GROW) report and portal
- It aims to bolster efforts in environmental conservation and sustainable land use across India.

Key Highlights

- Utilising cutting-edge remote sensing and Geographic Information Systems (GIS) technologies The report offers a comprehensive state-wise and district-wise analysis
  - o Providing crucial insights to government departments and industries engaged in greening and restoration projects.
- Under the leadership of NITI Aayog, th**e report employed remote sensing and GIS techniques**
  - o To evaluate the suitability of agroforestry practices across all districts of India.
- Additionally, it introduced an Agroforestry Suitability Index (ASI) for national-level prioritization, utilizing thematic datasets.

- **The GROW initiative includes the launch** of the "Greening and Restoration of Wasteland with Agroforestry (GROW)-Suitability Mapping" portal on 'Bhuvan'
  o Ensuring universal access to state and district-level data.
- This portal is expected to significantly **boost the promotion of agroforestry initiatives by government bodies.**
- Presently, agroforestry covers 8.65% of India's total geographical area, encompassing approximately 28.42 million hectares.
- The GROW report emphasizes the immense potential of converting underutilized areas, particularly wastelands, into productive agroforestry zones.
- This initiative aligns with national commitments to **restore 26 million hectares of degraded land by 2030**
  o establish an additional carbon sink capable of sequestering 2.5 to 3 billion tonnes of carbon dioxide equivalent.

The urgent need to promote agroforestry for three primary reasons:

- reducing the import of wood and wood products, mitigating climate change through carbon sequestration, and optimizing the use of arable land.
- India, as the pioneer of **the National Agroforestry Policy in 2014**, is committed to enhancing productivity, profitability, and sustainability through agroecological land use systems.
- Agroforestry, which integrates trees, crops, and livestock, addresses multifaceted challenges related to food security, nutrition, energy, employment, and environmental conservation.
- These efforts are in alignment with global commitments such as:
  o the Paris Agreement
  o Bonn Challenge
  o UN Sustainable Development Goals
  o United Nations Convention on Combating Desertification (UNCCD)
  o Doubling Farmers' Income initiative
  o Green India Mission, among others.

132. China moves its nationals into its vacant 'defence villages' along LAC - Indian Express

Relevance: Security challenges and their management in border areas – linkages of organized crime with terrorism.

News:
- Chinese nationals have started **occupying several of their model "Xiaokang" border defence villages across India's** north-eastern borders
- China has been building it along the Line of Actual Control (LAC) since 2019,

Prelims Takeaway
• Vibrant Villages Programmes
• Line of Actual Control (LAC)

Key Highlights
- the Chinese, in the last few months, have started occupying a couple of these villages built on its side of the **LAC across from Lohit Valley and the Tawang sector of Arunachal Pradesh.**
- China has been constructing 628 such "well-off villages" along India's borders with the Tibet Autonomous Region
  o including Ladakh and Arunachal Pradesh for over five years now.
- the Chinese are building infrastructure all along the LAC bordering the northeast
  o even as the LAC remains far off from most **inhabited areas or areas of importance except for Tawang and the Siliguri Corridor.**
- The official added that the Chinese have consistently improved their existing infrastructure including

- o improving their connectivity through passes, constructing roads and bridges and their model villages.
- China has also been constructing infrastructure, including border villages, in Bhutanese territory.
- In the last three to four years, India has also stepped up work on its border infrastructure —
  - o This includes improving forward connectivity, constructing alternate routes to the LAC as well as connecting them.
- Under the **Vibrant Villages programmes,** India plans to develop 663 border villages into modern villages with all amenities in the first phase.
- Of them, at least 17 such villages along the borders with China in Ladakh, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh
  - o have been selected for development as a pilot project under the programme.
- Work is underway to improve connectivity to the passes
  - o establish laterals for inter-valley connectivity and on construction of helipads and advanced landing grounds at various locations in the state

133. Pension concerns - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
- Employees' Provident Fund Organisation (EPFO)
- Employees' Pension Scheme (EPS), 1995

News:
- Recently the Central Board of Trustees of the Employees' Provident Fund Organisation (EPFO) **recommended for a 0.1-percentage-point increase** in provident fund (PF) deposits for 2023-24
- It is in tune with what the EPFO did last year.

Key Highlights
- However, **the recommended rate of 8.25% is 0.4-percentage points** lower than in 2018-19, a pre-election year like 2023-24.
- Months ago, the **Finance Ministry had rejected** a proposal to double the minimum pension amount, citing a "huge rise" in **the budgetary support needed under the Employees' Pension Scheme (EPS), 1995.**
- There is one more component in the budgetary support which refers to the Central government's contribution at 1.16% of wages up to an amount of ₹15,000 a month.
- The Finance Ministry **calculates that a 100% rise in the minimum pension** would be more than the proportionate increase in the overall budgetary support
  - o As numerous pensioners had received much less than ₹1,000 as monthly pension till 2014.
- Describing the EPS as a "Defined Contribution-Defined Benefit" social security scheme,
  - o The government said in the Rajya Sabha that all benefits were paid out of accumulations through contributions
  - o And as per the fund's valuation as on March 31, 2019, there was "an actuarial deficit.
- However, this **argument has been virtually demolished in the EPFO's annual report (2022-23).**
- Notwithstanding its reasons not to hike the minimum pension, the government must note that the difference between the minimum and original pension was about ₹970 crore for 2022-23.
- So, the doubling of the minimum pension is no strain.
- In the case of higher PF pension, the rules have been framed after the 2022 Supreme Court judgement wherein most of the pre-2014 retirees would not be covered;
  - o There are around four lakh such applications for higher pension. A more expansive approach to PF pension matters will help senior citizens.

134. Kerala passes resolution requesting Union govt. to amend wildlife Act - The Hindu

Prelims Takeaway

Relevance: Conservation, environmental pollution and degradation, environmental impact assessment.

News:

- The Kerala Legislative Assembly adopted a **unanimous resolution urging the Central government** to suitably **amend the Wildlife Protection Ac**t to mitigate human-wildlife conflicts.

• Wildlife Protection Act
• Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Key highlights

- Wildlife intrusions in habitations abutting forests and lethal attacks on residents had impelled the government to request the Centre to make the law more contemporary.
- The resolution demanded that the Central law empower Chief Forest Conservators to use lethal force to liquidate wild animals
  - That trespass on residential localities and pose an imminent threat to human life.
- The resolution demanded the Central government declare wild pigs as vermin.
- It also requested the Centre to initiate scientific and humane measures to control the wildlife population.
- The resolution was paramount to the State, **given that forests covered 30% of its geographical expanse.**
- UDF had blamed forest officials for not taking pre-emptive action to insulate residential localities from potentially lethal wildlife intrusions in Wayanad.

The Wild Life (Protection) Act 1972

- It provides a legal framework for the protection of various species of wild animals and plants, management of their habitats, regulation
  - And control of trade in wild animals, plants, and products made from them
- The act also **lists schedules of plants and animals** that are afforded varying degrees of protection and monitoring by the government.
- **India's entry to the CITES** (Convention on International Trade in Endangered Species of Wild Fauna and Flora) was made easier by the Wildlife Act.
- Earlier, **Jammu and Kashmir was not covered** by the Wildlife Protection Act of 1972.
- The Indian Wildlife Protection Act now applies to J&K as a result of the reorganisation act.

135. ISRO to launch INSAT-3DS on Feb 17, will improve forecasts - Indian Express

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:

- The **Indian Space Research Organisation (ISRO)** will soon launch the **INSAT-3DS** from Sriharikota.

Prelims Takeaway
• INSAT-3DS
• Types of Orbits
• India Meteorological Department (IMD)
• Indian Space Research Organisation (ISRO)

Key Features

- It will facilitate the **development of new satellite products** to track cyclones, monsoon systems, thunderstorms, and other natural disasters.
- It will also **provide valuable observations** of the atmosphere, land, and oceans.
- **Funding:** Ministry of Earth Sciences
- **Payloads:** Four payloads - an Imager, a Sounder, a Data Relay Transponder and a Satellite aided Search and Rescue Transponder.

Benefits of Multi-Spectral Imager and Sounder

- The multi-spectral imager will generate images of the Earth **across six wavelength bands.**

- o It will aid visualisation of colour-dependent atmospheric parameters like water vapour (humidity).
- The sounder will contribute in generating **vertical profiles of the atmosphere** and **provide information** like temperature and humidity.

Third Generation Meteorological Satellite
- It is a continuation to the **Third Generation Meteorological Satellite series** from the **geostationary orbit.**
- It follows predecessors like **INSAT-3D** and **INSAT-3DR**, which have been operational since their launch in 2016.

Benefits of INSAT Data
- Since 2003, the India Meteorological Department (IMD) has been using INSAT data for its **operational meteorology purposes.**
- Satellite-based products have significantly **improved forecast accuracy, atmosphere and ocean monitoring**, and overall meteorological services.
  - o All this led to reduced loss of life, property, and livelihood.

136. Global meet urges India to augment pulses production to meet nutritnal needs - The Hindu/ Efforts being made to attain self-sufficiency in pulses by 2027: Munda - Indian Express

Relevance: Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Prelims Takeaway
• Self-sufficiency in Pulses
• NAFED

News:
- The Global Pulses Conference, an annual meeting of pulses producers, processors and traders**, suggested that India augment production of pulses to meet the nutritional requirements.**

Key Highlights
- The Centre had taken adequate measures to improve pulses cultivation in the country **by increasing the minimum support price (MSP) regularly.**
- The two-day conference is jointly organised by **the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED)** and the Global Pulse Confederation (**GPC**).
- Over the last decade pulses production had grown by 60% from 171 lakh tonnes in 2014 to 270 lakh tonnes in 2024.

'Self-sufficiency by 2027'
- **India had become self-reliant in chickpeas (chana) and many other pulses crops,** with only a slight deficiency remaining in pigeon peas (tur) and black gram.
- Consistent efforts are being made to attain self-sufficiency in pulses by 2027.
- It's a crop that **benefits the soil.**
- It is nutritious and benefits the smallholding farmers.
- If India takes efforts to improve cultivation, **all the stakeholders will get the benefits.**

137. January trade deficit narrows to 9-month low of $17.5 billion - The Hindu/ Goods exports up 3% in Jan, gold and electronics imports widen trade deficit - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
• Trade Deficit
• Balance of Payments

News:

Shortfall narrows

The trade deficit, which hit a record high of $29.9 billion in October, narrowed sequentially for the third straight month, provisional estimates show

- Imports of $54.4 billion were, however, 6.6% lower than in the preceding month

- Services exports are estimated to have expanded 17.5% to $32.8 billion

- Goods exports rose for the second straight month to $36.92 billion in January

138. As sanctions ease, India becomes top buyer of Venezuelan crude in Dec, Jan - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

INDIA, U.S. BIGGEST BUYERS FROM VENEZUELA

India	US	Others
2.54	1.00	2.03

Venezuelan exports
5.57

All figures in lakh barrels per day

Source: Kpler; Note: Rounded-off figures for January

- Chinese independent refiners were biggest buyers of discounted Venezuelan oil amid sanctions

- With US easing sanctions in Oct and discounts narrowing, Venezuelan dispatches to Chinese refiners have dropped

- The spurt in Venezuelan oil exports to India has come largely at the expense of Chinese refiners

Prelims Takeaway
- Organization of the Petroleum Exporting Countries (OPEC)
- Trends based Question

139. From restoring forests to river basins, seven conservation initiatives across continents recognised by UN - Down To Earth

Relevance: Conservation, environmental pollution and degradation, environmental impact assessment.

News:

- The United Nations named seven initiatives from across **Africa, Latin America, the Mediterranean and Southeast Asi**a as the intergovernmental organisation's World Restoration Flagships

- The projects revolve around revival and preservation of ecosystems at **the tipping point of outright degradation caused by wildfires, drought, deforestation and pollution.**

Key Highlights

Prelims Takeaway
- Terai Arc Landscape initiative
- Sri Lanka Mangrove Regeneration initiative

- The award conferred by the United Nations Environment Programme (UNEP) and Food and Agriculture Organization (FAO) of the UN
  o Makes the initiatives eligible for technical and financial support from the organisation.
- The awards serve as a part of the UN Decade on Ecosystem Restoration, led by the two agencies.
- Along with this, over **eight million hectares are planned for restoration by 2030."**
- **The Living Indus initiative received approval from the Pakistan** parliament in the wake of the devastating 2022 climate change-induced floods.
- Its official launch took place at the 27th Conference of Parties to the **UN Framework Convention on Climate Change in Sharm el-Sheikh.**
- **The initiative aims to restore 25 million hectares of the river basin by 2030,** encompassing 30 percent of Pakistan's surface area through the implementation of 25 high-impact interventions for policymakers, practitioners and civil society.
- It designates the Indus River as a living entity with rights
  o A measure taken to protect rivers elsewhere as well.
  o It involves Australia, Bangladesh, Bolivia, Brazil, Canada, Ecuador, India, New Zealand, Peru and Sri Lanka.
- The **Acción Andina social movement led by Peruvian conservation** non-profit ECOAN aims to protect and restore a forest area of one million hectares.
- "They are expected to benefit from the initiative by 2030 in various ways--from access to medicine, solar panels, and clean-burning clay stoves
  o To improve grazing management, sustainable agriculture, microbusiness, and ecotourism management of Indigenous cultures.
- The **Sri Lanka Mangrove Regeneration initiative** is a science-driven programme co-led by local communities.
- It focuses on the restoration of natural balance in the ecosystem. Since its launch in 2015, efforts have led to 500 hectares of restored mangroves, according to the UN statement.
- **The Terai Arc Landscape initiative aimed to**
  o Restore the forests of critical corridors of the Terai Arc Landscape in collaboration with local communities working
  o As citizen scientists, community-based anti-poaching units, forest guards, among others.
- Growing forests in Africa's drylands initiative aims to expand from 41,000 restored hectares today to 229,000 hectares by 2030.
- **"Ecosystem restoration is a long-term solution i**n the fight to eradicate poverty, hunger and malnutrition,
  o As we face population growth and increased need for foods and ecosystem goods and services,

140. IBBI expert panel bats for specialised insolvency mediation- The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:
- An **IBBI-appointed expert committee headed by former Law Secretary** has recommended a voluntary mediation framework under the Insolvency and Bankruptcy Code (IBC).

Prelims Takeaway
• Insolvency and Bankruptcy Code (IBC)
• Insolvency and Bankruptcy Board of India

Key Highlights
- Currently, **mediation does not exist as a legislative mandate** under IBC.
- Mediation is the use of a neutral third party to facilitate the negotiated settlement of a dispute and resolve conflicts between two or more parties.

- The **Committee has taken a cautious approach** and endeavoured to balance the fundamental objectives of the Code,
  - i.e., "time-bound reorganisation" and "maximisation of value" with autonomy to parties to voluntarily opt for the 'out-of-court' mediation process to enhance efficiency of the insolvency resolution process.
- The Committee has recommended a "**stage based**" **and phased introduction of voluntary mediation** as a dispute resolution mechanism under the Code,
  - While maintaining the sanctity of the timelines for various existing insolvency resolution processes.

Flexibility in process
- The core essence of the framework is **its independence and flexibility to provide room for quick incorporation of implementational learning**.
- The committee recommended the **likely framework for the introduction of mediation as a complementary mechanism**
  - for resolution of disputes around the processes under the Code.
- The mediation framework would best operate as a self-contained blueprint within the Code
  - with independent infrastructure to ensure that the objectives of the Code are met without compromising or diluting the basic structure of the Code in terms of timelines, public rights.
- However, there are **critical issues that require attention before the scheme is implemented.**
- One notable concern is the exclusion of financial creditors from the initial scope of voluntary mediation provisions,

141. Torpedoes, refueller aircraft in new deals cleared by DAC- The Hindu

Relevance: Various Security forces and agencies and their mandate.

News:
- The **Defence Acquisition Council** (DAC) **accorded Acceptance of Necessity (AoN**), the first step in the procurement process, for proposals worth ₹84,560 crore.

Prelims Takeaway
• DAC
• DAP 2020

Key highlights
- The proposals include **some long-pending deals**
  - Such as for heavyweight torpedoes (HWT) for the Navy's Scorpene-class submarines and flight refueller aircraft (FRA) for the Indian Air Force (IAF) beginning afresh.
- Other major deals include **medium range maritime reconnaissance and multi-mission maritime aircraft for the Navy and the Coast Guard**
  - New generation anti-tank mines, air defence tactical control radar, and software-defined radios.
- "Further, to keep the Indian naval ships one step ahead of the threats posed by the adversaries
  - the AoN under Buy (Indian) category has been accorded for procurement of **active-towed array sonar** having capabilities
  - to operate **at low frequencies** and various depths **for long-range detections of adversary submarines.**

'DAP 2020'
- The procurement of a **new generation of anti-tank mines** having seismic sensors and the provision of remote deactivation
  - With additional safety features has been approved under Buy (Indigenously Designed, Developed and Manufactured category of Defence Acquisition Procedure (DAP) 2020.
- The DAC has approved amendments in the DAP 2020 with respect to benchmarking and cost computation, payment schedule and procurement quantity.
- The DAC also cleared the AoN for sustainment support through repair replenishment for the 24 MH-60R multi-role helicopters procured by the Navy from the U.S. under the foreign military sale route.

142. DoT unveils an unparalleled venture 'Sangam: Digital Twin' initiative - PIB

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:
- Recently, the Department of Telecommunications (DoT) introduced the **'Sangam: Digital Twin' initiative.**
- It seeks to **leverage Digital Twin technology** to create virtual replicas of physical assets for **real-time monitoring, simulation, and analysis.**

'Sangam: Digital Twin' Initiative
- The initiative is a **Proof of Concept (PoC)** executed in **two stages**
  o The first stage focuses on **exploratory efforts** to clarify objectives and unleash potential.
  o The second stage will involve **practical demonstrations of specific use cases** to generate a future blueprint for scaling and replicating successful strategies in future infrastructure projects.
- **Objectives**
  o To bridge the gap between conceptualization and realization of innovative infrastructure solutions.
  o To develop a model framework for facilitating faster and more effective collaboration.
  o To provide a roadmap for scaling successful strategies in future infrastructure projects.
- The initiative comes against the backdrop of the past decade's breakthroughs in communication, computation and sensing in the era of techade striving for the vision 2047.
- It presents an exciting opportunity to pioneer **sustainable, efficient, and innovative infrastructure solutions** by harnessing the power of innovation, data, and design.

Integration of Advanced Technologies
- It **integrates** advanced technologies such as 5G, IoT, AI, AR/VR, AI native 6G, and next-gen computational technologies to **reshape infrastructure planning and design.**
- It emphasizes **collaboration** among public entities, infrastructure planners, tech giants, startups, and academia to achieve **holistic innovation.**

143. RBI must probe loan-to-value norms: gold loan firms - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:
- Recently, the Association of Gold Loan Companies requested the RBI to **investigate violations** by certain bank branches of the **norm that caps the loan amount against pledged gold jewellery.**
- This plea comes as banks continue to focus on growing their **gold loan portfolios** even after the RBI's temporary relaxation in the **Loan-to-Value (LTV) norm** ended.

Violations of LTV Norm
- The Association highlighted instances of both public and private sector banks **violating the 75% LTV norm.**
  o The norm states that the loan amount cannot exceed 75% of the value of the collateral.
- Some bank branches are extending gold loans beyond this limit, with loans ranging from 80-90%, violating regulatory guidelines.

Focus on Agricultural Gold Loans
- Banks are increasingly focusing on **agricultural gold loans** due to the **benefits of priority sector lending classification** and **easier recovery** in case of default.
- However, **growth in gold loans** in the **non-agriculture segment** continues to rise.
- Additionally, there are concerns about **customers without agricultural activity availing agricultural loans** which is against the regulations.

Gold Loan Growth
- According to a Crisil Market Intelligence and Analytics Research report, gold loan finance witnessed a **CAGR of 15%** between fiscal 2018 and 2022.
  o This was driven by stable gold prices and increased demand during the pandemic.

- As of March-end 2022, banks and NBFCs collectively held outstanding gold loans of ₹5,09,400 crore, with banks holding 78% and NBFCs holding 22% shares.

144. OpenAI launches Sora: How AI can create videos from a text prompt - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
• OpenAI Sora
• ChatGPT

News:
- Recently, OpenAI introduced **Sora**, a new generative artificial intelligence (GenAI) model capable of **converting text prompts into videos.**
- This marks a significant advancement in the field of AI, addressing previous inconsistencies in text-to-video conversion.

Sora's Capabilities
- It can **create full videos in one go** or **add more to already created videos** to make them longer.
- It can generate **videos up to a minute long** while maintaining visual quality and adhering to the user's prompt.
- It can also **animate a static image,** transforming it into a dynamic video presentation.
- It is capable of **creating complex scenes** with multiple characters, specific types of motion, and accurate details of the subject and background.

Safety Protocols
- OpenAI has developed safety protocols to detect and prevent misuse of Sora. This includes
  o a **text classifier** to reject prompts violating usage policies
  o **image classifiers** to review generated videos for compliance.
- The company plans to engage with policymakers, educators, and artists to understand concerns and identify positive use cases for the technology.
- The company will also work with visual artists, designers, and filmmakers to gather feedback for further improvements.

Sora's Shortcomings
- Struggles with **accurately simulating complex scenes' physics**
- Understanding specific instances of **cause and effect.**
  o For example, a person might take a bite out of a cookie, but afterward, the cookie may not have a bite mark.
- It may also **confuse spatial details** and struggle with **precise descriptions of events** that unfold over time.

145. After PAC nod, hike in reporting limits for Ministries' spending proposed - Indian Express

Relevance: Government Budgeting

Prelims Takeaway
• Appropriations
• Grants

News:
- After a gap of about 18 years, **the government is set to revise its financial limits for 'New Service' and 'New Instruments of Service'** after getting approval from Parliament's Public Accounts Committee (PAC).

Key Highlights
- The panel has approved the **Finance Ministry's proposal to raise the reporting limit for new policy-related expenditure** by ministries/departments to above Rs 50 crore
  o but not exceeding Rs 100 crore along with mandating prior approval of Parliament for spending over Rs 100 crore.
- The approval, which has come in line with expansion in GDP growth and the Budget size, has fixed the reporting limit for 'New Instrument of Service
  o to up to 20 per cent of the original appropriation or up to Rs 100 crore, whichever is higher.

- The **last such revision had come into effect in 2006.**
- Due to the low financial limits for new policy-related expenditure earlier, there has been a reported increase in the number of supplementary proposals from the ministries/departments.
- The time taken in seeking Parliament's approval would then cause delay in execution of projects, the report said.

New Service (NS) and New Instrument of Service (NIS)

- New Service (NS) refers to **expenditure arising out of a new policy decision, not brought to the notice of Parliament earlier**, including a new activity or a new investment.
- New Instrument of Service (NIS) refers to **relatively large expenditure arising out of important expansion of an existing policy.**
- The financial limits for 'New Service/New Instrument of Service' are applied whenever **the expenditure is incurred on account of the expansion of an existing policy.**
- According to the report, a substantial growth in budget size has diminished the delegated powers of the ministries leading to voluminous proposal(s) being forwarded, for reporting/approval of the Parliament.
- The PAC and the Comptroller and Auditor General of India (CAG) have been pointing to the **growing instances of unnecessary supplementary, re-appropriations not adhering to the NS/NIS limits;** and re-appropriations without reporting to Parliament or without obtaining prior approval of the Finance Ministry.
- the PAC had raised concerns over excess expenditure, ranging between 10.04 per cent to 79.77 per cent,
  - o incurred during FY 2019-20 for grants/appropriations even after obtaining high amounts of supplementary grants by the ministries/departments to meet their additional requirements.
- While explaining the need for the proposed revision, the Department of Expenditure under the Finance Ministry in its submission to the PAC said
  - o that in the last four financial years, the ministry took 2,500 tokens to the notice of the Parliament for reappropriation.

146. Joblessness rising in country with education levels: study - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- According to a study by IIM Lucknow, India's economy is witnessing a **stagnating employment growth, weakening employment elasticity** and **slow structural transformation.**
- Additionally, structural problems are brewing in the labour market such as **low female labour force participation** and a **rise in the unemployment rate (UR) with education levels.**

Prelims Takeaway
• MGNREGA
• Unemployment
• Labour Force Participation Rate

Trends in Employment Growth	Gender Disparity in Labour Market
• Surge in output and employment from 1987-88 to 2004-05, followed by 'jobless growth' from 2004-05 to 2018-19, and a minimal rebound afterward. • Agricultural sector, though employing the most youth, contributed low value-added to the overall economy, resulting in significant employment challenges. • Economic growth hasn't translated into job creation and has rather resulted in net labour displacement. **Policy Recommendations for Growth** • The study suggests identifying and promoting the labour-intensive manufacturing sector to achieve inclusive growth. • Additionally, examining the quality and decency of jobs alongside job quantity is important. • As there is a strong linkage between productivity and job decency. **Education Levels in Labour Market** • There is a significant gender disparity in the labour market and a growing level of unemployment for the highly educated youth than the less educated. • In 2020–21, the total labour force in India stood at an estimated 556.1 million. • Out of this total, 292.2 million (54.9%) were self-employed, 22.8% were in regular employment and an estimated 22.3% were in casual employment. • The UR for the illiterate and less educated class (below primary) was 0.57% and 1.13% respectively. • But for the highly educated class (graduates and above), it was 14.73% in 2020–21 for the age group '15–29 years'	• There is a persistence of gender-based disparity in the Labour Force Participation Rate (LFPR) in rural and urban areas. • Additionally, the decline of LFPR is higher for females as compared to males from 1983 to 2020-21. • The overall female Work Force Participation Rate (WFPR) for those aged 15–59 in 2020–21 stood at 32.46%, a full 44.55 percentage points below that of men. • Further, the total percentage of male WFPR (81.10%) in the same year for aged 15–59 years is more than twice the rate for female adults (33.79%). **Impact of Public Policies** • Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and similar initiatives have positive effects on rural livelihoods. • These policies raise wages, increase female labour force participation and improve bargaining power among low-caste workers.

147. Army to set up new corps for ops along LAC - Indian Express

Relevance: Security challenges and their management in border areas – linkages of organized crime with terrorism.

Prelims Takeaway
• Line of Actual Control
• Map Based question

News:
• T**he Army is converting its Headquarters Uttar Bharat** (HQ UB) area into a full-fledged operational corps

Key Highlights
• It is a move that will **shift its focus towards operations along the Line of Actual Control** (LAC) from its current responsibility of peacetime duties,
• **Based in Bareilly, the HQ UB area is currently a static formation** looking after peacetime locations and training establishments of Uttarakhand and western Uttar Pradesh
   o In addition to the LAC running along Himachal Pradesh and Uttarakhand — also referred to as the central theatre.
• A corps comprises elements of all arms and services with adequate reserves to carry out operations in its area of responsibility.
• It is structured to hold three divisions, but can hold more or less as per existing operational requirements. Each division comprises 15,000 to 18,000 troops.
• Earlier, the UB area had only one brigade and a few scouts battalions under it to patrol key border areas.
• But considering frequent face-offs with Chinese troops at certain disputed points along the LAC and an enhanced focus on dominating the border
• The formation was gradually upgraded and its combat capability increased by putting three independent brigades and an infantry division based in Uttarakhand under it.
• As per officials, the increased troop density in the area and additional emerging operational requirements have necessitated a change of focus towards operational tasks.

Line of Actual Control (LAC)
• The LAC is **the demarcation that separates Indian-controlled territory from Chinese-controlled territory.**
• It is divided into **three sectors**:

- o   The eastern sector which spans Arunachal Pradesh and Sikkim
- o   The middle sector in Uttarakhand and Himachal Pradesh
- o   The western sector in Ladakh.
- India considers the **LAC to be 3,488 km long, while the Chinese consider it to be only around 2,000 km.**
- India's **claim line is the line seen in the official boundary marke**d on the maps as released by the Survey of India, including both Aksai Chin and Gilgit-Baltistan.
- This means **LAC is not the claim line for India.**
- In China's case, **LAC is the claim line except in the eastern sector,** where it claims the entire Arunachal Pradesh as South Tibet.

148. A supercomputer and the AI in AIIMS: How they are helping identify therapies for cancer patients - Indian Express

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.
News:

Prelims Takeaway
• Artificial Intelligence (AI)
• Cancer

- **A supercomputer and AI**, **developed** by researchers from the All India Institute of Medical Sciences (**AIIMS**) Delhi, can help doctors identify the best cancer therapy for their patients

Key Highlights
- **iOncology AI aims to sequence the genomes of 3,000 cancer patients** who are currently seeking treatment at AIIMS,
- The AI model has been trained on 1,500 breast and ovarian cancer patients from AIIMS and was found to be over 75 per cent accurate when compared to the diagnosis provided by the clinicians.
- Genomic data is a powerful tool for medical researchers and doctors.
- It helps them understand **how variations in DNA affect our health.**
- Through genomic sequencing, they decipher our genetic makeup and spot alterations in our genes.

How does the AI tool work?
- The platform, developed **with Pune's Centre for Development of Advanced Computing,** allows doctors to store cancer patients' blood test and lab reports, scans and ultrasound reports and their history.
- Along with collecting and collating data, **the AI-enabled platform is also capable of reading the different types of datasets a**nd helping the doctors make decisions.
- "After studying the clinical data and genomic make-up of, say, a couple of thousand cancer patients
  - o   the tool will be able to help the doctors in selecting the appropriate treatment for the next patient
- **Genomic testing cancer therapy ai Genomic data** is a powerful tool for medical researchers and doctors.
- AI will be able to automatically flag the ones that have certain abnormalities.

- For example, haemoglobin levels of people in India are less as compared to the Caucasian population. Our treatment protocols can be adjusted to account for this

AI and cancer care: The big shift

- Globally, there is an **increasing interest in the use of AI for cancer treatment as it can help doctors**
  - o from developing new therapies to diagnosing patients at early stages of the disease and selecting appropriate treatments.

149. Govt raises funding for development of natural rubber sector for two years - Indian Express

Relevance: Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Prelims Takeaway
• Natural Rubber
• Kerala

News:

- The union government has in**creased the allocation sustainable development of the natural rubber sector scheme** for the next two financial years (2024-26) by 23 per cent

Key Highlights

- This comes amid a shortfall in availability of natural rubber which has resulted in **rising import of natural rubber from countries such as Vietnam, Malaysia and other Southeast Asian nations.**
- There are over **13 lakh rubber growers in the country with Kerala** accounting for a major chunk of the production
- funds will be used for:
  - o supporting the plantation of rubber
  - o generation of planting material
  - o productivity enhancement
  - o formation of rubber producers societies
  - o rubber research and training.
- **In non-traditional areas like Andhra Pradesh, Odisha and north-east states**, 3,752 hectares will be brought under rubber cultivation during 2024-26.
- The scheme is **implemented through the Rubber Board.**
- ”Research will aim at developing rubber clones suitable for different agro-climatic regions of the country to expand rubber cultivation to new areas

150. ODYSSEUS SPACECRAFT - Indian Express

Relevance: Science and Technology- developments and their applications and effects in everyday life.

Prelims Takeaway
• Odysseus Spacecraft
• Commercial Lunar Payload Services Program (CLPS)
• NASA

News:

- Recently America launched a **Robotic lunar lander** into space.
- If successful, it will become the **first American spacecraft** to land gently on the Moon since the **Apollo 17 moon landing in 1972.**
- It would also become the **first private effort** to reach the surface of the Moon **intact,** following three failed attempts by other companies.

Why is it called Odysseus?

- It was named Odysseus after a contest among employees of Intuitive Machines of Houston, the company in charge of the mission.
- The name is inspired from the journey of the **hero of the ancient Greek epic poem "Odyssey".**
- Odyssey's journey serves as an analogy for the **long and challenging nature** of the lunar mission.

Significance of Odysseus

- Signifies the **potential of private companies** to undertake lunar missions at significantly **lower costs** compared to traditional NASA endeavours.
- It could pave the way for **broader Moon exploration** by both NASA and commercial entities.

NASA's Involvement

- NASA is the **primary customer,** paying Intuitive Machines $118 million for its **payloads.**
- The **payloads** include
  o **Stereo camera:** It will observe the plume of dust kicked up during landing.
  o **Radio receiver**: It measures the effects of charged particles on radio signals.
- The launch comes after **recent failures of other private lunar missions,** underscoring the risks involved.
  o A US company, Astrobotic Technology of Pittsburgh, attempted to send Peregrine, its lander, to the moon.
  o But a malfunction with its propulsion system prevented any possibility of landing.

Commercial Lunar Payload Services Program (CLPS)

- Both Odysseus and Peregrine are part of **NASA's Commercial Lunar Payload Services program** (CLPS).
- **Objective:** To use commercial companies for lunar exploration rather than NASA building and operating its own moon landers.

151. Use dictionary meaning of 'forest', Supreme Court tells Central govt. - The Hindu/ SC says no new zoo, safari without its nod - Indian Express

Relevance: Conservation, environmental pollution and degradation

News:

- Recently, the SC passed the order on petitions challenging the amendments introduced in 2023 to the **Forest (Conservation) Act, 1980.**

Prelims Takeaway
• Forest (Conservation) Act, 1980
• Forest (Amendment) Act, 2023

The Background

- The 1980 statute was enacted to **check further deforestation** leading to ecological imbalance.
- Petitions argued that the amended Act **limited 'forest' to declared forests or those recorded as such in government records** after 1980.

Government Records

- The Centre, however, denied any attempt to trim the extent of forest coverage.
- It referred to the clarification provided in Section 1A, which broadened the definition of "government records".
- To encompass **lands identified as forests** by any State or Union Territory, local governing bodies, councils or acknowledged communities.

The Judgement

- The Supreme Court directed that the expression **'forest'** will continue to have a **"broad and all-encompassing" meaning** for the time being.
- It directed the government to revert to the **"dictionary meaning" of 'forest'** as upheld by it in a 1996 decision in the **T.N. Godavarman Thirumulpad case.**
- It clarified that 'forest' includes lands not just in official records but **as per the dictionary meaning.**
- It will include **1.97 lakh square km of undeclared forest lands.**

Interim Measures

- The States and Union Territories must **compile comprehensive records of forest lands** by March 31, adhering to previous court orders.
- The dictionary meaning would continue till the States and UTs prepare a "consolidated record" of all the lands recorded as 'forest' in government records.

Control Over Zoos

- The Bench further directed that the **establishment of zoos or safaris** will **require final approval** from the **Supreme Court.**

152. MCA plans to introduce 'leniency plus' regime to crack down on cartels - The Hindu

Prelims Takeaway

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

• CCI
• Leniency plus

News:
• The Corporate Affairs Ministry (MCA) has notified the introduction of **'Leniency plus' regime**

Key Highlights
• It will paving the way for the Competition Commission of India (**CCI**) to roll out a new Cartel detecting tool that is e**xpected to revolutionise Anti Trus lot enforcement i**n the country.
• Under the regime, **companies under investigation for one cartel** would be encouraged to report other unknown cartels to CCI.
• Such a programme helps competition authorities **to discover secret cartels** and to obtain insider evidence of the infringement.

What is Leniency Plus?
• Leniency plus is a proactive antitrust enforcement strategy
• It is aimed at **attracting leniency applications by encouraging companies** already under investigation for one cartel to report other cartels unknown to the competition regulator.
• **The benefit**:
  o reduction of penalty in the first cartel to the person disclosing the information, without prejudice to the company obtaining a lesser penalty regarding the newly disclosed cartel.
• While the Competition Act provides a framework for CCI to deal with leniency or lesser penalty applications, it until recently did not recognise leniency plus.

CCI draft regulation
• CCI had, in the last year, issued draft Lesser Penalty regulations.
• The draft regulations offer leniency applications in an ongoing cartel inquiry the incentive to disclose the details of another unrelated cartel.
• A leniency plus regime is expected to **further incentivize applicants to come forward with disclosures regarding multiple cartels**, thereby enabling the CCI to save time and resources on cartel investigation.
• This regime is already recognised in jurisdictions like the **UK, US, Singapore and Brazil.**

153. FINALLY A CHIP FABRICATION PLANT IN INDIA? THE PROGRESS SO FAR - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
• Semiconductor
• ATMP plant

News:
• The Minister of State for Electronics and IT recently confirmed that the **Tata Group and Israeli chip company Tower Semiconductor** have applied **to set up foundries** in the country.

Key highlights
• Aside from boosting domestic job prospects, it will also offer **India leverage in the chip wars** by increasing its say in the geopolitics of technology
  o that has so far been shaped by China and the United States.
• **India is competing** with some of its key allies – **the US and Europe** – to attract chipmakers.

What are the proposals currently on the table?
• India's chip incentive scheme broadly covers three aspects of the ecosystem –
  o full-blown foundries that can manufacture chips
  o packaging plants called ATMP facilities;
  o assembly and testing projects called OSAT plants.
• So far, US-based Micron Technology has cleared its proposal to set up a $2.75 billion **ATMP plant**, with the **facility coming up in Gujarat.**
• The Tata Group is understood to have also applied for an ATMP plant.

Why is India focusing on semiconductor manufacturing?

- It is, therefore, clear that building semiconductors domestically is crucial for the government's vision to develop a domestic electronics supply chain
  - eventually **reduce its imports from foreign countries, especially China**
  - which despite its own challenges remains to be the number one destination for such manufacturing.

154. Anoxic marine basins are among the best candidates for deep-sea carbon sequestration, say scientists - Phys.org

Relevance: Conservation, environmental pollution and degradation
News:

Prelims Takeaway
• Anoxic Marine Basins
• Carbon Sequestration

- According to scientists, **anoxic marine basins** may be among the most viable places to conduct **large-scale carbon sequestration** in the deep ocean.

Rationale for Carbon Sequestration

- To achieve climate goals, including limiting global warming to 1.5°C above pre industrial levels, **net negative CO2 removal strategies** are essential.
- Sending plant biomass to the seafloor offers a promising method for carbon storage, preventing CO2 and methane release into the atmosphere during decomposition.
- **Anoxic marine basins** are identified as suitable sites for carbon storage.

Optimal Site: The Black Sea

- The researchers examined three basins viz. the Black Sea, the Cariaco Basin, and the Orca Basin; assessing their capacity for biomass storage and preservation.
- Among the three basins, the Black Sea emerges as the most viable option due to its depth, isolation, and ongoing anoxia.

Anoxic Marine Basins

- They are characterised by **oxygen deficiency** and **isolation from main currents.**
- In most anoxic basins, the water is **extremely stagnant** and can have mixing times of many thousand years.
- They **can't support animal life** and are populated primarily by **microbes and some very specialised fungi** with different metabolisms than creatures in oxygen-rich environments.
- Many anoxic basins also contain **toxic chemicals,** which are produced by geothermal activity or by microbes living in the basins.
- Some also contain **salt domes,** big mounds of hardened salt.
- In some anoxic basins, **methane and other gases collect in reservoirs** beneath the seafloor.
  - The gases can percolate upward, pushing up domes of sediment on the seafloor that are called mud volcanoes.
  - The gases can burst through the soft sediments, creating "mini-eruptions" of wispy columns of sediment-filled water.

Formation of Anoxic Marine Basins

- Permanent anoxic basins form when there is a **strong layering of the water column** created in a cup-like formation on the ocean floor.
- The layering is caused by **density differences** due to salt concentration or temperature.
- Once stratification occurs, circulation with the rest of the ocean is minimised, and microorganisms consume the oxygen in the water.

155. Manipur HC removes portion of its order on ST tag for Meiteis - The Hindu

Relevance: Security challenges and their management in border areas – linkages of organized crime with terrorism.
News:

Prelims Takeaway
• National Commission for Scheduled Tribes
• Meities

- A Bench of the Manipur High Court modified its own March 27, 2023 order, ordering the removal of Paragraph 17(iii),

Key Highlights
- Paragraph 17(iii), had instructed the Manipur government to consider the inclusion of Meiteis in the list of Scheduled Tribes.
- This direction is said to have triggered the ongoing ethnic conflict between the Meiteis and the tribal Kuki-Zo communities in the State.
- ST status for Meiteis was considered and rejected in 1982 and 2001, government records show

Process of Inclusion in the ST List
- State governments starts recommending for inclusion of the tribes in the list of ST.
- **After the recommendation of the state govt, Tribal Affairs Ministry reviews** and sends them to the Registrar General of India, **Under the Home Ministry for approval.**
- After approval, it is sent to the **National Commission for Scheduled Tribes and then sent to the Cabinet for a final decision.**
- Once the cabinet finalises it, then it introduces a bill in the parliament to amend the Constitution (Scheduled Castes) Order, 1950, and the Constitution (Scheduled Tribes) Order, 1950.
- After the **amendment bill is passed by both the Lok Sabha and Rajya Sabha**, the President's office takes the final decision under Articles 341 and 342 of the Constitution

156. FM asks financial sector regulators to take more steps to curb unauthorised lending via apps - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
News:

Prelims Takeaway
• First Loan Default Guarantee
• GIFT IFSC

- The Finance Minister **asked financial sector regulators**, including the Reserve Bank of India (RBI), **to take further measures to check spread of unauthorised lending through online apps.**

Key Highlights
- Finance Minister Addressed the 28th meeting of the Financial Stability and Development Council (FSDC)
- The ongoing inter-regulatory issues were also discussed to support GIFT IFSC in its strategic role to become one of the world's premier international financial centres
- The objective is **to remain proactive, maintain cyber security preparedness with constant vigilance, and take appropriate and timely action to mitigate** any such vulnerabilities in the Indian financial system.
- Fraudulent loan apps **have defrauded many gullible borrowers of their money,** leading to distress in many cases.

First Loan Default Guarantee (FLDG)
- FLDG is a **lending model and a credit-sharing agreement** between digital lending apps and their partner banks and NBFCs.
- As per these agreements, **the digital lending apps will give credit guarantees to compensate their partners up to a certain amount in case of default.**
- Regulated entities such as banks and NBFCs lend from their own book through these fintech or digital lending apps.

157. ISRO key test over, CE20 cryogenic engine is now human-rated for Gaganyaan missions - The Hindu/ Cryogenic engine test for human-space flight mission, Gaganyaan, successful: ISRO - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.
News:

Prelims Takeaway
• Gaganyaan Mission
• Cryogenic Engine
• ISRO

- Recently, ISRO achieved a significant milestone in the **human rating of its CE20 cryogenic engine** with completion of the final round of ground qualification tests.
- The cryogenic engine powers the **cryogenic stage** of the human-rated LVM3 launch vehicle for **Gaganyaan missions.**

Human Rating
- Human-rating refers to rating a system that is **capable of safely transporting humans.**
- **Rigorous testing** including life demonstration tests, endurance tests, and performance assessments under various conditions, were conducted to meet human rating standards.
- The CE20 engine underwent 39 hot firing tests under different conditions, totaling 8,810 seconds.
- This surpassed the minimum requirement of 6,350 seconds for human rating qualification.

Cryogenic Engine
- A cryogenic engine **powers the last stage of space launch vehicles** which makes use of **Cryogenics.**
  - Cryogenics is the study of the production and behaviour of materials at extremely low temperatures (below -150℃) to lift and place the heavier objects in space.
- It uses **Liquid Oxygen (LOx)** and **Liquid Hydrogen (LH2)** as propellants.
- So far only **six countries** have these launch vehicles viz. the US, China, Russia, France, Japan, and India.
- India's heaviest launch vehicles viz. **GSLV** and **GSLV Mk III** use cryogenic fuel in the upper stage of the launch vehicle.

Advantages
- It is more **efficient** and provides **more thrust** for every kilogram of propellant it burns compared to other propellant rocket stages.
- Using a cryogenic upper stage enhances the **payload carrying capacity** of a rocket.
- Both fuels (LOx and LH2) are **environment-friendly** other propellants used in the rocket industry.

Disadvantages
- It is technically a much more **complex system** as against solid/earth-storable liquid propellant stages.
- Due to the **usage of propellants at extremely low temperatures** and the associated **thermal and structural problems.**

158. Union Cabinet approves 100% FDI in space sector - The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:
- Recently, the Union Cabinet approved amendments to the existing Foreign Direct Investment **(FDI) policy,** particularly in the **space sector.**

Prelims Takeaway
• Foreign Direct Investment (FDI)
• Foreign Portfolio Investment (FPI)

The Amendments
- The amended policy allows **100% FDI in the space sector** to attract potential investors to invest in Indian companies in space.
- The amended policy extends the facility of
  - Up to 74% FDI under automatic route for satellite manufacturing and operation, satellite data products, and ground/user segment.
  - Up to 49% FDI under automatic route for launch vehicles and associated systems/subsystems, and creation of spaceports.
  - Up to 100% FDI under automatic route permitted for manufacturing of components/systems for satellites, ground segment, and user segment.

Benefits of Increased Private Sector Participation
- It is expected to **generate employment, promote modern technology absorption,** and **enhance sector self-reliance.**

- It aims to **integrate Indian companies into global value chains,** enabling them to establish manufacturing facilities within the country.

Division of Satellites Sub-sector

- The satellite sub-sector has been **divided into three activities** with defined limits for foreign investment.
- As per the existing FDI policy, foreign investment is allowed in **establishment and operation of satellites** via government-approval route only.

159. Payments banks may seek RBI nod for small-value fixed deposits – The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

Prelims Takeaway
• Current account and savings bank account
• Payments banks

- Payments banks (**PBs) may approach the Reserve Bank of India (RBI**) to **allow them to take small-value fixed** as well as **recurring deposits**

Key Highlights

- garnering low-cost savings bank (SB) deposits is proving an uphill task given the high-interest rates being offered by commercial banks on term deposits
- Now, only six PBs — **Airtel Payments Bank, Fino Payments Bank, India Post Payments Bank, Jio Payments Bank, NSDL Payments Bank, and Paytm PB** — are operational.

FD/RD needed to stop deposit outflow

- "Commercial banks' low-cost **CASA (current account, savings account) deposits have come down over the last few quarters**
  - As customers prefer investment in fixed deposits, non-convertible debentures, mutual funds, equities, etc.,
  - Which offer better returns. Given this situation, there is no way PBs can stop the decline in their savings bank (SB) deposits.
- So, the only way to stop deposit outflow is **to allow to offer FDs and recurring deposits (RDs)**

Up the cap

- These banks can only **accept demand deposits (current account and savings bank account/CASA) with a maximum balance of ₹2 lakh** per individual customer.
- They **cannot undertake lending activities** but distribute financial products like mutual fund units and insurance products, etc
  - And act as business correspondents of another bank.

160. Cabinet approves Flood Management and Border Areas Programme (FMBAP) for the period 2021-26- PIB

Relevance: Disaster and disaster management.

News:

Prelims Takeaway
• Flood Management and Border Areas Programme
• River Management and Border Areas

- 'Recently, the Union Cabinet has given the nod for the extension of the "**Flood Management and Border Areas Programme (FMBAP)**"
- The total budget of Rs. 4,100 crores over a span of 5 years from 2021-22 to 2025-26.

Key Points about the Flood Management and Border Areas Programme:

- This initiative operates as a **centrally sponsored scheme.**

It comprises two main components:

- **Flood Management Programme (FMP):**
  - This involves central assistance to State Governments for crucial projects related to flood control, anti-erosion measures, drainage development, and anti-sea erosion efforts.

- **River Management and Border Areas (RMBA):**
  - ○ This facet focuses on flood control and anti-erosion initiatives along common border rivers with neighboring countries.
  - ○ It includes hydrological observations, flood forecasting, and activities related to the investigation and pre-construction phases of joint water resources projects with neighboring countries.
  - ○ The central government provides 100% assistance for this component.

Funding Structure:
- The funding pattern differs based on the state category.
- Special Category States receive funding in the ratio of 90% (Centre) to 10% (State),
- General/Non-Special Category States follow a 60% (Centre) to 40% (State) funding pattern.
- **The RMBA component not only addresses flood and erosion issues** but also safeguards critical installations of security agencies and border outposts along the border rivers.
- **The scheme includes provisions for incentivizing states th**at implement flood plain zoning, recognized as an effective non-structural measure for flood management.

Significance:
- The approval of this program is crucial, for escalating frequency and intensity of extreme weather events in recent years due to the anticipated impact of climate change.
- The situation is expected to worsen, leading to increased challenges in managing floods in terms of their extent, intensity, and frequency.''

161. New protocol can reduce breeding cycle of pigeonpea by 3-5 years, important for nutritional security in drylands- Down to earth

Relevance: Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Prelims Takeaway
• Yellow revolution
• Pigeon pea

News:
- A new fast-breeding protocol is likely to make it easier for scientists to develop better quality varieties of the crop at a faster rate

Pigeon pea
- Pigeon pea, **known as arhar and tur in India, stands out as a significant legume crop** and a protein-rich dietary staple commonly consumed as dal.
- Cultivated predominantly in **semi-arid regions of India, it thrives in tropical climates** and exhibits specific requirements for rainfall, temperature, and soil conditions.
- In terms of climatic conditions, **pigeon pea necessitates an annual rainfall of 600-650 mm**
  - ○ Coupled with moist conditions during the initial eight weeks and dry conditions during flowering and pod development.
- Temperature-wise, it can thrive within a range of 26°C to 30°C during the rainy season and 17°C to 22°C in the post-rainy season (November to March).
- While adaptable to various soil types, sandy loam or loam soil is deemed most suitable for cultivation.
- Pigeon pea is notably sensitive to low radiation during pod development, resulting in suboptimal pod formation during monsoons and cloudy weather.
- Frequently **intercropped with a variety of crops,** it is estimated that 80-90% of pigeon pea cultivation in India involves intercropping.
- Despite its agricultural significance, **pigeon pea faces challenges such as diseases** like Wilt, Sterility Mosaic Disease, Phytophthora Blight, Alternaria Blight, and Powdery Mildew.
- Notably, its extended growth cycle and sensitivity to day length have hampered breeding efforts, leading to the release of only about 250 varieties globally over six decades.
- On a positive note, pigeon pea offers numerous health benefits, boasting a low glycemic index
- being rich in thiamine, riboflavin, niacin, vitamin B-6, folate, vitamin A, calcium, zinc, iron, magnesium, and phosphorus.
- Key pigeon pea-producing states in India include Uttar Pradesh, Madhya Pradesh, West Bengal, Bihar, and Jharkhand.

162. China 2023 coal power approvals rose, putting climate targets at risk- The Hindu

Relevance: Conservation, environmental pollution and degradation, environmental impact assessment.

News:
- **China approved 114 gigawatts (GW) of coal power capacity in 2023,** up **10% from a year earlier,** with the world's top carbon polluter now at risk of falling short on climate targets after sanctioning dozens of new plants

Key Highlights
- China has vowed to "strictly control" new coal-fired generation capacity, and has also connected record numbers of new wind and solar plants to its grid.
- **But after a wave of electricity shortages in 2021**, China also embarked on a coal power permitting boom that could slow its energy transition
    o According to analysis by U.S. think tank Global Energy Monitor (GEM) and the Helsinki-based Centre for Research on Energy and Clean Air (CREA).
- "Drastic action" is now required to meet 2025 carbon and energy intensity goals, and **China could also struggle to meet a target to raise the share of non-fossil fuels in its total energy mix to 20% by 2025**
- China's CO_2 emissions rose by an estimated 5.2% in 2023, and are up 12% since 2020, CREA lead analyst Lauri Myllyvirta wrote in a separate note published by Carbon Brief

Background of 1.5 Degrees Celsius Warming Target?
- The Paris Agreement aims to limit the **temperature increase to 2 degrees Celsius by the end of this century.**
- This target is considered significant, but **there are a couple of important things to remember.**
- The 2 degrees Celsius target was not determined based on strict scientific evidence.
- Instead, it was initially proposed by an economist named William Nordhaus in the 1970s.
- The **Alliance of Small Island States pushed for the target to be lowered to 1.5 degrees** Celsius, leading to further retrofitting of future scenarios to meet this goal.
- According to the Intergovernmental Panel on Climate Change (**IPCC), the leading scientific body on climate change,** if current trends continue, the world is likely to reach 1.5°C of warming by 2030-2052.
- Also, the IPCC Special Report on the difference in impacts between 1.5°C versus 2°C warming suggests that tropical countries
    o such as India are projected to experience the largest impacts on economic growth because of climate change.

163. ISRO: PAPA detects solar wind impact of coronal mass ejections - The Hindu

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:
- Recently, ISRO announced the operational status of the **Plasma Analyser Package for Aditya (PAPA) payload** on the **Aditya-L1** satellite.
- The PAPA payload is developed by the Space Physics Laboratory and Avionics Entity of the Vikram Sarabhai Space Centre (VSSC)/ISRO.

Key Features of PAPA Payload
- PAPA is an **energy and mass analyser** designed for **in-situ measurements** of **solar wind electrons and ions** in the **low energy range.**
- It comprises two sensors viz. **Solar Wind Electron Energy Probe (SWEEP)** and **Solar Wind Ion Composition Analyser (SWICAR).**
    o These facilitate comprehensive observations of solar phenomena.

- The sensors also detect the **direction of arrival of solar wind particles** enabling a holistic understanding of solar wind dynamics.

Operational Status and Achievements

- PAPA has been operational since December 12, 2023, and has been performing nominally.
- Its advanced sensors successfully **detected the impact of coronal mass ejections (CMEs),** including those occurring in February 10-11, 2024.
- The sensors are continuously observing **solar wind electrons and ions,** demonstrating effectiveness in **monitoring space weather conditions.**
- The payload's performance aligns with its design across all **operational modes,** showcasing its capability to **analyze solar phenomena.**

164. US achieves first moon landing in 50 years - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
• Odysseus
• Commercial Lunar Payload Services Program (CLPS)

News:

- Fifty-two years after the last successful **Apollo mission,** a US-made spacecraft, **Odysseus,** landed on the Moon on February 23.
- This marked the **advent of private space companies** on the lunar surface.

Mission Details

- Odysseus, developed by Intuitive Machines, lifted off on a **Falcon 9 rocket of SpaceX,** carrying six NASA payloads to the Moon.
- The spacecraft carried six NASA payloads to the Moon.
- The **lander module, Nova-C,** became the **second to land in the Moon's south pole region,** following Chandrayaan-3 last year.
- **Funding:** For this mission, NASA paid Intuitive Machines $118m under the **Commercial Lunar Payload Services (CLPS)** programme**.**

Why is it called Odysseus?

- It was named Odysseus after a contest among employees of Intuitive Machines of Houston, the company in charge of the mission.
- The name is inspired from the journey of the **hero of the ancient Greek epic poem "Odyssey".**
- Odyssey's journey serves as an analogy for the **long and challenging nature** of the lunar mission.

Significance of the Mission

- It signifies a new phase in lunar exploration focused on **establishing infrastructure and technology** to **support long-term human presence.**
- It aims to lay the **groundwork for exploiting lunar resources** and **fostering sustainable exploration.**
  o This is in contrast to past moon landings, which were primarily scientific endeavours.
- This information will **help evaluate factors** such as the quantity of water present and the accessibility of this vital resource.
- This is significant as NASA prepares to **send a crewed mission** in September 2026 with **Artemis III.**

Commercial Lunar Payload Services Program (CLPS)

- Under CLPS, so far, at least **14 private companies** have been contracted to **carry NASA payloads to the Moon.**
- **Objective:** To create the market and technology ecosystem in the private space industry with respect to science and technology needs of lunar exploration.

165. International collaboration of physicists demonstrates laser cooled Positronium - The Hindu

Relevance: Science and Technology- developments and their applications and effects in everyday life.

Prelims Takeaway
• Positronium
• AEgIS Initiative

News:

- An international collaboration of researchers from the **Anti-hydrogen Experiment: Gravity, Interferometry, Spectroscopy (AEgIS),** has achieved a significant milestone by successfully demonstrating the **laser cooling of Positronium.**

Positronium

- It is a **fundamental atom** composed of an **electron (e-) and a positron (e+),** both being leptons that **interact through electromagnetic and weak forces.**
- With a **very short life,** it annihilates with a half-life of 142 nanoseconds.
- It is considered a **pure leptonic atom.**
  - Unlike usual atoms that contain a mixture of baryons and leptons, Positronium solely consists of electrons and positrons.
- Its **hydrogen-like system,** with halved frequencies for excitation, makes it an ideal candidate for attempting laser cooling and performing tests of fundamental physics theories.

AEgIS Initiative

- The AEgIS experiment was **formally accepted by CERN in 2008,** with construction and commissioning continuing through 2012-2016.
- It involves physicists from 19 European groups and one Indian group.
  - Professor Sadiq Rangwala from Raman Research Institute (RRI) in Bengaluru is leading the Indian effort.
- The experiment was conducted at the **European Organization for Nuclear Research (CERN)** in Geneva, Switzerland.
- **Significance:** Serves as a crucial precursor to the formation of anti-hydrogen and the measurement of Earth's gravitational acceleration on antihydrogen in the AEgIS experiment.

Achievements

- The AEgIS team successfully cooled Positronium atoms from ~380 Kelvin to ~170 Kelvin.
- A 70-nanosecond pulse of the **alexandrite-based laser system** was used to demonstrate cooling in one dimension.
- Lasers deployed were either in the **deep ultraviolet or infrared frequency bands.**

Future Implications

- Laser cooling of anti-atoms like Positronium and their spectroscopic comparison are crucial tests for **Quantum Electro Dynamics (QED).**
- This achievement opens doors for creating **exotic many-particle systems** like Bose-Einstein condensates.

166. WTO Meet India to push for permanent solution to public stock holding of grains - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- INDIA will strongly **oppose a China-led proposal for an investment facilitation pact**

Prelims Takeaway
• Joint Support Initiatives
• Public stock-holding

Key Highlights

- India is pressing for finding a **permanent solution to public stock holding of grains** for food security and protection of the interests of fishermen at the WTO ministerial meeting

Food security issues

- The **public stock-holding** (PSH) programme is **a policy tool under which the government procures** crops like rice and wheat from farmers at MSP,
- and stores and distributes foodgrains to the poor.
- India stresses the need for PSH for its large, vulnerable population and **wants a permanent solution from the MC13.**
- MSP is normally higher than the prevailing market rates and sells these at a low price to ensure food security for over 800 million beneficiaries.
- However, the WTO's Agreement on Agriculture limits the ability of a government to purchase food at MSP.

- Under global trade norms, a **WTO member country's food subsidy bill should not breach the limit of 10 percent** of the value of production based on the reference price of 1986-88.
- As part of the solution, India has asked for measures like amendments in the formula to calculate the food subsidy cap.
- Developed nations are of the view that such programmes distort global trade prices of food grains.
- **Joint Support Initiatives (JSIs**) or plurilateral agreements **India opposes this move being pushed for certain nations.**

167. PM launches 'world's largest agri storage plan'; Rs 1.25 lakh cr outlay over 5 years - Indian Express

Relevance: Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Prelims Takeaway
- Sahakar se Samriddhi
- largest grain storage plan

News:
- The Prime Minister announced a **plan to set up the "world's largest grain storage plan in the cooperative sector.**

Key Highlights
- Inaugurating a pilot project being undertaken in **11 Primary Agricultural Credit Societies (PACS)** in 11 states under the largest grain storage plan
- This will enable farmers to store their produce and sell it at the right time according to their own needs.
- This will also help them to avail loans from banks.
- Further, he inaugurated a project for **computerisation in 18,000 PACS across the country**, aligning farming with cutting edge technology and shifting to fully digital payments.
- The vision of **Sahakar se Samriddhi (prosperity through cooperatives)** is to rejuvenate the cooperative sector and empower small and marginal farmers.
- His government had reduced minimum alternate tax on cooperative societies –
    - Bringing it at par with the corporate sector – and raised the slab for tax to be deducted at source to income above Rs 3 crore
- The new storage plan aims to add another 700 lakh tonnes capacity over the next five years through cooperatives, in effect, double the existing capacity.
- The creation of a full-fledged Ministry of Cooperation and routing of non-basmati rice and sugar exports on government account through the newly-registered National Cooperative Exports Ltd
    - Points to the importance the government is placing on cooperatives.

168. Centre discloses key consumption expenditure survey findings after 11-year gap - The Hindu/ Household Consumption Expenditure Survey: Indians spending more on milk, fruits and vegetables than foodgrains - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
- Household Consumption Expenditure Survey (HCES)
- Engel Curve Hypothesis

News:
- Recently, the government released findings of the **All India Household Consumption Expenditure Survey** conducted between August 2022 and July 2023.
- It will play a key role in **reviewing critical economic indicators,** including the GDP, poverty levels, and the Consumer Price Inflation (CPI).

Household Consumption Expenditure Survey (HCES)
- The Household Consumption Expenditure Survey (HCES) is usually conducted by the **National Statistical Office (NSO) every five years.**

- It is designed to collect information on the **consumption spending patterns of households** across the country, both urban and rural.
- The data gathered in this exercise reveals the **average expenditure on goods** (food and non-food) **and services.**
- However, the **findings of the last Survey,** conducted in **2017-18** were **never released** due to cited **"data quality" issues.**

Key Findings of the Survey	
1. Average MPCE • Average monthly per capita consumption expenditure (MPCE) rose by 33.5% (to ₹3,510) in urban households and 40.42% (to ₹2,008) in rural India since 2011-12. • The MPCE numbers do not include the estimated values of things people get for free through social welfare programs. • It, however, included a few non-food items received through such schemes, including computers, mobile phones, bicycles, and clothing. • By adding the imputed cost of free items, the average monthly consumption expenditure stood at Rs 3,860 in rural areas and Rs 6,521 in urban areas.	**2. Average MPCE between Rural and Urban Households** • The difference in average MPCE between rural and urban households has narrowed to 71.2 percent in 2022-23 compared with 83.9 percent in 2011-12. • This suggests rural consumption spending has risen more than urban consumption spending during the 11-year period. **3. Share of Expenditure on Food** • The proportion of spending on food has dropped to 46.4% for rural households from 52.9% in 2011-12. • The urban households spent just 39.2% of their overall monthly outgoes on food compared with 42.6% incurred 11 years earlier. • This reduction could translate into a lower weightage for food prices in the country's retail inflation calculations.

Change in Food Composition
- Spending on cereals and pulses has reduced while expenditure on milk, fruits, and vegetables has increased.
- Rural and urban consumers are spending more on fruits and vegetables than on cereals for the first time.

Preference for Animal Proteins and Processed Foods
- There's a growing preference for animal proteins like eggs, fish, and meat over plant proteins like pulses.
- Consumers are allocating a larger portion of their expenditure to processed foods, beverages, and purchased cooked meals.

Engel Curve Hypothesis
- The observed trends align with the Engel Curve hypothesis.
- It broadly states that as incomes grow, households spend a smaller proportion on food.
- Even within food, they would buy more of "superior" and less of "inferior" items.

4. Consumption expenditure on non-food items • Consumption expenditure on non-food items increased in both rural India (54%) and urban India (61%) in 2022-23 as against 2011-12. • A greater share of spending is also now being directed towards education, health and conveyance and on consumer durables and services. • As household incomes rise and expenditure on essential items falls, discretionary spending will rise further. **5. Income Disparity** • The bottom 5% of both rural and urban populations had significantly lower MPCE compared to the top 5%, showcasing income disparity. • The MPCE of the top 5 percent of rural population is 7.65 times more than its bottom 5 percent • The MPCE of the top 5 percent of urban population has an MPCE of over 10 times its bottom 5 percent.	**6. Comparison among States** • Sikkim had the highest MPCE for both rural (₹7,731) and urban areas (₹12,105). • It is the lowest in Chhattisgarh, where it was ₹2,466 for rural households and ₹4,483 for urban household members. **Policy Implications** • HCES data indicates a need to focus on promoting the production of items like milk, fish, poultry products, fruits, and vegetables. • Sectors like fruits, vegetables, livestock, and fisheries have experienced significant growth, primarily market-led. o This is in contrast with the slower growth in cereals and non-horticultural crops. • The demand for MSP is mainly from farmers of crops not covered under MSP, highlighting the importance of aligning policy with demand trends reflected in HCES data.

169. RBI asks NPCI to consider Paytm's request for TPAP: What is it & how will it benefit customers? - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
News:

Prelims Takeaway
• TPAPs • NPCI

• The Reserve Bank of India (**RBI**) **has asked** the National Payment Council of India (**NPCI**) to examine the request of One97 Communications' (OCL)
• OCL owns Paytm, and requested to **become a Third-Party Application Provider (TPAP) for continued Unified Payments Interface** operation of the Paytm application.

Key Highlights
• A **TPAP approval is mandatory to provide UPI-based payment transaction**s to customers.
• Currently, all UPI transactions on the Paytm app are being routed through Paytm Payments Bank (PPBL), an associate company of OCL, which is registered as TPAP.
• As the RBI has asked the PPBL to shut its operations by March 15, 2024, there will be no TPAP registration for the Paytm app to be able to provide UPI payment services.

What is a TPAP?
• A **Third-Party Application Provider** is an entity that provides the UPI compliant app(s) to the end-user customers to facilitate UPI-based payment transactions.
• These applications could be **mobile wallets, merchant apps, or any other platform that utilises UPI for payments.**
• NPCI, **the umbrella organisation for operating retail payments and settlement systems in India,** owns and operates the UPI platform.
• TPAPs leverage the UPI infrastructure provided by NPCI and work with payment service providers (PSPs) and banks to facilitate transactions.
• They are responsible for ensuring that their applications adhere to security standards and compliance guidelines set by NPCI.

What happens if OCL gets TPAP approval?
• For Paytm, TPAP approval from NPCI is a must to continue to provide UPI-based payment transactions facility to customers.
• OCL will not be allowed to add new users until all the existing users are migrated satisfactorily to a new handle, the regulator said.

- As per NPCI regulations, large TPAPs have to mandatorily participate in UPI through a multibank model only.

How many TPAPs are there?

- Currently, **there are 22 NPCI-approved 3rd party Unified Payments Interface (UPI)** apps that can be used to send and receive money from other UPI users by using UPI IDs.
- They include Amazon Pay, Google Pay, Groww, Jupiter Money, Mobikwik, Phonepe, Samsung Pay, TataNeu and Whatsapp.

170. PM to inaugurate three ISRO facilities today -The Hindu

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

News:

Prelims Takeaway
• PSLV
• ISRO

- Prime Minister will review the progress of the **Gaganyaan human spaceflight programme and dedicate three facilities** of the Indian Space Research Organisation (**ISRO**)

Key Highlights

- Gaganyaan, expected to be launched in 2025, envisages a demonstration of human spaceflight capability by sending astronauts to orbit and returning them safely to the Earth.
- **PM will dedicate:**
  - the Trisonic Wind Tunnel established at the VSSC
  - integration facilities for the Polar Satellite Launch Vehicle (PSLV) set up at the Satish Dhawan Space Centre, Sriharikota,
  - the Semi-cryogenic Integrated Engine and Stage Test Facility (SIET) at the ISRO Propulsion Complex in Mahendragiri, Tamil Nadu.
- The wind tunnel, which is the first of its kind in the country, has a **Mach number range of 0.2 to 4**
  - which means it can generate speeds ranging from subsonic to supersonic up to four times the speed of sound (Mach number 4).
- The tunnel will provide self-reliance in the end-to-end design of upcoming launch vehicle projects.
- The new **PSLV Integration Facilities (PIF) at Sriharikota will give ISRO the capability to increase the number of PSLV** missions in a year to 15.
- At the new facility, the PSLV rocket will be integrated parallelly with the refurbishment of the launch pad.
- SIET will give the ISRO the capability to test the SCE-2000 semi-cryogenic engine which uses refined kerosene (named ISROSENE) and liquid oxygen as propellants and the rocket stage.

171. First private ammunition manufacture facility opens-The Hindu

Relevance: Various Security forces and agencies and their mandate.

News:

Prelims Takeaway
• MAKE programmes
• Balakot

- In a first in the private sector, **two facilities for the manufacture of ammunition and missiles were opened by Adani Defence** and Aerospace in Kanpur.

Key Highlights

- The twin-facility complex, spread over 500 acres, was inaugurated by Army Chief Gen. and Uttar Pradesh Chief Minister.
- Simultaneously, **MAKE programmes for developing new-generation ammunition,** including electronic fuses currently not held in the inventory, are also being processed."
- The Kanpur complex is set to **become one of the largest integrated ammunition manufacturing complexes in South Asia**
- The facilities will produce high-quality small, medium and large calibre ammunition for the armed forces, paramilitary forces and the police.
- The facility has started rolling out small caliber ammunition, starting with 150 million rounds estimated at 25% of India's annual requirement."

- The unveiling coincided with the fifth anniversary of the Balakot air strike when the Indian Air Force hit terror camps in Balakot, Pakistan, on February 26, 2019.

Export potential
- Noting that the ammunition categories proposed for manufacturing by the Army also **have sufficient export potential**
- Considering the limited players in the field worldwide with expertise in ammunition manufacturing, and our competitive manufacturing cost, the Indian industry will have a huge advantage.

172. India-specific AI model to find gestational age developed-The Hindu

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:
- Researchers have developed an **India-specific artificial intelligence model to precisely determine the gestational age of a fetus** in the second and third trimester of pregnancy.

Prelims Takeaway
• INDIAai.
• Global Partnership on Artificial Intelligence

Key Highlights
- The model has been designed by researchers at the Indian Institute of Technology-Madras and the Translational Health Science and Technology Institute, Faridabad.
- It is part of an interdisciplinary group for advanced research on birth outcomes — **DBT India initiative (GARBH-Ini) programme.**
- **The Garbhini-GA2 is the first late-trimester** GA estimation model to be developed and validated using Indian population data.
- Currently models used for Western population are in use which could prove erroneous when applied in the later part of pregnancy due to variations in the growth of the fetus in the Indian population
- The Garbhini-GA2 accurately estimates **the foetus' age, reducing error by almost three times.**
- The Indian data would help to **provide appropriate care for pregnant women and determine the precise date of birth,** thus reducing maternal and infant mortality rates.

Artificial Intelligence (AI)
- AI is the ability of a computer, or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and judgment.
- Although no AI can perform the wide variety of tasks an ordinary human can do, **some AI can match humans in specific tasks.**
- The ideal characteristic of AI is its ability to rationalize and take actions that have the best chance of achieving a specific goal.
- A subset of AI is **Machine Learning** (ML).
- **Deep Learning** (DL):
  o techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video.

India's Other Initiatives Related to Artificial Intelligence
- INDIAai.
- Global Partnership on Artificial Intelligence (GPAI).
- US India Artificial Intelligence Initiative.
- Responsible Artificial Intelligence (AI) for Youth.
- Artificial Intelligence Research, Analytics and Knowledge Assimilation Platform.

173. Govt. concludes G-Sec borrowing for FY24-The Hindu

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:
- **The government will not borrow through Treasury Bills** "for the sake of borrowing" during the remaining period of the current fiscal, a senior Finance Ministry official said.

Prelims Takeaway
• Capital expenditure
• Dividend from RBI

Key Highlights

- The government has completed G Sec borrowing for the current fiscal and it expects a dividend from the Reserve Bank of India in FY25, similar to FY24.
- Meanwhile, the Finance Ministry official said 80% of capital expenditure and 79% of Revenue Expenditure has been completed as of early February and the expectation is to achieve RE by end March.
- During the January-March quarter, the Government in consultation with RBI, planned to borrow ₹3.93 lakh crore through 13 weekly auctions of T Bills.
- So far 8 auctions have been completed, while the plan is to raise ₹1.7 lakh crore via the remaining five auctions with the next one scheduled for Wednesday.

No coupon rate

- T Bill is an instrument which is issued at a discount while redeemed at par.
- Since there is no coupon rate payable on such an instrument, **the difference between discount price and face value is earning for the investors.**
- Such an instrument is issued in three maturities – **91 days, 182 days and 364 days**.
- At the same time, the government also goes for long-term borrowing with dated Government Securities (G Sec).
- Maturity period for such a bond could be anywhere between 1 year and/or up to 50 years.
- Such bonds carry interest rate and enjoy sovereign guarantee for principal and interest.
- **Borrowing through dated securities is part of government borrowing** as mentioned in the budget and used to bridge the fiscal deficit.

Dividend from RBI

- Meanwhile, the government expects that its dividend income from the Reserve Bank of India for the current financial year ending March is to stay at levels similar to the last financial year.

Capital expenditure

- The official said capital expenditure as a percentage of Revised Estimates (RE) has exceeded revenue expenditure.
- The official hoped that RE for both expenditures will be met.

174. MoSPI household expenditure survey came amid internal wrangling over future round- Indian express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- The release of the **Household Consumption Expenditure Survey** (HCES) **for 2022-23** last week came after an internal wrangling over whether to continue with the next round of the survey for 2023-24 or simply junk it.

Prelims Takeaway
• Household Consumption Expenditure Survey
• MoSPI

Key Highlights

- It is learnt that there was a move by an influential section within the Ministry of Statistics and Programme Implementation (**MoSPI) to shelve the survey's fieldwork for 2023-24**
  - That is currently underway, citing the finalisation of 2022-23 survey results.
- **MoSPI has been working on back-to-back surveys for 2022-23 and 2023-24** to see whether the revised methodology is giving robust and stable results for consumption expenditure.
- The intent behind conducting back-to-back surveys for 2022-23 and 2023-24 was to assess the robustness of the revised methodology, officials said.
- In the revamped HCES for 2022-23, several new features have been introduced including the segregation of the consumption basket into three broad categories
  - Food items, consumables and services, and durable goods — along with inclusion of questions seeking inputs on free items and subsidies under welfare schemes such as foodgrains.

ey Points of survey

- The survey has covered **2.62 lakh households,** out of which 1.55 lakh were in rural areas and 1.07 lakh were in urban areas.
- The HCES 2022-23 results showed that **rural consumption spending rose more sharply than urban spending in 11 years till 2022-23**

- o With a fall in share of expenditure on food for both rural and urban households.
- Rural average monthly **consumption spending per person increased to Rs 3,773 per month in 2022-23 from Rs 1,430 per person in 2011-12,** a jump of 164 per cent.
- This is higher than the 146 per cent increase in urban average monthly consumption expenditure per person to Rs 6,459 in 2022-23 compared with Rs 2,630 per person in 2011-12.

175. Center amends IT rules to issue orders for destroying interception records- Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
• IT Rules
• Censorship

News:
- The government has amended the Information Technology (IT) rules
- The rules allow for **the Home Secretary or other bureaucrats in the Centre to issue directions to destroy digital records of interception or decrypt information.**

Key Highlights
- So far, the **power lies with security agencies,** such as law enforcement bodies.
- The change will broaden powers of the Centre to issue directions to destroy digital evidence.
- In a gazette notification, the IT Ministry said that it was **amending Section 23 of the Information Technology** (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009
  - o By substituting "security agency" with the words "competent authority and the security agency".
- The Rule 23 of this law states that **every record, including electronic records pertaining to directions for interception or monitoring or decryption of information**
  - o And of intercepted or monitored or decrypted information shall be destroyed by the security agency in every six months
  - o Except in a case where such information is required, or likely to be required for functional requirements.

Changes in IT Rules
- The 2021 IT Rules replaced the previous guidelines and sought to **regulate intermediaries and digital news media.**
- Social media platforms were required to provide technological solutions **to identify the first originator of any information, risking privacy.**
- The amendments introduced in **April 2023 give the government power to decide for itself what information is bogus and exercise wide-ranging powers of censorship**
  - o by compelling intermediaries to take down posts deemed fake or false.
- The new regulations threaten freedom of speech and civil liberties in India by restricting speech through executive order rather than legislation.

176. Trade diplomacy: Govt depts red-flag high duties to curb China imports, seek nuance in strategy- Indian express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Prelims Takeaway
• RCEP
• Production-Linked Incentive scheme

News:
- MULTIPLE WINGS IN the government have started to red-flag the Centre's moves to progressively hike customs duties, especially the more recent offensive targeted at imports of Chinese components and inputs.

Key Highlights
- A section within the government is in favor of a more nuanced approach in using tariffs as a diplomatic tool
- failing which there is a possibility of the **gains of India's manufacturing-focused thrust that include schemes such as Production-Linked Incentive** (PLI) being squandered away.

- **China still accounts for 14 per cent of India's imports** with not just inputs for the domestic industry in sectors ranging from electronics to pharmaceuticals and textiles to leather,
  - but also capital goods, being sourced from China.
- This, coupled with the fact that average tariffs in **India have jumped to 18.1 per cent in 2022 from 13 per cent eight years ago in 2014,**
  - has made India uncompetitive vis-a-vis countries such as Vietnam, Thailand and Mexico.
- The roadblocks to imports in these sectors is leading to either a loss of domestic output or simply a loss of competitive advantage for Indian manufacturing.

TRADE DIPLOMACY WITH CHINA
- Earlier this year, the Ministry of Electronics and Information Technology (MeitY) relayed concerns about high production cost due to high tariffs to the Finance Ministry.
- MeitY had pushed for a lowering of duties of about 20 per cent on parts including circuit boards, chargers and fully assembled phones, by at least 5 percentage points.
- Moreover, to check cheap quality imports from China, **India imposed Quality Control Orders (QCOs) that restrict MSMEs** from getting necessary input material.
- WHILE India Inc has mostly been at the forefront of pushing for protectionist measures including tariff and non-tariff barriers
  - It is the industry itself which wants the government to reduce duties on imports of capital goods and key inputs across sectors.
- **India accounts** for **negligible share in China's total trade**, but significantly depends on Chinese imports in key sectors including pharmaceuticals and electronics.
- Official data shows that **India is home to barely 3 percent of Chinese exports.**
- **India has chosen to stay out** of important mega regional trading arrangements, including the Regional Comprehensive Economic Partnership (**RCEP**).
- **Analysts caution that in some cases** where customs duty hikes have been proposed, duties are close to or have effectively **crossed the WTO-mandated "bound rates.**
  - These are the customs duty rates that a country commits to all other members under the MFN principle
  - and breaching these rates could effectively put a country at risk of being branded as "protectionist
- The implementation of the duty hike on solar panels from September 2017 was opposed by both the New and Renewable Energy Ministry and solar project developers.

177. PM launches 2,000 railway infra projects worth around ₹41,000 crore- The Hindu

Relevance: Infrastructure – Energy, Ports, Roads, Airports, Railways etc.

News:
- Prime Minister Narendra Modi inaugurates significant **railway projects** to boost infrastructure development.

Prelims Takeaway
• Amrit Bharat Station Scheme
• PM-Gati SHAKTI

Key Highlights
- The project is a testament to the **rapid pace of development** in modern India.
- Infrastructure has a **role in positioning India a**s an attractive investment destination.

Focus on Station Redevelopment
- Foundation stone has been laid for **554 station redevelopment projects** under the 'Amrit Bharat' station scheme.
- There is the introduction of **upgraded passenger facilities** to selected stations,
  - including improved foot-over bridges, waiting areas, and surveillance systems.

Gomtinagar Station Redevelopment
- There was **inauguration of Gomtinagar station** in Uttar Pradesh, costing approximately ₹385 crore.
- This is one glimpse of Railways Transformation and Growth.

Overcoming Historical Challenges
- Financial losses, in railways have been shifted towards **profitability and expansion.**

- There is notable improvement in Railway Budget allocation and **reduction of losses over the past decade.**

Accelerated Track Expansion
- The Railway Minister **announced plans** to add 5,000 km of new tracks in FY24,
- Railway Line of 31,000 km was added in the **last 10 years.**
- There is **significant increase** in track expansion rate
  o From 4 km per day (2004-14) to 15 km per day currently.

Electrification Milestone
- Over **41,000 km of tracks** was electrified, marking a historic achievement for Indian Railways.
- **Completion timeline** for station redevelopment projects estimated at 3 years.

178. '10,000 genome' project completed, says Centre - The Hindu/ 10,000 human genomes sequenced in India: Govt - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
• Genome India Project
• Human Genome Project

News:
- The Government's **Genome India initiative** reached a significant milestone by completing the **sequencing of 10,000 healthy genomes** from diverse Indian populations, comprising 99 distinct groups.
- This achievement marks the establishment of a **comprehensive genetic map of India,** offering immense potential for clinical and research applications.

Technological Advancements
- The government highlighted the remarkable progress in genome sequencing technology, enabling the completion of thousands of genomes **in a matter of months.**
- This is in contrast to the first whole human genome sequence announced in 2003; completed over 13 years at the cost of $3 billion.

Genetic Variants Analysis
- Analysis of a subset of genomes revealed **135 million genetic variants found in India,** with some variations specific to certain populations.
- These variants hold implications for **identifying disease-indicating and resistance-indicating variants,** aiding diagnostics and therapeutics development.

Need for India-Specific Database
- An India-specific genetic database is required due to the **prevalence of mutations unique to the Indian population,** which may not be present globally.
- A mutation MYBPC3 that leads to cardiac arrest at a young age is found in 4.5% of the Indian population but is rare globally.
- Another mutation called LAMB3 that causes a lethal skin condition is found in nearly 4% of the population near Madurai but it is not seen in global databases.

Data Storage
- The extensive dataset, totaling 8 petabytes of data, will be stored at the **Indian Biological Data Centre (IBDC).**
- It will be made **available for research purposes,** contributing to scientific knowledge and innovation.
- The availability of a comprehensive genetic map is expected to **drive advancements in biology** and **contribute to India's bio-economy growth.**

179. MSMEs should work on quality, durability: PM - The Hindu

Prelims Takeaway
• MSMEs
• Government Initiatives for MSMEs

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:
- Recently, the Prime Minister highlighted the significance of **MSMEs** focusing on quality and durability to establish a **robust presence in the global supply chain.**
- Speaking at the 'Creating the Future – Digital Mobility for Automotive MSME Entrepreneurs' event, he recognized the MSME sector's crucial role in the **automotive industry.**

Key Highlights
- He acknowledged that many vehicles globally **incorporate components manufactured by Indian MSMEs,** reflecting their significance in the automobile industry.
- He stressed the importance of **producing components without defects** and ensuring **environmental sustainability** as guiding principles for MSMEs.

Government Initiatives for MSMEs
- Various schemes were introduced by the government during the COVID-19 pandemic to support MSMEs and preserve jobs.
  o Such as PM-Mudra, PM-Vishwakarma, and MSME credit guarantee scheme
- He assured MSMEs of access to **low-cost loans, working capital facilities**, and **opportunities for expansion.**
- He also highlighted the government's efforts in skill development by establishing a separate **Ministry for Skill Development** to cater to the needs of MSMEs.
- The PLI scheme was also highlighted to promote advanced automotive technologies and attract global investments for which the MSMEs need to expand their capacities.
- He also launched the **TVS Open Mobility Platform** and the **TVS Mobility-CII Centre for Excellence** to highlight MSMEs in the automotive industry.
  o This would help them formalise operations, integrate with global value chains and become self-reliant.

Encouragement for Electric Vehicles (EVs)
- The PM urged entrepreneurs to **enhance their capacities** to meet the growing demand for electric vehicles.
- He also mentioned initiatives like the **Rooftop Solar scheme** that facilitates the conversion of houses into charging stations for electric vehicles.

180. WHAT IS GOOGLE'S AI 'GENIE' THAT CAN TURN IMAGES INTO VIDEO GAMES? - Indian Express

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
- Google DeepMind's Genie
- Artificial Intelligence

News:
- Recently, Google DeepMind unveiled **Genie**, which enables users to **craft their own virtual worlds** akin to those found in high-energy games.

Genie
- Genie is a novel model capable of **generating interactive video games based solely on text or image prompts,** devoid of prior training in game mechanics.
  o Other several generative AI models produce creative content with language, images and even videos.
- It can generate an endless variety of playable worlds from **synthetic images, photographs, and even sketches.**
- It stands as a pioneering generative interactive environment trained on **videos sourced from the Internet.**
  o This is noteworthy as it lacks labelled data about actions or controlled image areas.
- It boasts **11 billion parameters** and comprises various components like a **spatiotemporal video tokenizer, autoregressive dynamics model**, and a **scalable latent action model.**

- This innovation not only expands creative possibilities but also represents a significant stride towards **general AI agents.**
  - An independent programme or entity that interacts with its environments by perceiving its surroundings via sensors.

181. PM Modi inaugurates country's first indigenous hydrogen fuel cell ferry - The Hindu

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

Prelims Takeaway
• Harit Nauka Initiative
• Green Hydrogen

News:
- Recently, the Prime Minister inaugurated India's **first indigenously built hydrogen fuel cell ferry boat** virtually.

Key Highlights
- The pilot vessel, a 24-meter catamaran, has the capacity to accommodate 50 passengers in its fully air-conditioned passenger space.
- Designed to enhance urban mobility, the ferry boat is equipped with advanced hydrogen fuel cell technology.
- The vessel is part of the **Harit Nauka initiative,** symbolizing the commitment to environmentally friendly transportation solutions.
- The vessel, constructed at the Cochin Shipyard, marks a significant milestone in India's journey towards **embracing clean energy solutions** and the **nation's net-zero commitments.**

Home-Grown Technology
- The hydrogen fuel vessel features **fully indigenous technology** developed by **Cochin Shipyard Limited (CSL).**
- This technology holds promise for **replication in other regions** of the country, offering **sustainable urban mobility solutions** nationwide.

Green Hydrogen Hub Port
- The **V.O. Chidambaranar Port,** where the vessel was flagged off, is designated as the **first Green Hydrogen Hub Port** in the country.
- The port's development projects encompass a desalination plant, hydrogen production, and bunkering facility.
  - This reflects Tamil Nadu's commitment to exploring alternative energy sources.

182. Special parachutes, cramped capsule — how Gaganyaan will take 3 astronauts to space & bring them back- The Print

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Prelims Takeaway
• Chandrayaan
• Ganganyaan

News:
- India's maiden human spaceflight mission **Gaganyaan, will take three astronauts to space inside a cramped but heavy capsule**
- It will orbit the Earth for at least three days before heading back and crashing into the Indian Ocean.

Key Highlights
- The Indian Space Research Organisation (ISRO) is developing the Rs 9,000 crore mission with a projected launch sometime next year.
- Recently, **the Prime Minister announced the names of four astronaut candidates** shortlisted for the mission.

Gaganyaan Structure
- The entire spacecraft flying into the Earth's orbit is called the orbital module.
- It consists of two parts — **the service and crew modules.**

- The crew module, a pyramid-shaped cramped structure, will house the astronauts.
- The service module enables the spacecraft to enter the orbit and later leave the orbit and descend to the surface.
- **ISRO's LVM3 rocket w**ill take the Gaganyaan craft into space.
- The orbital module will separate from the LVM3 before reaching the Earth's orbit.
- Then, five engines, parts of the propulsion system in the service module, will fire to put the orbital module into orbit.
- During the return journey, the service module engines will fire again to break the modules away from the orbit and make it head towards the Earth.

Crew Module

- The crew module is fully autonomous, primarily consisting of the Environmental Control and Life Support System (ECLSS)
  - o Responsible for producing oxygen, maintaining pressure, adjusting temperature, etc.
- ISRO tried procuring this system from other countries but later developed the technology itself.
- The crew module also contains the Crew Escape System (CES)
  - o Which can be activated during launch and remain active within the atmosphere only for use in case of emergencies.
- The crew module can carry a maximum of three people.

Launch Vehicle

- The Launch Vehicle Mark-3 rocket's human-rated variant (HLVM3) will launch the Gaganyaan mission.
- The spacecraft will fly on top of the HLVM3 until it reaches orbit.
- The HLVM3 is a three-stage launch vehicle and can carry 10,000 kg to low earth orbit and 400 kg to geostationary orbit.
- A solid propellant powers the HLVM3 first stage.
- The second stage has two Vikas engines
- The third stage powers the spacecraft through its cryogenic engines and launches it towards the destination orbit before breaking away.
- The rocket **launched the Chandrayaan-2 and -3 missions.**
- The rocket underwent many reevaluations and modifications with multiple safety redundancies, strengthening of structures and components, new and additional navigation systems, etc.
- The module also performed orientation manoeuvres to help decide the correct angle for entering the atmosphere.

183. How 'NaMo Drone Didis' are pushing past their limitations & transforming India's rural landscapes- The Print

Relevance: Major crops-cropping patterns in various parts of the country, – different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Prelims Takeaway
• IFCCO
• Drone Didis

News:

- The 'NaMo Drone Didi Initiative' was announced by the PM on 15 August last year to train **15,000 women-led Self-Help Groups (SHGs) in the use of agricultural drones.**

NaMo Drone Didi

- It is a name given to women drone pilots who have been trained under the government's '**NaMo Drone Didi Initiative'.**

Objective

- It is aimed at training and equipping 15,000 women-led Self-Help Groups (SHGs) with agricultural drones.
- The idea is to offer farmers assistance in agricultural operations, such as crop monitoring, spraying fertilizers, and sowing seeds
  - Thus helping rural women achieve self-sufficiency while simultaneously making the sector less labour-intensive.
- Once they finish the course, these women get the Remote Pilot Certificate (RPC)
- the certification required to fly drones, from the DGCA and can take up assignments as 'Drone Didis'.
- The Indian Farmers Fertiliser Cooperative (IFFCO) has been part of the NaMo Drone Didi Scheme since its inception.
  - It is a farmer-owned fertilizer collective and India's largest fertilizer company.
- IFCCO produces two major fertilizers — nano urea and nano DAP.

Quick Look

1. Index of Eight Core Industries (ICI)

- It is a production volume index that measures the collective and individual production performances of eight selected core industries.
- Core Industries: Natural Gas, Coal, Refinery Products, Crude Oil, Cement, Electricity, Steel and Fertilizers.
- Termed as the core industries owing to their strong impact on the general economic activities and the other industrial activities.
- The calculation of the Index is done by using the Laspeyres formula.
- They comprise a total of 40.27% of the total weight of the overall items that are included in the Index of Industrial Production (IIP).
- The new IIP series has revised the base year for the ICI to 2011-12 from the initial base of 2004-05.
- Published by the Office of the Economic Adviser (OEA), Ministry of Commerce and Industry.

2. Bharat 5G Portal

- It is a comprehensive platform serving the interests of startups, industry and academia in quantum, 6G, IPR and 5G domains.
- It also features the Future Tech-Experts registration portal in collaboration with PANIIT USA.
  - o Aim: To help and advise the Indian Telecom ecosystem to advance the goal of Atmanirbhar Bharat.
- It acts as a one-stop solution for all quantum, IPR, PoCs/Pilot, 5G and 6G-related works capturing academic R&D developments, industry standards, OEMs, startups/MSMEs, and subject matter experts.
- It aims to propel India's 5G capabilities and foster innovation, collaboration, and knowledge-sharing within the telecom sector.

3. Alzheimer's Disease

- As per a recent study, rare medical accidents can lead to the transmission of Alzheimer's from one human to another.
- Alzheimer's disease is a brain condition that causes a progressive decline in memory, thinking, learning and organising skills.
- It is the most common type of dementia, accounting for 60-80% of all dementia cases.
- It involves parts of the brain that control thought, memory, and language.
- The condition usually affects people aged 65 years and over, with only 10% of cases occurring in people younger than this.
- Cause: The exact cause is not fully understood, but it is believed to be influenced by a combination of genetic, environmental, and lifestyle factors.
- The early signs of the disease include forgetting recent events or conversations.
- Over time, it progresses to serious memory problems and loss of the ability to perform everyday tasks.
- Treatment: There's no cure for Alzheimer's, but certain medications and therapies can help manage symptoms.

4. Lab-grown Fish

- Recently, ICAR-Central Marine Fisheries Research Institute (CMFRI) entered into a collaborative research agreement with a private-sector start-up offering cultivated meat technology solutions to grow fish meat in the laboratory.
- Lab-grown fish is merely a type of lab-grown or cultivated/cultured meat.
- The cultivated fish meat is produced by isolating specific cells from fish and growing them in a laboratory setting using media that is free of animal components.
- The final product is expected to replicate the flavour, texture, and nutritional qualities of 'real' fish meat.
- Recently, a number of countries have made great strides in this pioneering technology.
- Israel is the frontrunner, followed by Singapore, the United States and China.

5. Payments Bank

- A payments bank is like any other bank but operates on a smaller scale without involving any credit risk.
- It was set up based on the recommendations of the Nachiket Mor Committee.
- Objective: To advance financial inclusion by offering banking and financial services to the unbanked and underbanked areas, helping the migrant labour force, low-income households, small entrepreneurs, etc.
- It is registered as a public limited company under the Companies Act 2013 and licensed under Section 22 of the Banking Regulation Act 1949.
- It is governed by a host of legislation, such as the Banking Regulation Act, 1949; RBI Act, 1934; Foreign Exchange Management Act, 1999, etc.
- Features
  - They are differentiated, and not universal banks.
  - The minimum paid-up equity capital for payments banks shall be 100 crores.
  - It can take deposits up to Rs. 2,00,000; can accept demand deposits in the form of savings and current accounts.
  - The money received as deposits can be invested in secure government securities only in the form of a Statutory Liquidity Ratio (SLR).
    - This must amount to 75% of the demand deposit balance.
    - The remaining 25% is to be placed as time deposits with other scheduled commercial banks.
  - It can offer remittance services, mobile payments/transfers/purchases, and other banking services like ATM/debit cards, net banking, and third-party fund transfers.
  - It can become a banking correspondent (BC) of another bank for credit and other services which it cannot offer.
  - It cannot issue loans and credit cards; cannot accept time deposits or NRI deposits.
  - It cannot set up subsidiaries to undertake non-banking financial activities.

6. Green Roofs

- According to a recent research, green roofs treated with mycorrhizal fungi foster a more diverse soil community that is more likely to support long-term green roof sustainability.
- Green roofs are ballasted roofs consisting of a waterproofing membrane, growing medium (soil), and vegetation (plants) overlying a traditional roof.
- Green roof systems, akin to conventional roofs, need to address drainage, stormwater management, and safeguard the building using a waterproof membrane.
- However, they also must establish a conducive growing environment, potentially offering support, irrigation, and root protection barriers while maintaining minimal weight.
- Two types of green roofs exist viz. intensive and extensive.

- o Intensive green roofs are essentially elevated parks. They can sustain shrubs, trees, walkways and benches with their complex structural support, irrigation, drainage, and root protection layers.
- o Extensive green roofs are relatively light. They support hearty native ground cover that requires little maintenance. Extensive green roofs usually exist solely for their environmental benefits and don't function as accessible rooftop gardens.
- Green roofs last longer than conventional roofs, reduce energy costs with natural insulation, create peaceful retreats for people and animals, and absorb stormwater, potentially lessening the need for complex and expensive drainage systems.
- On a wider scale, green roofs improve air quality and help reduce the Urban Heat Island Effect, a condition in which city and suburban developments absorb and trap heat.

7. One Stop Centre Scheme

- It is a Centrally Sponsored Scheme formulated under the Union Ministry of Women and Child Development (MWCD).
- Objectives:
  - o To provide integrated support and assistance to women affected by violence, both in private and public spaces under one roof.
  - o To facilitate immediate, emergency and non-emergency access to a range of services under one roof to fight against any forms of violence against women.
- It supports all women including girls below 18 years of age affected by violence, irrespective of caste, class, religion, region, sexual orientation or marital status.
- The Scheme is funded through the Nirbhaya Fund and the Central Government provides 100% financial assistance under the Scheme.
- The day-to-day implementation and administrative matters would be the responsibility of the District Collector/District Magistrate.

8. Extended ROentgen Survey with an Imaging Telescope Array (eROSITA)

- Recently, the German eROSITA consortium has released the data for its share of the first all-sky survey by the soft X-ray imaging telescope.
- The eROSITA is a wide-field X-ray telescope on board the Russian-German "Spectrum-Roentgen-Gamma" (SRG) observatory.
- It is a sensitive X-ray telescope capable of delivering deep, sharp images over very large areas of the sky.
- It consists of seven identical Wolter-1 mirror modules; placed in a halo orbit around the L2 point.
- It has been performing an all-sky survey, in which the whole celestial sphere is mapped once every six months.
  - o Eight such all-sky charts are planned until December 2023.
- It is also expected to yield a sample of several million Active Galactic Nuclei, providing a unique view of the evolution of supermassive black holes within the emerging cosmic structure.
- The survey will provide new insights into a wide range of astrophysical phenomena as well as solar system bodies that emit X-rays via the charge exchange process.

9. New scheme for bio-manufacturing, bio-foundry on the cards

- Seeking to push utilisation of recycled resources, government will launch a scheme of 'bio-manufacturing and bio-foundry
- It will provide environment-friendly alternatives such as biodegradable polymers, bio-plastics, bio-pharmaceuticals and bio-agri products to consumers and industry.
- "This scheme will help in transforming today's consumptive manufacturing paradigm to one based on regenerative principles
- The 'bio-manufacturing and bio-foundry' concept is broadly based on circularity in which recycling and reuse of resources will be key for manufacturing.

- It will also use bio-agri inputs for various uses, including production of ethanol, as a source of bioenergy and bio-degradable items. Similarly, bio-based feedstock will be used in bio-refineries.

10. Exercise Vayu Shakti

- It is a triennial exercise taking place once every three years.
- Objective: Showcasing the capability of the IAF to conduct full spectrum operations (Day and Night), and to see the participation of aircraft and helicopters, transport aircraft and unmanned aerial vehicles.
- The frontline aircraft in the IAF inventory includes
  - Russian SU-30MKI and MiG-29UPG fighters,
  - French Rafale and Mirage 2000,
  - American C-130 and C-17 transport aircraft, AH-64E Apache attack helicopters and CH-47F Chinook heavy-lift helicopters,
  - Indigenous Light Combat Aircraft (Tejas), Advanced Light Helicopter (Dhruv) and the Light Combat Helicopter.

11. Uniform Civil Code (UCC)

- UCC provides for one law for the entire country across all religious communities in their personal matters such as marriage, divorce, inheritance, adoption etc.
- UCC is defined in Article 44 as part of the Directive Principles of State Policy (DPSP), in part of Part IV of the Constitution.
- Article 44 - It states that 'The State shall endeavour to secure for the citizens a Uniform Civil Code throughout the territory of India'.
- UCC aims to enforce a uniform legal framework to all citizens, irrespective of their religion.

12. MagSafe

- MagSafe charger is a wireless charger/power bank that connects to the back of your wireless-compatible mobile phone to charge your phone in the easiest of ways.
- It is equipped with either a 5,000 or a 10,000 mAh battery pack on the inside, which can be used as a power backup.
- This type of charger uses the magnetic current present at the back of your mobile phone and the magnets on the MagSafe charger.
- A good MagSafe charger is just like any other wireless power bank that attaches to your mobile phone and works as a power bank.
- As with any other power bank, a MagSafe charger also needs to be charged.

13. Global Multidimensional Poverty Index

- The index is a key international resource that measures acute multidimensional poverty across more than 100 developing countries.
- It was first launched in 2010 by the OPHI and the Human Development Report Office of the UNDP.
- The MPI monitors deprivations in 10 indicators spanning health, education and standard of living.
- It includes both incidence as well as intensity of poverty.
- A person is multidimensionally poor if she/he is deprived in one third or more (means 33% or more) of the weighted indicators (out of the ten indicators).
- Those who are deprived in one half or more of the weighted indicators are considered living in extreme multidimensional poverty.

14. Subika Paintings

- It is a style of painting which is intricately linked to the Meitei community's cultural history.
- It is surviving through its six manuscripts viz. Subika, Subika Achouba, Subika Laishaba, Subika Choudit, Subika Cheithil and Thengrakhel Subika.
- Although the royal chronicle, Cheitharol Kumbaba, doesn't mention a specific founder, there is a possibility that this art form existed when the writing tradition was introduced in the state.
- Experts estimate the use of Subika paintings since the 18th or 19th century.

15. Kendriya Grihmantri Dakshata Padak

- The Union Ministry of Home Affairs (MHA) has recently launched a new medal, the Kendriya Grihmantri Dakshata Padak, amalgamating four existing medals.
- Aims: To recognize and honour outstanding contributions in various areas related to national security and public service.
- The award is open to members of police forces, security organizations, intelligence wings, central and state police forces, and forensic science units.
- Personnel of the Central Board of Indirect Taxes and Customs (CBIC) may also be considered, particularly in the area of preventing narcotics smuggling.
- This new medal will be conferred on individuals from various security and intelligence organizations for excellence in operations, including counter-terrorism, border actions, arms control, Left Wing Extremism, prevention of narcotics smuggling, and rescue operations.
- Design and Symbolism of the Medal
  o The Kendriya Grihmantri Dakshata Padak will be a circular silver gold gilt medal.
  o The obverse will feature the symbol of 'face of Sardar Patel' at the centre with the words 'Jai Bharat' below.
  o The upper edge will have 'Rashtra Prahari' (in Hindi), while the lower edge will have 'Sentinel of the Nation' (in English).
  o The reverse will include the Ashoka Chakra at the center with the words 'Satya Seva Suraksha' below.

16. Dusted Apollo

- Recently the rare Dusted Apollo butterfly was sighted in Himachal Pradesh.
- This marks the first-ever photographic documentation of the species in the region since its discovery in 1890.
- The Dusted Apollo, known for its high-altitude habitat, has a distribution range spanning from Ladakh to west Nepal, flying at elevations between 3,500 to 4,800 meters in the inner Himalayas.
- Distinguished by its complete discal band on the upper forewing and a narrow dark marginal band on the hind wings, this butterfly closely resembles the Ladakh Banded Apollo.
- With 11 Apollo species recorded in Himachal Pradesh, five declared as Scheduled species, and most facing endangerment, there is a growing need for immediate attention to their conservation.

17. Personally Identifiable Information (PII)

- PII is any data or information maintained by an organisation or agency that can potentially be used to identify a specific individual.
- This includes information such as Aadhaar, PAN, voter identity, passport, date of birth, contact number, communication address, and biometric information.
- The constituents of PII vary depending on an individual's home country.
- Non-PII in tandem with additional information can be used to identify an individual.
  o Non-PII information includes photographic images (especially of the face or other identifying characteristics), place of birth, religion, geographic indicators, employment information, educational qualifications, and medical records.

18. Open Market Sale Scheme

- The FCI from time to time sells surplus food grains from the central pool, especially wheat and rice, in the open market at pre-determined prices.
- FCI does this through e-auctions where open market bidders can buy specified quantities.
- States are allowed to procure food grains through the OMSS without participating in the auctions.
  - This is for their needs beyond what they get from the central pool to distribute to NFSA (National Food Security Act) beneficiaries.
- Purpose
  - To dispose off surplus stocks of food grains held by FCI
  - To regulate the prices in the open market.
- Process of sale
  - FCI conducts weekly auctions on the National Commodity and Derivatives Exchange Limited (NCDEX) platform.

19. Halal Certification

- It guarantees that the food is prepared in accordance with Islamic law and is unadulterated.
- It also ensures that the product does not include any "forbidden" components, and has not been in contact with any substances or objects considered "impure".
- It is mainly applied to meat products and other food products such as milk, canned food, and additives.
- In India, halal certification is usually provided by a third-party body.
- Some private companies that provide halal certification in India include MTR, Venky's, Sufi, and McDonald's.

20. INS Sandhayak

- The Indian Navy recently commissioned its latest survey vessel, Sandhayak, at Naval Dockyard in Vizag.
- It is the first in a series of four Survey Vessel (Large) ships being constructed at Garden Reach Shipbuilders & Engineers (GRSE), Kolkata.
  - INS Sandhayak has an indigenous content of over 80 per cent by cost.
- Purpose: To conduct comprehensive coastal and deep-water Hydrographic Surveys for Port and Harbour approaches, as well as determining navigational channels and routes.
- The operational zone extends up to maritime limits, covering the Exclusive Economic Zone (EEZ) and extended continental shelf.
- It is equipped to gather oceanographic and geophysical data, serving both defence and civil applications.
- In its secondary role, the ship can offer limited defence capabilities and serve as a hospital ship during wartime or emergencies.
- It is equipped with cutting-edge hydrographic tools, including a Data Acquisition and Processing System, Autonomous Underwater Vehicle, Remotely Operated Vehicle, DGPS Long-range positioning systems, and Digital side-scan sonar.
- Powered by two diesel engines, the vessel boasts a speed capability exceeding 18 knots.

21. Aldabra rail

- The flightless Aldabra rail went extinct over 130,000 years ago, but the species then reappeared via iterative evolution.
  - Iterative evolution is the repeated evolution of a specific trait or body plan from the same ancestral lineage at different points in time.
- Aldabra rail lives on a coral atoll off the southeast coast of Africa.
- It is a subspecies of the white-throated rail (Dryolimnas cuvieri) and is the only living flightless bird in the Indian Ocean.

- It's about the size of a chicken, with a flecked gray back, a rusty red head and chest and a white throat.
- In losing its ability to fly once again, the Aldabra rail has essentially evolved twice, rising from the dead through a process called iterative evolution.
- A 2019 study found evidence of a flightless rail on the atoll from before it was submerged beneath the waves 136,000 years ago.

22. Trichoglossum

- Recently, the researchers discovered a new fungus species in Kerala named Trichoglossum syamviswanathii.
- Trichoglossum is a genus of fungus classified within the family Geoglossaceae (Ascomycota), commonly known as "hairy earth tongues" fungus due to their numerous filaments resembling mushrooms.
- They are black, dark, or brown in colour.
- They exhibit saprotrophic behaviour but can also be found as endophytes in plant roots.
- They are globally distributed in tropical and temperate forests at least five out of seven continents of the world.
- They play a critical role in the decomposition of organic matter.

23. Grammy Awards

- Grammy Award, originally named Gramophone Award, is presented annually in the United States by the National Academy of Recording Arts & Sciences to honour artistes in the music industry for their exceptional work in a year.
- It was started in 1959 to respect the performers for the year 1958. Once it was made, the committee decided to call it Grammy as a tribute to Emile Berliner's gramophone.
- The "General Field" are four awards that are not restricted by genre viz. Album of the Year, Record of the Year, Song of the Year and Best New Artiste
- The honorees receive a golden statuette of a gramophone.
- Shakti, the Indo-jazz supergroup consisting of Ustad Zakir Hussain, John Mclaughlin, V Selvaganesh, Ganesh Rajagopalan, and Shankar Mahadevan, wins the Grammy for Best Global Music Album for "This Moment."
- The album, created during Covid, showcases a fusion of Eastern and Western sounds and North Indian classical with Carnatic classical music.

24. Gamma Ray Astronomy PeV EnergieS phase-3 (GRAPES-3) Experiment

- GRAPES-3 is designed to study cosmic rays with an array of air shower detectors and a large area muon detector.
- Located in Ooty, India, it is operated by the Tata Institute of Fundamental Research.
- It aims to probe the acceleration of cosmic rays in different astrophysical settings.
- Objectives: To study
  - The origin, acceleration and propagation of >10^{14} eV cosmic rays in the galaxy and beyond.
  - The existence of "Knee" in the energy spectrum of cosmic rays.
  - The production and/or acceleration of the highest energy (~10^{20} eV) cosmic rays in the universe.
  - The astronomy of multi-TeV γ-rays from neutron stars and other compact objects.
- The GRAPES-3 experiment recently discovered a new feature in the cosmic-ray proton spectrum at about 166 tera-electron-volt (TeV) energy while measuring the spectrum spanning from 50 TeV to a little over 1 peta-electron-volt (PeV).

25. Obelisks

- Obelisks is a newly discovered class of virus-like entities present in the human body.
- It comprises a class of diverse RNAs that have colonized and gone unnoticed in human and global microbiomes.
- Named after the highly symmetrical, rod-like structures formed by their twisted lengths of RNA, the Obelisks' genetic sequences are only around 1,000 characters (nucleotides) in size.
- These mysterious bits of genetic material have no detectable sequences or even structural similarities known to any other biological agents.
- They're also significantly larger than other genetic molecules that coexist inside cells, from plants to bacteria, called plasmids, which are more commonly composed of DNA.
- Obelisks represent their own class of organism. They lie somewhere between viruses and viroids.
- Although the hosts of other obelisks remain unknown, there is a possibility that some of them may be found in bacteria.
- Different types of Obelisks appear to be present in different areas of our bodies.

26. Image Correction Algorithm

- Scientists at India's Raman Research Institute (RRI) have developed a novel image-correction algorithm
- It aimed at enhancing images used in the study of ultracold atoms.
- These atoms, cooled to temperatures near absolute zero, exhibit intriguing quantum mechanics properties.
- Current imaging methods, which rely on fluorescence, absorption, and phase-contrast techniques, suffer from flaws such as interference fringes that obscure the true images.
- The new algorithm significantly reduces these fringes by 50%
- This leads to clearer images and enables more precise calculations of parameters like atom number and temperature uncertainty.
- This advancement holds promise for deeper insights into the behaviour of ultracold atoms and their quantum properties.

27. Extension to Subsidised Sugar Scheme

- The Union Cabinet has extended the Subsidised Sugar Scheme.
- It is aimed at providing sugar at subsidized rates to Antyodaya Anna Yojana (AAY) families until March 31, 2026.
- This initiative is intended to enhance the nutritional intake of the poorest citizens. Under this scheme, the Central Government provides a subsidy of Rs. 18.50 per kg per month of sugar to AAY families in participating States.
- The extension of the scheme is projected to provide benefits exceeding Rs. 1850 crore during the period of the 15th Finance Commission (2020-21 to 2025-26). Additionally, the Government of India offers free ration under the Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY.
- It sells essential food items like 'Bharat Atta,' 'Bharat Dal,' 'Bharat Rice,' tomatoes, and onions at affordable prices to support vulnerable sections of society.

28. Reservation to OBC in Jammu and Kashmir

- The Union government has introduced a new bill in the Lok Sabha to provide reservation for Other Backward Classes (OBCs) in local bodies of Jammu and Kashmir.
- This legislation aims to align existing laws with constitutional provisions.
- It will ensure representation for OBCs in panchayats and municipalities for the first time since India's independence.
- The proposed Jammu and Kashmir Local Bodies Laws (Amendment) Bill, 2024 seeks to amend relevant acts to bring them in line with constitutional provisions.
- Thebill will affect the provisions related to the reservations for backward classes in local governance.

- Currently, there is no provision for OBC reservations in these local bodies in Jammu and Kashmir.
- The bill aims to address this gap by empowering a commission to determine the number of reserved seats once the legislation is passed.

29. Vyomitra

- India is preparing for its manned space mission, Gaganyaan, in 2025.
- The country plans to send a humanoid robot named Vyommitra to space first to test critical systems.
- Vyommitra, weighing 40 kg and developed by ISRO.
- It will simulate human functions within the spacecraft's orbit.
- It is equipped to operate control panels, monitor parameters, perform life support operations, and engage in conversations using artificial intelligence.
- Vyommitra aims to ensure the habitability and safety of the Gaganyaan module before crewed flights.
- Her deployment marks a significant step toward future Gaganyaan missions.

30. ABHYAS

- Recently, the Defence Research and Development Organisation (DRDO) successfully conducted four flight trials of the high-speed expendable aerial target 'ABHYAS'.
- ABHYAS is a high-speed expendable aerial target (HEAT).
- It is designed by the DRDO's Aeronautical Development Establishment (ADE).
- It offers a realistic threat scenario for the practice of weapon systems.
- It is the ideal platform for the validation of Armed Forces equipment slated for induction (only those that require aerial engagement).
- It is designed for autonomous flying with the help of an autopilot indigenously made by the ADE.
- It has a radar cross-section and a visual and infrared augmentation system required for weapon practice.
- The target drone has a laptop-based Ground Control System with which the aircraft can be integrated and pre-flight checks, data recording during the flight, replays after the flight and post-flight analysis can be carried out.

31. International Centre for Integrated Mountain Development (ICIMOD)

- Recently, experts from the ICIMOD declared the Hindu Kush Himalaya region a biosphere on the brink of collapse and called for bold action and urgent finance to prevent nature loss.
- The ICIMOD, established in 1983, is an intergovernmental knowledge and learning centre working on behalf of the people of the Hindu Kush Himalaya (HKH).
- Mission: To build and share knowledge that drives regional policy and action and attracts investment that enables the diverse countries and communities of the HKH to transition to greener, more inclusive, and climate-resilient development.
- Member countries: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan.
- Headquarters: Kathmandu, Nepal
- Functions
  - It serves the region through information and knowledge generation and sharing to find innovative solutions to critical mountain problems.
  - It bridges science with policies and on-the-ground practices.
  - It provides a regional platform where experts, planners, policymakers, and practitioners can exchange ideas and perspectives towards the achievement of sustainable mountain development.

32. India's first Hypervelocity Expansion Tunnel Test Facility

- Recently, the IIT- Kanpur successfully established and tested India's first Hypervelocity Expansion Tunnel Test Facility.
- India's first Hypervelocity Expansion Tunnel Test Facility, S2, nicknamed 'Jigarthanda', is a 24-metre-long facility located at IIT Kanpur's Hypersonic Experimental Aerodynamics Laboratory (HEAL) within the Department of Aerospace Engineering.
- It was indigenously designed and developed over three years with funding and support from the Aeronautical Research and Development Board (ARDB), the Department of Science and Technology (DST), and IIT Kanpur.
- It is capable of generating flight speeds between 3-10 km/s, simulating the hypersonic conditions encountered during the atmospheric entry of vehicles, asteroid entry, scramjet flights, and ballistic missiles.
- It will be a critical asset for the Indian Space Research Organisation (ISRO) and the Defence Research and Development Organisation (DRDO).
- It will serve as a testing ground for ongoing missions of ISRO and DRDO like Gaganyaan, Reusable Launch Vehicles (RLV), and hypersonic cruise missiles, enabling the development of more advanced and reliable aerospace technologies.

33. Vaccine Safety Net

- The Healthy Indian Project (THIP), a health information platform in India, is included as a member of the World Health Organization's Vaccine Safety Net (VSN).
- Vaccine Safety Net is a global network of websites, established by the World Health Organization that provides reliable information on vaccine safety.
- It is a network of a diverse group of digital information resources, VSN members providing scientifically based information on vaccine safety in various languages.
- A key player in the Project is the Global Advisory Committee on Vaccine Safety (GACVS).
  - It was established by WHO in 1999, to respond promptly, efficiently, and with scientific rigour to vaccine safety issues of potential global importance.
- GACVS developed three categories of criteria for good information practices regarding credibility, content, accessibility and design to which digital resources providing information on vaccine safety should adhere.
- WHO evaluates those electronic resources for their adherence to these criteria.
- It is continuously expanding and to date, 110 websites from 45 countries provide vaccine safety information in 43 languages.

34. Kaladan Multi-Modal Transit Transport Project

- Kaladan Project would link India and Myanmar via the Bay of Bengal.
- It was jointly identified by India and Myanmar to create a multi-modal mode of transport for the shipment of cargo from the eastern ports of India to Myanmar as well as to the North-Eastern part of India through Myanmar.
- It will link Kolkata with the Sittwe seaport in Rakhine state in Myanmar, primarily over the Bay of Bengal - covering over 500 km.
- It is being constructed by India under the Grant in Aid Scheme.
- The project envisaged four important stages viz.
  - Kolkata to Sittwe waterway
  - Sittwe to Paletwa inland (River Kaladan) waterway
  - Paletwa to India-Myanmar border post in Myanmar
  - Linking the road to Lawngtlai in Mizoram
- The project is expected to contribute to the economic development of the North-Eastern States of India.
  It also provides a strategic link to the North-East, thereby reducing pressure on the Siliguri Corridor.

35. Open Network Digital Commerce

- It is an open-source network set up to enable buyers and sellers to transact with each other irrespective of the e-commerce platform.
- It will enable local commerce across segments to be discovered and engaged by any network-enabled application.
- It is an initiative of the Department for Promotion of Industry and Internal Trade(DPIIT) under the Ministry of Commerce and Industry.
- Objectives
  - To promote open networks for all aspects of the exchange of goods and services over digital or electronic networks.
  - To create new opportunities, curb digital monopolies and support micro, small and medium enterprises and small traders and help them get on online platforms.
  - To democratise digital or electronic commerce, moving it from a platform-centric model to an open-network.
- It is expected to digitise the entire value chain, promote inclusion of suppliers, derive efficiencies in logistics and enhance value for consumers.

36. Kilkari programme

- Recently the Union Ministers of State for Health and Family Welfare virtually launched the Kilkari programme, a Mobile Health (m-health) initiative for beneficiaries in local content in Gujarat and Maharashtra.
- It delivers free, weekly, time-appropriate 72 audio messages about pregnancy, childbirth, and childcare directly to families' mobile phones from the second trimester of pregnancy until the child is one year old.
- Women who are registered in the Reproductive Child Health (RCH) portal receive a weekly call with pre-recorded audio content directly to the mobile phones.
- Kilkari audio messages are present in the form of the voice of a fictitious doctor character called Dr. Anita.
- It is centrally hosted by the Ministry of Health and Family Welfare (MoHFW) for all the States/UTs.
- No further investment in the technology, telephony infrastructure or operational costs is required to be borne by States/UTs.
- The programme is integrated with the centralised Reproductive Child Health (RCH) portal of MoHFW and is the single source of information for this mHealth service.

37. MXenes

- Researchers recently reported on the potential of using MXene coatings that can guide microwaves in space and lighten satellite payloads.
- MXenes, first discovered in 2011, are ceramics that comprise one of the largest families of two-dimensional (2D) materials.
- Unlike most 2D ceramics, MXenes have inherently good conductivity and excellent volumetric capacitance.
  - They are molecular sheets made from the carbides and nitrides of transition metals like titanium.
- Among various types of MXenes, titanium carbide ($Ti_3C_2T_x$) is the most widely used.
- Some potential applications of MXenes include energy storage (such as lithium-ion batteries and supercapacitors) due to their high conductivity and large surface area, electromagnetic interference shielding, catalysis, sensors, and water purification, among others.

38. Ultracold Atoms

- The Indian scientists at the Raman Research Institute (RRI) recently designed a new image-correction algorithm that significantly enhances the study of ultracold atoms.
- The atoms whose temperatures are near absolute zero (zero Kelvin) are known as ultracold atoms.

- At low temperatures near absolute zero, atoms behave according to the principles of quantum mechanics rather than classical physics.

39. Forever Chemicals

- Recently, the researchers demonstrated a new lab-based method to detect traces of Forever Chemicals in just three minutes or less.
- PFAS (Per- and polyfluorinated alkyl substances), also known as the Forever Chemicals, are a large chemical family of over 4,700 highly persistent man-made chemicals.
- These were first developed in the 1940s and are now found in a variety of consumer products.
- These include nonstick pans, water-resistant textiles, and fire suppression foams, due to their ability to repel both grease and water.
- PFAS are the most persistent synthetic chemicals to date and hardly degrade in the natural environment.
- They have been found in the blood of people and animals all over the world, and are present at low levels in a variety of food products.
- Exposure to PFAS is linked to cancers, weakened immune systems among children, weight gain, and a wide range of other health problems.

40. Sandbox for Agricultural and Rural Security, Technology and Insurance (SARTHI) Portal

- Recently, the Union Agriculture minister unveiled the 'Sarathi' platform.
- Purpose: To provide a full suite of insurance products, including PMFBY, geared specifically for farmers and rural populations in India.
- It is the comprehensive digital insurance platform launched in collaboration with United Nations Development Programme (UNDP) India.
- The portal will be a single-window platform for viewing, purchasing, and availing insurance products.
- The platform has digital payment options and streamlined premium collection, effortless claim initiation, tracking and resolution besides user-friendly interfaces for stakeholders.

41. Build-Operate-Transfer (BOT) Model

- The National Highways Authority of India (NHAI) has come up with a list of high-traffic density corridors for private developers to build and operate under the build-operate-transfer (BOT) model.
- BOT is a type of agreement often used in infrastructure projects, particularly in the construction and operation of public facilities or utilities.
- It is a conventional public-private partnership (PPP) model in which a private entity is granted the rights and responsibilities to design, finance, construct, operate, and maintain a specific project or facility for a defined period of time.
- The private entity also bears the financial and operational risks associated with the project during the contract period.
- At the end of the contract period, the ownership and control of the facility are transferred back to the government or public authority, which may have been the original owner.
- The transfer is often accompanied by a predetermined valuation or compensation mechanism.
- The private company gains revenue during the concession period, while the government benefits from infrastructure development without upfront investment.

- BOT is particularly well-suited for greenfield projects (new projects without prior work) and large-scale, capital-intensive projects.

42. Zircon Missile

- In an attempt to hit a target in Kyiv, Russian forces recently launched a 3M22 Zircon missile.
- The 3M22 Zircon, or SS-N-33, is a scramjet-powered manoeuvring anti-ship hypersonic cruise missile developed in Russia.
- The missile is reportedly capable of flying with speeds up to Mach 9 and a range of 1000 km.
- It is a two-stage missile that uses solid fuel in the first stage and a scramjet motor in the second stage.
- The missile uses cooled supersonic combustion ramjet engines, which facilitate combustion by compressing air flowing at supersonic speeds due to the missile's forward motion.
- Guidance System: Active and Passive Radar Seeker.
- During flight, the missile is completely covered by a plasma cloud that absorbs any rays of radio frequencies and makes the missile invisible to radars.

43. Pak Army chief backs Nawaz call to form unity govt

- Pakistan's powerful army chief urged the country's polarised political leadership to form a "unified government of all democratic forces
  o as he backed ex-premier Nawaz Sharif's plea to his rivals to help form a coalition government after the general elections appear to have produced a hung Parliament.
- Efforts to form a unity government gained momentum after the three-time former prime minister Sharif, who seems to enjoy the backing of the Pakistan Army,
- Appealed to other political parties to join hands to pull cash-strapped Pakistan out of its current difficulties.
- Springing a surprise, independents backed by jailed former prime minister Imran Khan's Pakistan Tehreek-e-Insaf (PTI) party won the lion's share of 100 seats in the National Assembly in Thursday's election.
- Khan's party has already claimed victory in the elections.

44. New Defence Systems

- Recently, the Chief of Naval Staff (CNS) inaugurated a Precision Approach Radar (PAR) at INS Utkrosh in Andaman and Nicobar Islands.
  o The PAR facilitates highly accurate horizontal and vertical guidance for safe aircraft landings in low visibility conditions, such as heavy rain and fog.
- He also inaugurated the Integrated Underwater Harbour Defence and Surveillance System (IUHDSS) at Naval Jetty, Port Blair.
  o IUHDSS is designed to detect, identify, and track surface and underwater targets in the vicinity of the naval jetty, enhancing the security of Port Blair harbour.
- He also inaugurated the Naval Communication Network (NCN) Centres at INS Kohassa, INS Baaz, and INS Kardip.
  o The newly inaugurated NCN Centres are designed to augment communication and operational capability, enhancing real-time situational awareness and jointness in communication across ANC.

45. Brumation

- Brumation is a state of dormancy or reduced activity observed in reptiles, akin to hibernation in mammals.
- It occurs typically during colder months when temperatures drop and food becomes scarce.
- Reptiles enter this state to conserve energy and survive adverse environmental conditions.
- Reptiles may seek refuge in underground burrows, rock crevices, or other sheltered areas where temperatures are relatively stable.

- Their metabolism slows significantly, allowing them to go without food for weeks or months.
- Researchers have documented instances of brumation in various reptiles, including box turtles, painted turtles, snakes, and lizards.

46. Kalasa-Banduri Project

- The National Board for Wildlife (NBWL) recently deferred the decision on diverting forest land from the Kali and Sahyadri tiger reserves for the construction of a part of the Karnataka government's Kalasa-Bhanduri Project.
- The Kalasa-Bhanduri Project involves the construction of dams and a canal system to divert water from the Mahadayi River, located in Goa, to the Malaprabha River (a tributary of the Krishna River) basin in Karnataka.
- Purpose: To meet the drinking water needs of the districts of Belagavi, Dharwad, Bagalkot, and Gadag in Karnataka.
- Though the project was first proposed in the early 1980s, it has remained on paper owing to a dispute between Karnataka, Goa, and Maharashtra.
- As per plans, barrages are to be built against Kalasa and Bhanduri streams - tributaries of Mahadayi - and water diverted towards Karnataka's parched districts.

47. Dhokra Shilpkala

- Chhattisgarh's Ocher Studio is helping to preserve India's 4,000-year-old craft- Dhokra Shilpkala.
- The word "Dhokra" is believed to be derived from the Dhokra Damar tribes, who are the traditional metal smiths of Central India.
- The origins of Dhokra Shilpkala can be traced back to the tribal communities residing in the regions of Chhattisgarh, Jharkhand, West Bengal, and Odisha.
- It is distinguished by its exceptional metal casting technique, which employs the lost wax casting method, also recognized as cire perdue.
- Artisans draw inspiration from nature, mythology, and everyday life, incorporating motifs such as animals, birds, deities, and tribal symbols into their creations.
- From miniature figurines and jewellery to larger-than-life sculptures and functional objects, Dhokra Shilpkala encompasses a wide range of artistic expressions.
- The rapid pace of urbanisation, coupled with the rise of mechanised production techniques, has threatened the livelihoods of traditional artisans and endangered this ancient craft.

48. Index of Industrial Production

- IIP is an indicator that measures the changes in the volume of production of industrial products during a given period.
- It is a composite indicator that measures the growth rate of industry groups.
- The industry groups that it measures are classified as
  o Broad sectors like manufacturing, mining, and electricity.
  o Use-based sectors like capital goods, basic goods, intermediate goods, infrastructure goods, consumer durables, and consumer non-durables.
- It is used by government agencies including the Ministry of Finance, the Reserve Bank of India, etc. for policy-making purposes.
- It is compiled and published monthly by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
- Base Year for IIP is 2011-2012.
- Eight Core Sectors
- These comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP).
- The eight core sector industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilisers.

49. Alaskapox

- Recently, an elderly man from Alaska became the first person to die after contracting Alaskapox.
- Alaskapox is an orthopox virus that was first discovered in Alaska, USA, in 2015.
- It is a double-stranded DNA virus belonging to the same genus Orthopoxvirus as smallpox, monkeypox, and cowpox.
  - o Orthopoxviruses are zoonotic viruses that can infect various mammals, including humans.
- Current evidence indicates that the Alaskapox virus primarily occurs in small mammals.
  - o The virus has been most commonly identified in red-backed voles and shrews.
- Symptoms: One or more skin lesions (bumps or pustules), swollen lymph nodes and joint and/or muscle pain. Immunocompromised people might be at increased risk for more severe illness.
- Transmission: While human-to-human transmission of Alaskapox has not yet been observed, some orthopoxviruses can spread by direct contact with lesions.

50. Bochasanwasi Akshar Purushottam Swaminarayan Sanstha (BAPS)

- The Prime Minister will inaugurate the Bochasanwasi Akshar Purushottam Swaminarayan Sanstha BAPS Mandir, the first Hindu temple in Abu Dhabi.
- BAPS is a socio-spiritual Hindu faith based on the Vedic teachings propagated by Bhagwan Swaminarayan (1781-1830 CE).
- It is an NGO with a Consultative Status with the Economic and Social Council of the United Nations.
- It was formally established in 1907 CE by Brahmaswarup Shastriji Maharaj.
- Five-lifetime vows of BAPS followers: No Alcohol, No Addictions, No Adultery, No Meat, No Impurity of body and mind.

51. National Creators Award

- It is the first-of-its-kind award that will be targeted at "Gen Z", a reference to the young generation hooked to the internet and social media.
- Objectives
  - o Put change-makers on centre stage – recognizing and boosting digital creators that are making an impact
  - o Elevate the influence of digital media on social impact
  - o Bring a community of creators, leaders and government on one platform to spur a social revolution, a national movement during 'Amrit Kaal'
  - o Using creativity to drive positive change.
- Eligibility Criteria
  - o Participants must be 18 years of age or above at the time of nomination.
  - o 19 categories are open exclusively to individuals of Indian nationality. One category is dedicated to international digital creators.
  - o Content must be published on one or more digital platforms viz. Instagram, YouTube, Twitter, LinkedIn or Facebook.
  - o Language: English or any other Indian language.
  - o Creators can self-nominate in a maximum of three categories. Those nominating others can nominate in all 20 categories.

52. SWATI Portal

- Recently, the Principal Scientific Advisor to the Government of India launched "Science for Women-A Technology & Innovation (SWATI)" Portal.
- Aim: To create a single online portal representing Indian Women and Girls in STEMM (Science, Technology, Engineering, Mathematics and Medicine).
- The database of the SWATI Portal will serve in policy-making to address the challenges of Gender-gap.
- It is developed, hosted and maintained by the National Institute of Plant Genome Research (NIPGR), New Delhi.

- The various Sections in the portal include Icons - Awardees and Directors, Secretaries Academy Presidents; Faculty- Indian Universities, Autonomous organisations.

53.   IIT Zanzibar

- The Indian Institute of Technology Madras (IIT-Madras) inaugurated its first-ever international campus in Zanzibar (Tanzania) last year.
  - o   Zanzibar is an archipelago in the Indian Ocean off the coast of Tanzania, and is a semi-autonomous province of Tanzania.
  - o   It is Stone Town, a historic trade centre with Swahili and Islamic influences.
- The Zanzibar campus is part of the Indian government's efforts to showcase India's education system on the global stage.
- This move aligns with India's National Education Policy 2020 and aims to enhance educational cooperation between the two nations.
- It is located in the Bweleo district, near Zanzibar Town, and will offer programs in Data Science and Artificial Intelligence at the Bachelor's and Master's levels.
- The inaugural batch included students from Zanzibar, mainland Tanzania, Nepal, and India, with a noteworthy 40% representation of women.
- The campus will also engage in academic collaborations, including study abroad programs, internships, and exchanges with the Chennai-based IIT-Madras campus.

54.   Biodiversity Heritage Site

- Recently, the Odisha government declared the Gupteswar forest in Koraput district as its fourth Biodiversity Heritage Site (BHS).
- Biodiversity Heritage Sites are areas that are unique, ecologically fragile ecosystems having rich biodiversity.
- Under the Biological Diversity Act, the State Governments are empowered to notify in the official gazette, in consultation with 'local bodies', areas of biodiversity importance as Biodiversity Heritage Sites.
- Also, the State Government in consultation with the Central Government may frame rules for the management and conservation of BHS.
- The State Governments are empowered to frame schemes for compensating or rehabilitating any person or section of people economically affected by such notification.

55.   Hastsal Minar

- Also known as Mini Qutab Minar, it is located in a small village in western Delhi.
- Among the locals, it is also known as Hastsal Ki Laat and Kaushal Minar.
- Its construction was finished in 1634 during the reign of Mughal emperor Shah Jahan.
- It was constructed using lakhori bricks and clad with red sandstone.
- The minar is 17 metres (five storeys) tall, standing on a square platform and with an octagonal body.
- A staircase inside the five-storey tower led to the domed Chhatri pavilion at the top.
- It has three storeys, each with a reducing diameter, and is accessible through a narrow staircase
- Shah Jahan utilised Hastsal as one of his hunting lodges during the 17th century.
- In 2018, the minaret was deemed as Grade A in heritage value and was given permission to be conserved under Phase IV of the Delhi government's project to protect lesser-known monuments in the capital.

56.   Floor Test

- A floor test is a Constitutional mechanism under which a CM appointed by the Governor (Article 164) can be asked to prove majority on the floor of the Legislative Assembly of the state.
- This is done through a vote among the members.
- When the House is in session, it is the Speaker who can call for a floor test. But when the Assembly is not in session, the Governor's residuary powers under Article 163 allow him to call for a floor test.

- In 2020, the Supreme Court, in Shivraj Singh Chouhan case upheld the powers of the Speaker to call for a floor test if there is a prima facie view that the government has lost its majority.
- The Composite Floor Test is conducted only when more than one person stakes a claim to form the government.

57.   PM Surya Ghar Muft Bijli Yojana

- Recently, the Prime Minister of India launched the PM Surya Ghar Muft Bijli Yojana to provide free electricity to its beneficiaries.
- The free electricity scheme was earlier announced by the Finance Minister in an interim budget speech.
- Under the scheme, the government will provide 300 units of free electricity per month to its beneficiaries by investing worth ₹75,000 crores.
- Target: It aims to light up 1 crore households.
- Urban Local Bodies and Panchayats shall be incentivised to promote rooftop solar systems in their jurisdictions.
- The Central Government will guarantee no financial burden on the people by providing significant subsidies directly to their bank accounts and offering highly concessional bank loans.
- Expected Benefits
  o Savings of up to fifteen to eighteen thousand rupees annually for households from free solar electricity and selling the surplus to the distribution companies;
  o Entrepreneurship opportunities for a large number of vendors for supply and installation
  o Employment opportunities for the youth with technical skills in manufacturing, installation and maintenance.

58.   Convention on the Conservation of Migratory Species

- The COP14 to the Convention on the Conservation of Migratory Species of Wild Animals is hosted by the Government of Uzbekistan, in Samarkand from 12-17 February 2024.
- Also known as the Bonn Convention, it is an environmental treaty under the aegis of the United Nations Environment Programme.
- It provides a global platform for the conservation and sustainable use of migratory animals and their habitats.
- It is the only global and UN-based intergovernmental organisation established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species throughout their range.
- Activities by CMS Parties may range from legally binding treaties to less formal instruments, such as Memoranda of Understanding.
- The Conference of Parties (COP) is the decision-making organ of this convention.
- Appendices
  o Appendix I: It lists endangered migratory species and includes prohibitions regarding the take of these species.
  o Appendix II: It lists species that have an 'unfavourable conservation status' and encourages range states to draft range-wide agreements for the conservation and management of these species.

59.   e-Jagriti Portal

- The Consumer Affairs Secretary recently asserted that integration of AI in the 'e-Jagriti' portal will help reduce the number of pending cases in consumer courts.
- e-Jagriti Portal, a portal for consumer commissions, has been designed to further improve the customer experience.
- It provides a simple, fast, and cost-effective consumer dispute redressal software solution at all levels.

- It is envisaged to integrate consumer grievance platforms, namely, the Online Case Monitoring System (OCMS), E-Daakhil, the National Consumer Dispute Redressal Commission (NCDRC) Case Monitoring System etc. on a single platform.
- It offers modules case filing, online fee payment, case monitoring modules for seamless disposal of cases by all the Commissions, has Smart search facility on archived consumer complaints/cases/judgements and Voice-to-text conversion of judgements, case history and other details using AI.
- The portal will integrate a Virtual court facility for a convenient and accessible resolution of consumer complaints, reducing the time of disposal, multiple hearings, and physical court appearances, bringing effective and fast decisions & disposals in all Consumer Commissions.
- It is an initiative of the Department of Consumer Affairs, Ministry of Consumer Affairs, Food, and Public Distribution.

60. Swachhata Green Leaf Rating

- A government-initiated rating system for the hospitality sector which aims to ensure world-class hygiene and sanitation in hotels, resorts and homestays
  o It has become a non-starter with no State opting for it as of now.
- The objective is to prevent pollution in water bodies and keep the environment clean.
- The target groups are hotels, lodges, homestays, 'Dharamshalas' and camps which have portable toilets. The rating will be based on compliance with the safe sanitation practices outlined in the guidelines.
- The ranking scheme was launched in November 2023 by the Union Tourism Ministry in collaboration with the Department of Drinking Water and Sanitation.
- As part of the initiative, the State teams of Swachh Bharat Mission-Gramin (rural) and the tourism department will organise workshops on the concept, process and desired outcomes for the stakeholders.
- A three-tiered committee system has been proposed for implementation, beginning with a Verification Sub-Committee formed by the Sub-Divisional Magistrate (SDM) for the on-ground verification, followed by a District Committee, which the District Collector will chair and then a State-level committee, headed by the Chief Secretary of the State.

61. Electoral Bonds

- The electoral bonds system was introduced in 2017 by way of a Finance bill and was implemented in 2018.
- They serve as a means for individuals and entities to make donations to registered political parties while maintaining donor anonymity.
- Key Features
  o State Bank of India (SBI) is the authorized issuer and the bonds are issued through designated SBI branches.
  o SBI issues the bonds in denominations of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh and Rs 1 crore.
  o Can be purchased digitally or through cheques by Indian citizens or entities established in India.
  o Purchased Can be bought individually or jointly with other individuals.
  o Payable to the bearer on demand and interest-free.
  o Valid for 15 calendar days from the date of issue.
  o Encashment only through an authorised bank account of the political party.
  o Parties must disclose their bank account with the Election Commission of India (ECI).
  o Political parties are obligated to explain the utilization of the funds received.
- Eligibility of Political Parties
  o Political parties registered under Section 29A of the Representation of the People Act, 1951
  o Must have secured not less than 1% of the votes polled in the last general election to the House of the People or the Legislative Assembly

62. Schengen Visa

- It is an official document mandatory for some non-Europeans to travel to all the 27 countries which are part of the Schengen area.
  - The Schengen Area is a group of 27 European nations that have abolished their internal borders, for the free and unrestricted movement of people.
- Once granted, this visa allows the traveller to cross the borders of the other member-states without going through identity checks at the border.
- This type of visa is issued by one of the Schengen States and allows you to visit any of the Schengen countries for a duration of up to 90 days in total within 180 days.

63. New Drug to Treat Chronic Kidney Disease

- The Central Drugs Standard Control Organisation (CDSCO) recently granted approval for the use of Jardiance (empagliflozin) 10 mg tablets in reducing the risk of sustained decline in patients with end-stage kidney disease, cardiovascular death, and hospitalisation in adults with chronic kidney disease (CKD) at risk of progression.
- However, the release cautions against the use of Jardiance for CKD treatment in patients with polycystic kidney disease or those requiring intravenous immunosuppressive therapy or high doses of prednisone.

64. Kaji Nemu

- Recently, the Assam government declared the GI-tagged 'Kaji Nemu' (Citrus Limon) as the State Fruit.
- It is grown in almost all the districts of the state, is available throughout the year.
- Kaji Nemu is elongated, oblong and a lot juicier compared to other lemon varieties.
- It is popular for its unique aroma and health benefits (powerhouse of nutrients) and has been traditionally associated with the Assamese cuisines.
- It is majorly used in culinary and commercial purposes, and it is extensively used for its medicinal properties.

65. Mimas

- Recent findings from data collected by NASA's Cassini spacecraft reveal the presence of a vast ocean beneath the icy surface of Saturn's moon Mimas.
- It is the smallest and innermost of the major regular moons of Saturn.
- The surface is icy and heavily cratered and the most striking feature of this small moon is a gigantic crater known as Herschel.
  - Herschel is one of the largest impact structures, relative to the size of the body, known in the solar system.
  - A central peak in the centre of the crater rises to a height of 4 miles, almost as high as Mount Everest on Earth.
- The low density of Mimas indicates that it is composed almost entirely of water ice.

66. Law panel recommends law to register NRI marriages

- The Law Commission, in a report submitted to the Union government, has suggested a comprehensive law to register marriages of non-resident Indians (NRIs)
- to deal with situations arising out of "fraudulent marriages".
- Chairman Justice said the commission is of the opinion that the proposed legislation should be enough to cater to all facets involving marriages of NRIs as well as foreign citizens of Indian origin with that of Indian citizens.
- It is further recommended that all marriages between the NRIs/OCIs and Indian citizens should be made compulsorily registered in India,

67. Myanmar's new law may trigger mass exodus

- Myanmar's plans for conscription has triggered fear that it may create a new wave of exodus of young Myanmar nationals leaving for neighbouring countries in the south and Southeast Asia.
- The announcement of conscription that took place during the last weekend has made it compulsory for all Myanmar male citizens in the age group of 18 to 35
  - to join the armed forces as the military junta deals with countrywide insurgency that has freed large parts of the provinces
  - like Arakan, Chin, Kachin, and Sagaing and a few areas in the southeast of the country near the Thai-Myanmar border.
- Already a trickle of soldiers from Myanmar have been seeking refuge in Bangladesh and India over the past few months and both New Delhi and Dhaka
- have been in talks with the junta to return the soldiers who have been entering Indian and Bangladesh territory seeking refuge.
- Myanmar has flown air sorties to retrieve its soldiers from Mizoram. However such sorties are increasingly becoming difficult for the junta as it faces constraints.

68. Young Scientist Programme (YUVIKA)

- The Indian Space Research Organisation (ISRO) is set to conduct its special 'Young Scientist Programme' or 'YUVIKA' for school children.
- YUVIKA is a learning and awareness-creating programme of the ISRO to impart basic knowledge on Space Technology, Space Science, and Space Applications to younger students with a preference for rural areas.
- Aim: Creating awareness about the emerging trends in science and technology amongst the youngsters, who are the future building blocks of our nation.
- The programme is also expected to encourage more students to pursue Science, Technology, Engineering and Mathematics (STEM) based research /careers.
- Eligibility
  - Those who have finished class 8 and are currently studying in class 9.
  - Three students from each state/UT will participate in this programme every year, covering CBSE, ICSE and state-board syllabus.
  - The selection is based on 8th Standard academic performance and extracurricular activities.
  - Students belonging to the rural area have been given special weightage in the selection criteria.
  - In case there is a tie between the selected candidates, the younger candidates will be given priority.
- It is a two-week residential programme offered by ISRO that includes invited talks, experience sharing by eminent scientists, facility and lab visits, exclusive sessions for discussions with experts and practical and feedback sessions.

69. Diphtheria

- Recently, the World Health Organization (WHO) published the guidelines on the clinical management of diphtheria.
- Diphtheria is a serious contagious bacterial infection of the nose and throat.
- It is caused by strains of bacteria called Corynebacterium diphtheriae that make a toxin.
- It can spread from person to person, usually through respiratory droplets, like from coughing or sneezing. People can also get sick from touching infected open sores or ulcers.
- The bacteria can also infect the skin, causing open sores or ulcers. However, diphtheria skin infections rarely result in severe disease.
- Although diphtheria can be treated with medications, in advanced stages, the bacterial infection can damage the heart, kidneys and nervous system.
- Symptoms: A thick, grey membrane covering the throat and tonsils, sore throat and hoarseness, swollen glands in the neck, difficulty breathing etc.

- Treatments: Neutralisation of unbound toxin with Diphtheria Antitoxin (DAT); antibiotics to prevent further bacterial growth; and monitoring and supportive care to prevent and treat complications.

70. Foreign Exchange Management Act (FEMA)

- The Enforcement Directorate (ED) has conducted an inquiry into Paytm Payments Bank Limited (PPBL) transactions and found no violation under the Foreign Exchange Management Act (FEMA).
- FEMA is an enactment that deals primarily with the provisions relating to cross-border trade and payments
- It defines the procedures, formalities, and dealings of all foreign exchange transactions in India.
- It was introduced in 1999 as a replacement for the earlier Foreign Exchange Regulation Act (FERA).
- Applicability: It is applicable to all parts of India. It is also equally applicable to the offices and agencies located outside India but managed or owned by an Indian Citizen.
- It is applicable to the following entities and transactions
  - Any citizen of India residing in the country or outside (NRI)
  - Any overseas company that is owned 60% or more by an NRI
  - Any Associate Branches or subsidiaries, outside India, of companies or bodies corporate, registered or incorporated in India
  - Exports of any goods and services from India; Imports of goods and services to India
  - Banking, financial, and insurance services provided outside India
  - Cross-border sale, purchase, and exchange of any kind

71. Jnanpith Award

- Recently, celebrated Urdu poet and Bollywood writer and director Gulzar and Sanskrit scholar Jagadguru Rambhadracharya have been selected for the Jnanpith award,
- Jnanpith Award has achieved the recognition of the highest literary award of the country.
- It is sponsored by the cultural organisation Bharatiya Jnanpith.
- The Award is open for only Indian citizens and is given annually.
- English along with other Indian languages is considered for the Award.
- The prize carries a cash award of Rs. 11 lakhs, a citation, and a bronze replica of Vagdevi (Saraswati), the goddess of learning.

72. Spur-winged Lapwing

- Recently, a team of birdwatchers from Telangana made a remarkable discovery near Warangal - a spur-winged lapwing, believed to be the first sighting of its kind in India.
- The bird, identified as Vanellus spinosus, was spotted near Bhattupalle village during the Hyderabad Bird Race organised by Deccan Birders and HSBC.
- Key Features
  - They are medium-large waders with black crown, chest, foreneck stripe and tail.
  - The face, the rest of the neck and belly are white and the wings and back are light brown. The bill and legs are black.
  - Its striking appearance is supplemented by its noisy nature.
- Native Habitat: North Africa, the Middle East, and the Mediterranean
- The species is declining in its northern range, but is abundant in much of tropical Africa, being seen at almost any wetland habitat in its range.
- The species is monotypic: no subspecies are recognised.
- IUCN Status: Least Concern

73. Food Corporation of India (FCI)

- Recently, the Ministry of Consumer Affairs, Food and Public Distribution has increased the authorised capital of state-run FCI from ₹10,000 crore to ₹21,000 crore to enhance the operational capabilities and fulfil its mandate effectively.

- FCI is a statutory body set up in 1965 under the Food Corporations Act 1964.
- It works under the Department of Food & Public Distribution, Ministry of Consumer Affairs, Food and Public Distribution.
- It has the primary duty to undertake purchase, store, move/transport, distribute and sell food grains and other foodstuffs.
- It was established against the backdrop of a major shortage of grains, especially wheat.
- Objectives of FCI
  o To provide remunerative prices to farmers.
  o To ensure availability, accessibility and affordability of food grains to all people at all times
  o Ensuring food security of the nation by maintaining buffer stocks of food grains.
  o Distribution of food grains throughout the country for the Public Distribution System.

74. Bharat Mart

- The Bharat Mart is India's warehousing facility set up in the United Arab Emirates which would help the Indian exports showcase their products under one roof.
- This is similar to China's Dragon Mart.
- The complex is to be set up in Jebel Ali Free Zone (JAFZA) in Dubai.
- The facility will span over 1 lakh square metres and will be a mix of warehouse, retail and hospitality units.
- It can potentially play a key role in promoting the exports of India's micro, small and medium sectors by providing them with a platform to reach international buyers in the Gulf, West Asia, Africa and Eurasia.
- The facility will help reduce the time and cost of shipping goods between India and other countries.

75. International Single Species Action Plan

- Recently, the 14th Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP14) adopted the Single Species Action Plan for the conservation of the Hawksbill Turtle.
- The International Single Species Action Plan is the key instrument developed under the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA).
- Purpose: Implementing coordinated measures to restore migratory waterbird species to a favourable conservation status.
- International cooperation among the species' range states is essential for the implementation of these action plans.

76. Students can appear for 10th, 12th boards twice from 2025-26

- Recently, the Union Education Minister announced that starting from the academic session 2025-26, students will have the option to appear for 10th and 12th class board examinations twice a year.
- It aims to ensure that students have enough time and opportunity to perform well and leads to reduced stress.
- Additionally, students will have the option to retain the best score.
- This initiative is in line with the objectives outlined in the National Education Policy (NEP) introduced in 2020.

77. India Stack

- Recently, India and Colombia signed a MoU on Cooperation in the field of Sharing Successful Digital Solutions Implemented at Population Scale which intends to promote digital transformation via India Stack.
- India Stack is a set of Application Programming Interface (APIs) that allows governments, businesses, startups and developers to utilise a unique digital Infrastructure.
- It consists of three layers of open APIs viz. identity, payments, and data.

- Although the name of this project bears the word India, it can be applied to any nation, be it a developed one or an emerging one.
- The four distinct technology layers provided are
  o Presence less layer: Where a universal biometric digital identity allows people to participate in any service from anywhere in the country.
  o Paperless layer: Where digital records move with an individual's digital identity, eliminating the need for massive amounts of paper collection and storage.
  o Cashless layer: Where a single interface to all the country's bank accounts and wallets to democratise payments.
  o Consent layer: This allows data to move freely and securely to democratise the market for data.
- Some of the APIs that are a central part of India Stack are Aadhaar Proof, Aadhaar e-KYC, e-Sign, Digital Locker, and Unified Payment Interface.

78. Rip Currents

- Indian National Centre for Ocean Information Services (INCOIS) and ISRO have embarked on a project to continuously monitor and issue operational forecast alerts of rip currents.
- Rip Currents are a strong flow of water running from a beach back to the Open Ocean, sea, or lake.
- These are one of the most well-known coastal hazards on beaches around the world.
- They are formed by a beach topography. They can occur in areas with hard-bottom (rocky) or soft-bottom (sand or silt) beach topography.
- Contrary to popular belief, a rip cannot pull a person down and hold him/her under the water.
- It simply carries floating objects, including people, out to just beyond the zone of the breaking waves.

79. Cliffside Bambootail

- Recently, a team of researchers discovered a new species of damselfly at the Ponmudi hills in Thiruvananthapuram district of Kerala.
- The new species of damselfly is named Cliffside Bambootail (Phylloneura rupestris).
- It belongs to a group called bambootails, so named because of their long abdomen that resembles bamboo stalks.
- It lays eggs in the moss beds in seasonal rills that flow over rock cliffs.
- The discovery is significant because, for over 160 years, the genus Phylloneura was considered monotypic, with a single described species, the Myristica Bambootail
  o Myristica Bambootail's population is associated with myristica swamps and hence is known by its common name Myristica Bambootail.
  o It has remained the sole described species of the genus Phylloneura.
  o It is endemic to the Western Ghats and has been recorded only in the area between the Nilgiris Hills and Sharavathi Valley, north of the Palghat Gap.
  o IUCN Status: near-threatened

80. Central Asian Flyway

- The UN convention on the conservation of migratory species of wild animals (CMS) adopted India's initiative for the Central Asian Flyway (CAF).
- The Central Asian Flyway covers a large continental area of Eurasia between the Arctic and Indian Oceans and the associated island chains.
  o A flyway is a geographical region within which a single or group of migratory species completes its annual cycle - breeding, moulting, staging and non-breeding.
  o There are nine such flyways in the world.
- Geographically the flyway region covers 30 countries of North, Central and South Asia and Trans-Caucasus.
- There is an overlap between the CAF and the area of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA).

- o Sixteen out of the thirty countries encompassed by the CAF are located in the AEWA Agreement Area.
- CAF migration routes include the steppes and cold deserts of Central Eurasia, and much of the Himalayan chain.

81. Exercise Milan

- It is a biennial multilateral naval exercise that began in 1995 with the participation of only four countries viz. Indonesia, Singapore, Sri Lanka and Thailand.
- Since then, the exercise has transitioned leaps and bounds in terms of the number of participants and complexity of exercises.
- It has significantly expanded in scope and scale to become the largest exercise held by India.
- Originally conceived in consonance with India's Look East Policy, it expanded with the GoI's 'Act East Policy' and Security and Growth for All in the Region (SAGAR) initiative to include participation from other Friendly Foreign Countries (FFCs).

82. Rules that edge out women from jobs due to marriage illegal: SC

- In a recent order, the Supreme Court made a significant ruling against gender discrimination in the Military Nursing Service.
- The court condemned the termination of employment based on marriage as a clear case of gender discrimination and inequality.
- It emphasized that rules penalizing marriage and domestic involvement for women employees are unconstitutional.
- It also stated that such patriarchal rules undermine human dignity, right to non-discrimination and fair treatment.

83. Article 142

- It provides a unique power to the Supreme Court, to do complete justice between the parties, where at times law or statute may not provide a remedy.
- In such instances, the Court can go beyond its usual limits to settle a dispute in a way that matches the specifics of the case.
- Such orders of SC are enforceable throughout the territory of India as prescribed by any law made by Parliament or order of the President of India.
- While exercising power under this article, the court
  - o Should not ignore the substantive rights of a litigant under the existing law.
  - o Can not use the power to supplant substantive law applicable to a case.
  - o Cannot exercise the jurisdiction in violation of the statute.
  - o Cannot ignore express statutory provisions.

84. National Council for Transgender Persons

- Recently, the National Council for Transgender Persons (NCTP) convened its meeting under the Chairmanship of Secretary, Ministry of Social Justice and Empowerment.
- It is a statutory body constituted under the Transgender Persons (Protection of Rights) Act 2019 to safeguard the rights of transgender persons in India.
- It is responsible for monitoring and evaluating the implementation of the provisions of the Transgender Persons (Protection of Rights) Act, 2019.
- Objectives
  - o To focus on livelihood issues and raise awareness about the trans community for achieving the goal of social justice.
  - o To ensure the establishment of transgender welfare boards in all states
  - o To ensure that essential needs of the transgender community, like housing, food, healthcare, and education are met.
- Functions

o It advises the Central Government on the formulation of policies, programmes, legislation and projects with respect to transgender persons.
o It reviews and coordinates the activities of all the departments of Government and other Governmental and non-Governmental Organisations which are dealing with matters relating to transgender persons.
o It redresses the grievances of transgender persons.
o Performs such other functions as may be prescribed by the Central Government.

85. National Council for Transgender Persons

- In a plethora of judgments recently such as Arshiya Rizvi v. State of U.P. and Anr (2022), Razia v. State of U.P. (2022), and Shakila Khatun v. State of U.P (2023)
  o the Allahabad High Court has reaffirmed a divorced Muslim woman's right to claim maintenance under Section 125 of the CrPC
  o even after the completion of the iddat period as long as she does not marry.

86. Free trade Agreement (FTA)

- The proposed India-Oman free trade agreement (FTA) that could boost Indian exports into the West Asia region is likely to be announced soon.
- FTA is an agreement between countries or regional blocks to reduce or eliminate trade barriers, through mutual negotiations with a view to enhancing trade.
- It includes goods, services, investment, intellectual property, competition, government procurement and other areas.
- This concept of free trade is the opposite of trade protectionism or economic isolationism.
- FTAs can be categorised as
  o Preferential Trade Agreement
  o Comprehensive Economic Cooperation Agreement (CECA)
  o Comprehensive Economic Partnership Agreement (CEPA)

87. Foreign Direct Investment (FDI)

- It is a type of cross-border investment in which an investor from one country establishes a lasting interest in an enterprise in another country.
- FDI can take various forms, such as
  o Acquiring shares
  o Establishing a subsidiary or a joint venture
  o Providing loans or technology transfers
- It is considered to be a key driver of economic growth, as it can bring in capital, technology, skills, market access and employment opportunities to the host country.

88. IBSA Fund

- Recently, India contributed USD 1 million to the IBSA fund established by the IBSA countries viz. India, Brazil and South Africa.
- It was established in 2004 and became operational in 2006.
- Purpose: To identify replicable and scalable projects that can be disseminated to developing countries on a demand-driven basis.
- Objectives: Promoting food security, addressing HIV/AIDS, and extending access to safe drinking water to contribute to the achievement of the SDGs.
- IBSA Fund-supported projects help partner countries in the Global South to achieve their national priorities, as well as all other internationally agreed development goals.
- Each of the IBSA countries contribute one million dollars annually to the Fund.

- This is in a spirit of partnership and support for Southern-led, demand-driven, transformational projects in developing countries.

89. Kapilvastu Relics

- Recently, four bone fragments of Lord Buddha, also known as Kapilvastu Relics, kept in the National Museum will be taken to Thailand.
- The relics were excavated from Piprahwa in the Siddharthnagar District of Uttar Pradesh, an erstwhile part of the ancient city of Kapilavastu.
- A British colonial engineer and an estate manager William Claxton Peppé discovered an inscribed casket in 1898 at the stupa site in Piprahwa.
- The inscription on the casket's lid refers to the relics of Buddha and his community, the Sakya.
- History
  - According to Buddhist tradition, at the age of 80, Buddha attained enlightenment in Uttar Pradesh's Kushinagar district.
  - The Mallas of Kushinagar cremated his body with ceremonies befitting a universal king.
  - His relics were collected and divided into eight shares to be distributed among various groups.
  - Stupas were erected over these relics, making them the earliest surviving Buddhist shrines.
  - Ashoka, a devoted follower of Buddhism, opened seven of these stupas and collected a major portion of the relics to enshrine them in the stupas built by him, aiming to promote Buddhism and spread its teachings.

90. Badami Chalukyas

- Pulakesi I established the Chalukya dynasty in 550.
- Pulakesi I took Vatapi (Badami in Bagalkot district, Karnataka) under his control and made it his capital.
- Historians refer to Pulakesi I and his descendants as the Chalukyas of Badami.
- They ruled over an empire that comprised the entire state of Karnataka and most of Andhra Pradesh in the Deccan.
- Pulakesi II had been perhaps the greatest emperor of the Badami Chalukyas.

91. Anti-hydrogen Experiment: Gravity, Interferometry, Spectroscopy (AEgIS)

- It is an experiment approved by CERN (European Organization for Nuclear Research) with the goal of studying antihydrogen physics.
- The primary goal of AEgIS is the direct measurement of the Earth's gravitational acceleration, g, on antihydrogen.
- Once performed this could be the first direct test of the gravitational interaction between matter and antimatter.
- AEgIS is a collaboration of physicists from a number of countries in Europe and from India.

92. Antimatter

- Antimatter is the same as ordinary matter except that it has the opposite electric charge.
- It is also known as "mirror" matter.
- For instance, an electron, which has a negative charge, has an antimatter partner known as a A positron is a particle with the same mass as an electron but a positive charge.
- The antimatter particles corresponding to electrons, protons, and neutrons are called positrons, antiprotons, and antineutrons; collectively they are referred to as antiparticles.
- These anti-particles can combine to form anti-atoms and, in principle, could even form antimatter regions of our universe.

- Matter and antimatter cannot coexist at close range for more than a small fraction of a second because they collide with and annihilate each other, releasing large quantities of energy in the form of gamma rays or elementary particles.

93. Tupolev Tu-160M

- The Tu-160M, is a modernised version of a Cold War-era bomber that the former Soviet Union would have deployed in the event of nuclear war to deliver weapons at long distances.
- It is a Russian supersonic variable-sweep wing strategic missile-carrying bomber.
- It is called "White Swan" in Russia and is code-named "Blackjacks" by NATO.
- Russia claims it is the world's fastest-flying supersonic and heaviest payload-carrying bomber.
- It is designed to hit targets in remote areas with nuclear and conventional weapons.

94. Cabinet Committees

- Cabinet Committees are extra-constitutional, meaning, they are not mentioned in the Indian Constitution.
- They are partly designed to reduce the burden on the Union Cabinet by allowing smaller groups of ministers to make decisions on specific policy areas.
- They are constituted or reconstituted when a new government takes over or the Cabinet undergoes a reshuffle.
- The Prime Minister constitutes the Standing Committees of the Cabinet and sets out the specific functions assigned to them.
- The composition of cabinet committees in India can range from three to eight members, which typically consist of only Cabinet Ministers.
- However, non-cabinet ministers may also be appointed as members.

95. Exercise Dosti

- Indian and Sri Lankan coast guard ships reached the Maldives recently to take part in the trilateral coast guard exercise Dosti 16.
- Exercise Dosti is a biennial trilateral coast guard exercise between India, Sri Lanka, and the Maldives.
- It was first conducted in 1991 between the Indian and Maldives Coast Guards. Sri Lanka joined the exercise for the first time in 2012.
- The exercises have focused on exercises and drills on providing assistance in sea accidents, eliminating sea pollution, and the Coast Guard's procedures and conduct during situations such as oil spills.
- Aim: To further fortify the friendship, enhance mutual operational capability, exercise interoperability and build cooperation between the Coast Guards of India, Sri Lanka, and the Maldives.

96. Badwater Basin

- In the parched expanse of North America's driest region, Badwater Basin has defied expectations by lingering and expanding as an ephemeral lake.
- Badwater Basin is endorheic in nature i.e. water flows into it but not out, typically resulting in rapid evaporation and ephemeral lakes.
- Situated within Death Valley, it holds the distinction of being the lowest point in North America, lying at 282 feet (86 meters) below sea level.
- Despite its usual patterns, increased precipitation over the past six months has disrupted its typical behaviour.
- Originally formed as Manly Lake in August 2023 following Hurricane Hilary, it was anticipated to shrink, yet it remarkably endured through the fall and winter seasons.
- Its resurgence came in February 2024, when a powerful atmospheric river replenished its waters.

97. Smishing

- It is a form of phishing that targets individuals through text messages or SMS.
- Similar to phishing emails, smishing messages aim to trick one into divulging personal information or downloading malware onto the device.
- It is done in through following ways
  - Fake alerts and warnings: Scammers send texts posing as legitimate institutions such as banks, government agencies, or delivery services. They claim there is an issue with your account or a package delivery, urging you to click on a link for further details.
  - Urgent requests: Smishers manipulate emotions by creating a sense of urgency. They might promise prizes, warn of impending legal action, or claim your account is compromised, pressuring one to act quickly without thinking.
  - Exploiting current events: Scammers capitalise on ongoing events such as tax season by impersonating income tax officers, offering tax refunds, or threatening penalties for non-compliance. They may also exploit natural disasters or health crises to solicit donations or spread misinformation.

98. Coronal Mass Ejections (CMEs)

- CMEs are large expulsions of plasma and magnetic fields from the Sun's corona that propagate outward into interplanetary space.
- During a CME, the Sun releases a colossal amount of material, including electrons, protons, and heavier ions, as well as magnetic fields. This ejected material travels at high speeds into space.
- CMEs are typically triggered by the destabilisation of the Sun's magnetic fields.
- The exact mechanisms are complex, but they often involve the reconfiguration or disruption of magnetic loops on the Sun's surface.
- Impact on Earth
  - The interaction between the CME's magnetic fields and Earth's magnetosphere can lead to geomagnetic storms that can disrupt satellite communications, navigation systems, and even power grids.
  - CMEs can cause spectacular displays of the Northern and Southern Lights, also known as auroras, by energising particles in Earth's atmosphere.
  - Astronauts in space or passengers on high-altitude flights can be exposed to elevated levels of radiation during a CME event.

99. Sudarshan Setu

- Recently, the Prime Minister inaugurated Sudarshan Setu, India's longest cable-stayed bridge, in the Gulf of Kutch.
- Also known as Signature Bridge, it will link mainland Gujarat with Bet Dwarka island off Okha coast in Devbhumi Dwarka.
- It provides all-weather road connectivity to Bet Dwarka, the second largest island off Gujarat coast.
- It is technically a sea-link with a total length of 4,772 metres and a 900-metre cable-stayed section.
- This four-lane bridge was constructed at a cost of Rs 978 crore funded by the Union government.
- The bridge features 32 piers supporting seven cable-stayed spans.
- It includes walkways adorned with verses from the Bhagavad Gita and images of Lord Krishna, with solar panels serving as walkway roofs.

100. Savera Program

- Recently, the Haryana Chief Minister inaugurated the Savera program in collaboration with the Medanta Foundation and the Health Department in Gurgaon.
- Aimed at early detection and prevention of breast cancer, the initiative utilizes visually impaired individuals for screening due to their heightened tactile sensitivity.
  - Breast cancer is highlighted as a prevalent cancer type among women in urban areas.
  - Approximately 90,000 women lose their lives to breast cancer daily in India.

- Visually impaired individuals can detect breast cancer lesions as small as half a centimetre, compared to one centimetre by a normal doctor.
- In its initial phase, the programme will be launched at Civil Hospital in Sector 10, the polyclinic in Sector 31, and PHC in Wazirabad.

101. Blanets

- In Christopher Nolan's 2014 film Interstellar, three planets featured, other than Earth - depicted as extreme worlds - are theoretically plausible.
- Technically, these planets are called blanets, as they orbit black holes instead of stars.
- In 2019, Japanese scientists proposed a theory suggesting that planets could form within massive dust and gas clouds near supermassive black holes.
  - However, these planets aren't expected to be anything like the earth.
- Similar to how planets form around young stars from swirling dust and gas, blanets could form within the discs surrounding supermassive black holes.
- These blanets are expected to be about 3,000-times as large as the earth.
- They would need to orbit the black hole at a considerable distance of about 100 trillion kilometers to avoid being torn apart by the black hole's immense gravitational forces.

102. Hanooman

- Recently the BharatGPT group, led by IIT Bombay, along with seven other elite Indian engineering institutes announced that it would launch its first ChatGPT-like service next month.
- Backed by Reliance Industries Ltd and the Department of Science and Technology, the group built the 'Hanooman' series of Indic language models in collaboration with Seetha Mahalaxmi Healthcare (SML).
- Hanooman is a series of large language models (LLMs) that can respond in 11 Indian languages like Hindi, Tamil, and Marathi.
- It has been designed to work in four fields, including health care, governance, financial services, and education.
- Notably, the series is not just a chatbot; it is a multimodal AI tool, which can generate text, speech, videos and more in multiple Indian languages.
- The size of these AI models ranges from 1.5 billion to a whopping 40 billion parameters.
- One of the first customised versions is VizzhyGPT which is an AI model fine-tuned for healthcare using reams of medical data.

103. PSiFI System

- Recently, scientists unveiled a pioneering technology, named personalized skin-integrated facial interface (PSiFI), capable of recognizing human emotions in real-time.
- The technology is based on the phenomenon of "friction charging," where objects separate into positive and negative charges upon friction.
- The system features a first-of-its-kind bidirectional triboelectric strain and vibration sensor that enables the simultaneous sensing and integration of verbal and non-verbal expression data.
- Coupled with a sophisticated data processing circuit, the system facilitates seamless wireless data transfer, enabling the instantaneous recognition of emotions.
- Empowered by machine learning algorithms, it showcases remarkable efficiency in recognizing human emotions, even in scenarios where individuals wear masks.
- The PSiFI system is self-powered, facile, stretchable, and transparent.

104. Flue-Cured Tobacco

- Curing is a process by which the harvested tobacco leaf is made ready for the market.
- It is a well-standardized process especially in FCV tobacco to achieve the desirable qualities in the cured leaf along with the removal of moisture.

- There are three types of tobacco curing methods traditionally used: Air-Cured, Fire-Cured, and Flue-Cured.
- Each of the different curing methods results in a tobacco product that is distinguishable by both its nicotine content and its aroma.
- Why is Tobacco cured?
  - To create smoking tobacco, the tobacco leaves need to be cured, or dried out.
  - The wet, green tobacco leaves of a tobacco plant initially contain too much moisture to catch fire.
  - They also have higher chlorophyll content.
- By releasing a certain amount of chlorophyll from the leaves during the drying-out process, the natural tannins come out giving the smoked tobacco its flavour and scent.

105. Investor Information and Analytics Platform

- It acts as a one-stop shop for startups to seamlessly access Venture Capitalists (VCs) and investor networks, Govt schemes and several other components of the startup landscape for all stakeholders.
- By integrating information at different levels, the platform is also a one-stop shop for entrepreneurs to search for information on government agencies, incubators, investors, VCs and banks that invest in startups.
- This platform has been developed by the Researchers at the Centre for Research on Start-ups and Risk Financing (CREST) of IIT Madras.
- It will significantly help startup founders, entrepreneurs and Young Indians who intend to build their own devices, services and platforms for India and for the world.
- An important feature of this unique platform is "StartupGPT" which is an AI-based conversational platform whose function is to help ease information access for those who are navigating exhaustive data.

106. Know Your Customer

- It is a comprehensive process that financial and non-financial institutions follow to verify the authenticity and identity of their customers.
- The KYC process is mandatory for every customer before investing in any instruments or starting a bank account.
- In India at present, separate KYCs are needed for different financial products such as opening a bank account, investing in mutual funds, buying a life cover or investing in retirement-savings funds.
- Multiple KYCs, regular updates and even the exact specifications often prove to be a deterrent for new investors.
- To eliminate the need to do repeated KYC for investing across financial assets, the central government launched the Central KYC Records Registry.

107. World Trade Organization (WTO)

- WTO is the only global international organization dealing with the rules of trade between nations.
- The goal is to help producers of goods and services, exporters, and importers conduct their business.
- WTO is a forum for governments to negotiate trade agreements. It is also a place for them to settle trade disputes.
- It was created by Uruguay Round negotiations (1986-94) and is headquartered in Geneva.

108. Edwards syndrome

- It is also known as trisomy 18.
- It is an autosomal chromosomal disorder due to an extra copy of chromosome 18.
- It is a very severe genetic condition that affects a child's body development and growth.
- Symptoms: Children diagnosed with trisomy 18 have a low birth weight, multiple birth defects and defining physical characteristics.
- There are three types of Edwards syndrome
- Complete trisomy 18, Mosaic trisomy 18 and Partial trisomy 18

109. Similipal seeks more female tigers

- The Odisha government has expressed concern over the rising population of melanistic tigers in the Similipal Tiger Reserve (STR).
- It has thus requested permission from the National Tiger Conservation Authority (NTCA) to introduce tigresses from other regions.
- This move aims to enhance the genetic diversity of the tiger population in Similipal, which is currently dominated by black or pseudo-melanistic tigers, a rare variant of the Royal Bengal Tiger.
  - Similipal is renowned as the only habitat globally to harbour black tigers, attributed to melanism, which results in dark pigmentation of the skin.
  - The recent All Odisha Tiger Estimation (AOTE) 2023-24 report revealed that out of the 24 tigers captured on camera in Similipal, 13 are melanistic.

110. Exercise Dharma Guardian 2024

- Recently, India and Japan kicked off a two-week military exercise 'Dharma Guardian' in Rajasthan's Mahajan field firing range.
- Exercise Dharma Guardian is an annual exercise and is conducted alternatively in India and Japan.
- Objective: To foster Military Cooperation and enhance combined capabilities to execute joint operations in the semi-urban environment under Chapter VII of the United Nations Charter.
- The Exercise would focus on a high degree of physical fitness, joint planning, joint tactical drills and basics of special arms skills.
- It will enable the two sides to share their best practices in Tactics, Techniques and Procedures for conducting tactical operations.
- It will also facilitate developing interoperability, bonhomie and camaraderie between troops of both sides.
- This will enhance the level of defence cooperation, further fostering bilateral relations between the two friendly nations.

111. Ribosomes

- Recently, using electron microscopy, the scientists have managed to produce a 3D model of a part of the human cell, the ribosome.
- Ribosomes are non-membrane-bound cell organelles made of RNA and proteins found in both prokaryotic and eukaryotic cells.
  - In eukaryotic organisms, ribosomes are found in the cytoplasm, mitochondria, and chloroplast.
  - All prokaryotic ribosomes are found free in the cytoplasm of the cell.
- Ribosomal structure and function are strikingly similar in all organisms and organelles.
- They are made of two subunits, the large and the small subunit which comprises ribosomal RNA (rRNA) and proteins.
- They are complex molecular machines that make proteins from amino acids in a process called protein synthesis, or translation.
- The ribosome reads the messenger RNA (mRNA) sequence and translates that genetic code into a specified string of amino acids, which grow into long chains that fold to form proteins.
- The newly formed proteins detach themselves from the ribosome site and migrate to other parts of the cell for use.

112. United Nations Conference on Trade and Development (UNCTAD)

- Recently, in a new report, the UNCTAD raised an alarm over escalating disruptions in shipping routes for global trade.
- UNCTAD is the UN's leading institution dealing with trade and development.
- It is a permanent intergovernmental body established by the United Nations General Assembly in 1964.
- Objective: To assist developing countries, especially the least developed countries, and countries with economies in transition, to integrate beneficially into the global economy.

- It also seeks to help the international community promote a global partnership for development, increase coherence in global economic policy-making, and assure development gains for all from trade.
- It provides economic and trade analysis, facilitates consensus-building, and offers technical assistance to help developing countries use trade, investment, finance, and technology for inclusive and sustainable development.
- Its activities are advisory by nature.
- Headquarters: Geneva, Switzerland.
- Reports: Trade and Development Report, World Investment Report and The Least Developed Countries Report.

113. Ken River

- Recently, the Prime Minister in 'Mann Ki Baat' cited crocodiles in Ken River as an example of how technology is being widely utilized for wildlife conservation across various regions of the country.
- Ken River is one of the major rivers of the Bundelkhand region of central India.
- It is a tributary of the Yamuna River; last tributary of the Yamuna before the Yamuna joins the Ganga.
- The river originates near the village of Ahirgawan on the northwest slopes of the Kaimur Range in the district of Jabalpur, Madhya Pradesh.
- It flows through two states, namely Madhya Pradesh and Uttar Pradesh.
- It merges with the Yamuna at Chilla village, near Fatehpur in Uttar Pradesh.
- It is known for its rare Sajhar or Dendritic Agate stone.
- Major Tributaries: Bawas, Dewar, Kaith, Baink, Kopra and Bearma.

114. Steadfast Defender 2024

- Recently, NATO started its largest military exercise in Europe, the Steadfast Defender 2024.
- It is NATO's most extensive military exercise since the Cold War era.
- Purpose: To put NATO's new regional defence plans to the test.
- It involves 90,000 forces from 31 member countries and NATO partner Sweden and is conducted across various NATO nations.
- The exercise will feature an impressive array of military hardware, including over 50 naval vessels ranging from aircraft carriers to destroyers, and a formidable air contingent of more than 80 units comprising fighter jets, helicopters, and drones.
- The ground forces are equally robust, with at least 1,100 combat vehicles, including 133 tanks and 533 infantry fighting vehicles, demonstrating NATO's ground capabilities.
- These plans, the first of their kind in decades, outline the alliance's response mechanisms to potential threats, notably addressing concerns regarding Russian aggression.

115. The Wealth Report 2024

- Recently, the real estate consultant Knight Frank India released 'The Wealth Report 2024'.
- The number of Ultra-high Net Worth Individuals (UHNWIs) in India increased 6% annually to 13,263 last year on rising prosperity.
  - UHNWIs are defined as individuals having a net worth of $30 million and more.
- The number of affluents is expected to grow further to expand to 19,908 by 2028.

116. Africa Club

- Recently, at the 37th African Union Summit member countries took the initiative of forming the Africa Club.
- Africa Club is the Alliance of African Multilateral Financial Institutions (which are African-owned and controlled).
- Aim: To amplify Africa's influence in the global financial system by aligning its functions with the SDGs and the African Union's Agenda 2063.

- It seeks to introduce innovative financial instruments, provide a venue for debt management discussions and foster collaborative efforts to address the specific needs of African countries.
- Members: The African Export-Import Bank, Trade and Development Bank, Africa Finance Corporation, African Reinsurance Corporation, African Trade and Investment Development Insurance, Shelter Afrique Development Bank and ZEP - RE (PTA Reinsurance Co).

117. North Atlantic Right Whales

- Recently scientists have discovered that North Atlantic right whales are getting smaller, which is impacting their ability to breed.
- These whales are migratory animals, spending the winter in warmer waters and migrating to the poles for cooler waters in late summer.
- They inhabit the temperate and subpolar waters of the North Atlantic and North Pacific oceans.
- These are generally restricted to the coastal waters of the East Coast of the United States and Canada.
- There are three recognized species of right whales that occur in different parts of the world viz.
  o Southern right whales (Eubalaena australis)
  o North Atlantic right whales (Eubalaena glacialis)
  o North Pacific right whales
- These whales often skim feed at or just below the water surface, slowly swimming through clouds of plankton with their mouths half open and then straining the plankton through their long baleen plates.
- IUCN Status: Critically endangered
- CITES: Appendix I

118. Singapore faces shrinking population, total fertility rate falls below 1 per cent for first time

- Singapore, facing a dwindling population and a manpower shortage, has seen its resident total fertility rate (TFR) drop to an estimated 0.97 per cent in 2023
  o the first time it has dropped below one per cent in the country's history.
- The TFR, which refers to the average number of babies each woman would have during her reproductive years, fell from 1.04 in 2022 and 1.12 in 2021
- The birth rate remains below the replacement rate of 2.1 – the level at which a population replaces itself.
- The latest figure places Singapore among countries with the lowest birth rates globally, with South Korea topping the list at 0.72 in 2023

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