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For HPAS & Other Competitive Exam in Himachal Pradesh

Prelims

1. POLITY

1.1 SEDITION LAW

❖ With a view to preventing any "alleged misuse" of the provision, the **Law Commission of India**, in its 279th report, has **proposed retaining the law of sedition** (Section 124A) with key amendments.
   ✓ The Commission is currently **headed by** former Karnataka High Court Chief **Justice Ritu Raj Awasthi**.

ABOUT SEDITION

❖ The law defines sedition as **any act or attempt to bring into hatred or contempt, or excite or attempt to excite disaffection** towards the **government established by law** in India by:
   ✓ **words, either spoken or written.**
   ✓ **signs.**
   ✓ **visible representation, or otherwise.**

> In **May 2022 (SG Vombatkere vs UOI)**, SC had held that **sedition law should be effectively kept in abeyance till the Union government reconsiders the provision**.

❖ It was **introduced by the British colonial government in 1870** to suppress the freedom movement and punish those who spoke or wrote against British rule.
❖ Sedition is **a cognizable, non-bailable, and non-compoundable offense**, entailing **life imprisonment as maximum punishment, with or without a fine**.

RECOMMENDATIONS ON SEDITION

❖ Sedition being a colonial law **not** a **valid ground for its repeal**.
❖ It should be **made punishable with life imprisonment or for a term up to 7 years or with a fine**.
   ✓ Currently, Section 124A of the Indian Penal Code, which deals with sedition, has a punishment of **a life sentence** along with a fine or imprisonment which may extend up to **three years along with a fine**.
❖ The Union **government should bring in model guidelines** to prevent misuse of the sedition law.
❖ An **FIR on sedition should be filed only after a preliminary inquiry** and with the **government's permission** by **amending Section 154 of the Code of Criminal Procedure**.
❖ The words **'hatred', 'contempt' and 'disaffection'** should be **replaced by 'incitement to violence'** in Section 124A of the Indian Penal Code (IPC), which deals with sedition.
❖ Amend **Section 124A to align with Kedar Nath's Case** (1962) which underlines the presence of a **tendency to incite violence as a precondition** to invoke the clause.

1.2 PIB

❖ **Press Information Bureau** (PIB) marked its **centennial anniversary**.
❖ It is the **nodal agency for government of India to disseminate information** to the **print and electronic media** on government policies, programmes etc.
❖ It was **originally set up as temporary cell** (under then British government) in **1919**.
❖ The **first head of the cell was Dr LF Rushbrook Williams** of Allahabad University who was designated as officer on special duty.
❖ **In 1923, the bureau was made permanent** as the **Bureau of Public Information**.
❖ In 1941, **J Natrajan became the first Indian to head** the bureau as principal information officer.
❖ It **acquired its present name in 1946**, and became a **department of the Ministry of Information and Broadcasting after 1947**.
❖ It is headed by: **Principal Director General** (Media & Communication) who is **assisted by a Director General** and **eight Additional Director Generals**.
❖ Its activities can be broadly classified in three Categories:
   ✓ **Information, Education & Communication;**

✓ **Feedback and Accreditation &**
✓ **Special Services.**

1.3 COMMISSIONS OF INQUIRY ACT, 1952

❖ **Ministry of Home Affairs** has notified a 3-member **Commission of Inquiry** under **Commissions of Inquiry Act, 1952**, to inquire into **incidents of violence in Manipur**.
❖ The Commission of Inquiry **aims to thoroughly examine the incidents of violence in Manipur and shed light on their underlying causes**.
❖ It consists of **Justice Ajai Lamba**, former Chief Justice of Guwahati High Court, **Himanshu Shekhar Das** (IAS Retd.), and **Aloka Prabhakar** (IPS Retd.)

ABOUT COMMISSIONS OF INQUIRY ACT, 1952

❖ It **authorises central and state governments** to appoint **inquiry commissions** to make **inquiries in definite matters of public importance**.
❖ The commissions of inquiry act gives powers to the **central government** to appoint a commission of inquiry, to make inquiry into any matter relatable to any of the **entries enumerated in List I and III**.
❖ The Act empowers the **state governments to appoint inquiry commissions**, to make inquiry into any other matter relatable to any of the entries enumerated **in List II or III of Schedule VII**.
   o The **Central government can appoint a commission of inquiry to inquire into a matter falling within the purview of a state government** if it falls **within its plenary legislative power**, but a **state government cannot appoint a commission of inquiry, to inquire into matters falling within the purview of the central government**.
❖ A Commission set up by the government shall have the **powers of a civil court**, while trying a suit under the **Code of Civil Procedure, 1908**.

1.4 LEGAL SERVICES AUTHORITY

❖ **West Tripura's District Legal Services Authority** has organized a **Door-to-Door Legal Aid Campaign.**

DISTRICT LEGAL SERVICE AUTHORITY (DLSA)

❖ DLSA is formed under **Legal Services Authorities Act, 1987** to provide free and legal aid and services to the weaker sections of this society to make sure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities.
❖ Legal Services Authorities are statutory bodies that are formed or constituted in the various states of India by the **Legal Services Authorities Act, 1987. Justice P.N. Bhagwati** formed DLSA under the **Legal Aid Committee formed in 1971.**
❖ **Article 39-A** of the Indian Constitution deals with the provision of providing free legal services to the citizens of India. The provision is applicable to the citizens if they are unable to bear the expenditure of the legal services. It also helps the defendant in a case by appointing a lawyer in order to act for him in legal aspects.
❖ **Section 2(a)** of the Legal Services Authorities Act, 1987 states that the term **'district authority'** means a District Legal Services Authority which is constituted under Section 9 of the Act. The DSLA is a statutory body organized at the district levels in order to provide effective monitoring of legal aid programmes and their composition. The provisions related to DLSA are dealt with under **Section 9 and Section 10 of the Act.**
❖ District Legal Services Authority is constituted in every District so that there must be proper implementation of Legal Aid Programmes and Schemes in the District.

1.5 INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS (ICCPR) ACT

❖ Nathasha Edirisooriya, a Sri Lankan standup comic, was arrested under the International Covenant on Civil and Political Rights (ICCPR) Act from the Bandaranaike International Airport, Colombo.

ABOUT THE ACT

❖ The ICCPR is a multilateral treaty that deals with human rights.
❖ The Act was adopted by the United Nations (UN) General Assembly on 1966 and came into force in 1976.
❖ The Covenant respects civil and political rights of individuals, including right to life, freedom of religion, freedom of speech, freedom of assembly, electoral rights, and rights to due process and a fair trial.
❖ The ICCPR is part of the International Bill of Human Rights, along with the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the Universal Declaration of Human Rights (UDHR).
❖ The UN Human Rights Committee reviews regular reports by state parties on how human rights are being implemented.
❖ Currently, the covenant has 173 parties and 6 more signatories without ratification.
❖ India ratified this treaty in 1979.

SECTION 3 OF THE ICCPR ACT

❖ A section that has been used time and time again to restrict freedom of expression.
❖ The section prohibits the propagation of war or advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence.
❖ Offences under this section are cognizable as well as non-bailable.
❖ The section is based on Article 20 of the ICCPR.

ICCPR IN SRI LANKA

❖ Sri Lanka ratified the ICCPR in 1980, aiming to give domestic effect to the rights recognized by the covenant.
❖ The ICCPR Act was enacted in 2007, aligning Sri Lankan law with the provisions of the ICCPR.
❖ However, the Act has faced scrutiny due to its formulation, which differs significantly from the original ICCPR provisions.

1.6 RIGHT TO LIFE

Stating that the **'Right to Live with Dignity'** includes not being **"tied down by casteism"**, the **Delhi High Court** has directed the **CBSE** to comply with the request of two siblings.

ABOUT ISSUE:

❖ **The High Court** has directed the **CBSE** to comply with the request of two brothers belonging to the Scheduled Caste community to update their father's surname in their **Class 10 and 12 certificates.**
❖ In a plea before the **court,** the siblings said their father had decided to change his surname from **'Mochi' to 'Nayak'** due to caste atrocities suffered by him daily.
❖ The judge said the petitioner brothers have every right to have an **"honourable and respectable"** identity in society and if they have suffered any disadvantage on account of their surname, they were **"certainly entitled to a change of their identity that gives respectability to the petitioners in the societal structure".**

RIGHT TO LIFE (ARTICLE 21)

❖ **Article 21: Protection of Life and Personal Liberty:** "No person shall be deprived of his life or personal liberty except according to a procedure established by law.
❖ **Article 21** is at the heart of the Constitution. It is our Constitution's most organic and progressive provision.
❖ **A person's right to life and personal liberty** can only be taken away through the legal process (as defined in Article 12) that has been established.
❖ **Article 21** of the Constitution defines **'life'** as more than just the act of breathing. It does not imply a just animal existence or a life of drudgery.

- It encompasses a far **broader range of rights, including the right to live in dignity, the right to a livelihood, the right to health, the right to clean air**, and so on.
- The main purpose of **Article 21** is to ensure that when a person's **right to life or liberty** is taken away by the state, it is done so exclusively in accordance with the law.

RIGHT TO LIVE WITH HUMAN DIGNITY

- In **Maneka Gandhi v. Union of India[iii],** the **Supreme Court** gave a new dimension to **Article 21** and held that the right to live is not merely a physical right but includes within its ambit the right to live with human dignity.

1.7 GOVERNOR'S ROLE IN STATE LEGISLATURE

- Issues have recently emerged in several Indian states regarding the interaction between **Chief Ministers and Governors** concerning the passing of bills. **Chief Ministers** have expressed concerns that Governors have delayed acting on bills presented for their assent.
- This situation raises important questions about the functioning of a **democracy** and the potential consequences of **hindering the legislative process.**

WHAT ARE CONSTITUTIONAL PROVISIONS RELATED TO THE GOVERNOR?

- **Article 153** says that there shall be a **Governor** for each State. One person can be appointed as **Governor** for two or more States.
- **The Governor** is appointed by the **President** by warrant under his hand and seal and holds office under the pleasure of the **President (Article 155 and 156).**
- **Article 161** states that the governor has the power to grant pardons, reprieves, etc.
- The Supreme Court stated that the sovereign power of a Governor to pardon a prisoner is actually exercised in consensus with the State government and not the Governor on his own.
- The advice of the government binds the Head of the State.
- **Article 163** states that there is a council of ministers headed by the Chief Minister to aid and advise the Governor in the exercise of his functions, except some conditions for discretion.

DISCRETIONARY POWERS INCLUDE:

- Appointment of **a chief minister** when no party has a clear majority in the state legislative assembly.
- In times of **no-confidence motions.**
- In case of failure of constitutional machinery in the **State(Article 356).**

ARTICLE 200:

- **Article 200** of the Indian Constitution outlines the process for a Bill passed by the **Legislative Assembly** of a State to be presented to **the Governor for assent**, who may either assent, withhold assent or reserve the Bill for consideration by the **President.**
- The **Governor** may also return the Bill with a message requesting reconsideration by the House or Houses.
- In the case of **Purushothaman Nambudiri v State of Kerala**, the **Supreme Court** ruled that a bill pending the Governor's assent does not lapse upon the dissolution of the House.
- The Court inferred from the absence of a time limit in **Articles 200 and 201** that the framers did not intend for bills awaiting the Governor's assent to be at risk of lapsing.
- The second provision of **Article 200** grants the **Governor** the discretion to refer a bill to the President if they believe its passage would infringe upon the powers of the High Court. The procedure for presidential assent is outlined in **Article 201.**
- In the **Shamsher Singh case**, the Court held that the Governor's power to reserve bills for the President's consideration is an instance of discretionary authority.

ARTICLE 201:

- It states that when a Bill is reserved for the consideration of the **President,** the **President** may assent to or withhold assent from the Bill.

- ❖ The **President** may also direct the **Governor** to return the Bill to the House or Houses of the Legislature of the State for reconsideration.

ARTICLE 361:

- ❖ Under **Article 361** of the Constitution, the Governor has complete immunity from court proceedings for any act done in the exercise of their powers.

RECOMMENDATIONS

- ❖ The Supreme Court's judgement in **Nabam Rebia and Bamang Felix vs Dy. Speaker** clarified that the Governor's discretion under **Article 200** is limited to deciding whether a bill should be reserved for the President's consideration.
- ❖ The Court also underscored that **Article 163(2)** must be read in conjunction with **Article 163(1),** suggesting that only matters expressly permitting the Governor to act autonomously are beyond the purview of judicial challenge.
- ❖ Therefore, withholding assent to a bill indefinitely is unconstitutional, and a Governor's action or inaction in this regard can be subject to judicial review.
- ❖ <u>**Punchhi Commission (2010):**</u> It recommended that it is necessary to prescribe a time limit within which the Governor should take the decision whether to grant assent or to reserve it for consideration of the President.
- ❖ <u>**National Commission to Review the Working of the Constitution (NCRWC):**</u> It laid down a time-limit of **four months** within which **the Governor** should take a decision whether to grant assent or reserve it for the consideration of the President.
- ❖ It had also suggested the removal of the power of **Governor**, as provided in **Article 200**, to withhold assent for a piece of legislation and reserve a Bill for the consideration of the **President** except in cases as stipulated in the Constitution.

1.8   ORDINANCES

- ❖ There has been a **steady decrease** in the number of ordinances promulgated by the Centre since 2019.

ORDINANCE

- ❖ An ordinance is **any law promulgated** by the **President** when the Indian parliament is **not** in session.
- ❖ These ordinances have the same legal force and effect as an Act of Parliament, but they are **only temporary** in nature.

ORDINANCE MAKING POWER OF PRESIDENT

- ❖ **Article 123** grants the **President** certain law-making powers, including the authority to issue ordinances during Parliament's recess and hence it is not possible to enact laws in the Parliament.
- ❖ Following **limitations** exist with regards to the president's ordinance making powers:
- ❖ When one or either of the two Houses of Parliament is not in session, the President may promulgate an Ordinance.
- ❖ The President **cannot** issue an Ordinance unless he is satisfied that the situation necessitates **'immediate action.'**
- ❖ The President's authority to issue ordinances is justiciable if intentions are proved mala fide.
  Ordinance Making Power of Governor
- ❖ **Article 213** states that the **Governor** of the state may issue ordinances when the state legislative assembly (or either of the two Houses in states with bicameral legislatures) is not in session.
  Properties of the Ordinance
- ❖ An ordinance can be **retrospective**, which means that it can be enacted prior to its approval.
- ❖ An ordinance passed while Parliament is in session is deemed null and void.
- ❖ To stay a law, the Ordinance must be **approved** by Parliament **within six weeks** of its reassembly. Its existence is terminated if the parliament does not act within six weeks of its reassembly.
- ❖ Acts, laws, and events that occurred as a result of the **ordinance remain in effect until it expires.**
- ❖ Ordinance promulgation **cannot** be regarded as a substitute for the President's legislative authority.

- ❖ Ordinances can **only** be passed on subjects where the Indian Parliament has the authority to pass laws.
- ❖ Ordinances **cannot** be used **to revoke** the **fundamental rights** of the citizens guaranteed by the Indian Constitution.
- ❖ The ordinance would also be **declared null** and **void** if both houses passed **a resolution opposing it.**

MISUSE OF THE ORDINANCE MAKING POWER

Deliberate bypassing of the legislature:

- ❖ At times there are instances that legislature is being deliberately bypassed to avoid debate and deliberations on contentious legislative proposals.
- ❖ This is against the ethos and spirit of democracy.

REPROMULGATION OF ORDINANCES:

- ❖ As observed by the Supreme Court, **re-promulgation** of ordinances is a **"fraud"** on the Constitution and a subversion of democratic legislative processes, especially when the government persistently avoids placing the ordinances before the legislature.

UNDERMINING THE DOCTRINE OF SEPARATION OF POWERS:

- ❖ In the **Kesavananda Bharati vs. State of Kerala case 1973,** the Supreme Court listed the separation of powers as a **"basic feature"** of the Constitution.
- ❖ The repromulgation undermines the separation of powers, as it effectively allows the executive to make permanent legislation without legislative input or approval.

THE SATISFACTION OF PRESIDENT:

- ❖ Ordinance can be promulgated only when the President is satisfied that circumstances exist for the same thus providing the scope of misuse of the power.

1.9 LARGEST GRAIN STORAGE PLAN

- ❖ The **Union Cabinet** recently approved the constitution of an **Inter-Ministerial Committee (IMC)** to facilitate the **"world's largest grain storage plan in the cooperative sector".**

WHY DOES INDIA NEED A GRAIN STORAGE PLAN?

- ❖ India, the most populous country in the world, accounts for **18 per cent** (1.4 billion) of the global population (7.9 billion).
- ❖ However, it accounts for **only 11 per cent** (160 million hectare) of the arable land (1,380 million hectare) in the world.
- ❖ Also, India runs the **world's largest food programme** under the **National Food Security Act, 2013,** that covers about 81 crore people.
- ❖ Therefore, to ensure food security of a billion plus population, a robust network of foodgrain storage facilities becomes essential.
- ❖ At present, India has a foodgrain storage capacity of **145 million metric tonnes (MMT)** against the total food production of 311 MMT—leaving a gap of 166 MMT.
- ❖ In the absence of sufficient storage facilities, foodgrains are sometimes stored in the open, which results in damage.
- ❖ India has a storage capacity of 47 per cent of its total foodgrains production.
- ❖ At the **regional level**, only a few southern states have the **storage capacity of 90 per cent and above.**
- ❖ **In northern states** like Uttar Pradesh and Bihar, it is **below 50 per cent.**

WHAT IS THE 'WORLD'S LARGEST GRAIN STORAGE PLAN IN THE COOPERATIVE SECTOR'?

- ❖ At present, multiple government agencies, like the **Food Corporation of India (FCI), Central Warehouse Corporation**, **Warehouse Development Regulatory Authority**, Railways, and the civil supply departments of states are involved in grain management.
- ❖ Under the new plan, the **Ministry of Cooperation** aims to set up a network of integrated grain storage facilities through **Primary Agricultural Credit Societies (PACS)** across the country.

- ❖ According to the ministry, there are more than 1,00,000 PACS spread across the country with a huge member base of more than 13 crore farmers.
- ❖ This is one of the reasons why the PACS network was chosen for the new plan.

WHAT ARE THE BENEFITS OF THE PLAN?

- ❖ The plan is **multi-pronged** — it aims to address not just the shortage of agricultural storage infrastructure in the country by facilitating establishment of godowns at the level of PACS, but would also enable PACS to undertake various other activities, viz:
  - ✓ **Functioning** as Procurement centres for State Agencies/ Food Corporation of India (FCI);
  - ✓ **Serving** as Fair Price Shops (FPS);
  - ✓ **Setting up** custom hiring centers;
  - ✓ **Setting up common processing units**, including assaying, sorting, grading units for agricultural produce, etc.
- ❖ It would **reduce** post-harvesting losses.
- ❖ It would bring down the foodgrain handling and transportation cost.
- ❖ Farmers would have

1.10   GENERAL CONSENT FOR CBI

- ❖ **Tamil Nadu** announced that it has withdrawn the general consent given to the **Central Bureau of Investigation (CBI).**

GENERAL CONSENT OF CBI

- ❖ The CBI is governed by **The Delhi Special Police Establishment (DSPE) Act, 1946,** and it must mandatorily obtain the consent of the state government concerned before beginning to investigate a crime in a state.
- ❖ General consent is normally given by states to help CBI to conduct a seamless investigation of corruption cases against central government employees in their states. This essentially means consent by default and CBI may begin investigations into a case in a state with the premise that consent has been already given to it.
- ❖ **Consent** given to the CBI can come in **two forms** – either case **specific or general**. In the **first form**, the CBI has to **apply for consent on a case-by-case basis and can't act before the consent is given.**
- ❖ In the absence of general consent, CBI would have to apply to the state government for its consent in every individual case, and before taking even small actions.

WHY IS CONSENT NEEDED?

- ❖ The CBI is governed by the Delhi Special Police Establishment Act (DPSEA). Under this law, the CBI is a special wing of the Delhi Police and hence, its **original jurisdiction is restricted to the Capital.**
- ❖ Therefore, the CBI must mandatorily obtain the consent of the state government concerned before beginning to investigate a crime in a state.
- ❖ Many states have alleged that the central government was using the CBI to unfairly target the opposition.

IMPLICATIONS OF WITHDRAWAL OF GENERAL CONSENT

- ❖ **No registration of fresh cases:** Withdrawal of general consent also means that the CBI will not be able to register any fresh case involving central government officials or private persons in a particular state without prior permission of that state government.
- ❖ **Loss of power:** CBI officers will lose all powers of a police officer as soon as they enter the state unless the state government has allowed them.
- ❖ **States that have withdrawn the general consent** – Tamil Nadu, Mizoram, West Bengal, Chhattisgarh, Rajasthan, Maharashtra, Kerala, Jharkhand, Punjab and Meghalaya.

ABOUT THE CENTRAL BUREAU OF INVESTIGATION (CBI)

- ❖ It is the **premier investigating police agency** in India. It has its origin in the **Special Police Establishment** set up in 1941 to probe bribery and corruption during World War II. Later, it was set up by a resolution of the **Ministry of Home Affairs in 1963** after **Santhanam committee recommendation.**

- ❖ The CBI is under the administrative control of the **Ministry of Personnel, Pension & Public Grievances, Government of India.**
- ❖ It is also the **nodal police agency** in India, which coordinates investigations on behalf of **Interpol Member countries**.
- ❖ The CBI is different from the National Investigation Agency, which has jurisdiction all over the country.

PARLIAMENTARY PANEL RECOMMENDS NEW LAW TO DEFINE POWER, FUNCTIONS OF CBI

- ❖ Highlighting withdrawal of general consent for CBI probe by many States, a Parliamentary Committee has said that an existing law governing the federal probe agency has **"many limitations"** and there is a need to enact a new legislation to define its status, functions and powers.
- ❖ The **federal probe agency** was established in **1963.** It is **governed** by the **Delhi Special Police Establishment (DSPE)** Act, enacted to regulate the functioning of the special police establishment set up in 1941 to investigate cases of bribery and corruption involving purchases and supplies during World War II.
- ❖ The department-related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice said that according to the provisions of the DSPE Act, the consent of the State government is a prerequisite for any investigation by the CBI and as on date**, nine States** have **withdrawn the general consent.**
- ❖ The panel said that vacant posts in the CBI are not being filled up at the required pace and recommended that **"every effort should be made to fill up vacancies at the earliest".**
- ❖ A total of 1,709 posts are vacant in the CBI against its sanctioned strength of 7,295.
- ❖ The panel further recommended that the Director of CBI should monitor the progress made in filling up of vacancies on a quarterly basis and take necessary measures to ensure that the organisation is sufficiently staffed.
- ❖ The Committee is of the opinion that in this age of transparency, every public authority should strive to proactively disclose the data available with it or held by it in public domain to the extent possible.

1.11 CENTRAL LIST OF OBCS

- ❖ **National Commission for Backward Classes (NCBC)** is processing the approval for adding approximately **80 castes** from **six states** to the Central List of **Other Backward Classes (OBCs).**

ABOUT THE NEWS

- ❖ The National Commission for Backward Classes (NCBC) is already processing the approval for most of them.
- ❖ There are currently over 2,650 different communities listed in the Central OBC list for all States and Union Territories, including the **16 communities that were added since 2014.**
- ❖ In a report **released by** the **Ministry of Social Justice and Empowerment (MSJE),** the government had decided to include 16 communities to the Central list of OBCs from the states like Himachal Pradesh, Bihar, Jharkhand, Madhya Pradesh, and Jammu and Kashmir.
- ❖ The other states include Maharashtra, Telangana, Andhra Pradesh, Himachal Pradesh, Punjab, and Haryana, from where communities are shortlisted to get included under the central OBC list.
- ❖ The Union government also highlighted its recent move to bring the **105th Amendment** to the Constitution, which reaffirmed the rights of States to maintain their own OBC lists.

OBCS IN INDIA

- ❖ **First defined in the 1980 Mandal Commission report**, OBCs among Hindus were identified based on socio-educational field surveys, lists of OBCs notified by various State governments, the 1961 Census report, and extensive touring of the country.
- ❖ Among non-Hindus, the caste system was not found to be an inherent part of the religion.
- ❖ However, for equality, untouchables who converted from Hinduism and occupational communities known by their traditional hereditary jobs, such as the Gujjars, Dhobis, and Telis, were also identified as OBCs.

OTHER BACKWARD CLASSES (OBC) STATUS AND INCLUSION:

- ❖ Currently, for each state, there are **two OBC lists**, i.e.,
- ❖ **One for the state and the Centre.**

❖ So, a caste included in the OBC list of a state enjoys the reservation benefits in state government jobs and educational institutions, but not with respect to central government jobs or educational institutions.
❖ Procedure to include communities in Central List:

NATIONAL COMMISSION FOR BACKWARD CLASSES ACT, 1993:

❖ As per the **NCBC Act, 1993,** the Commission is **mandated** to constitute a Bench to examine the proposals of inclusion and then forward their decision to the Union government (with dissent, where applicable).
❖ The Cabinet then needs to approve the additions and bring legislation to this effect.
❖ The **President is empowered to notify the change.**

CONSTITUTIONAL PROVISIONS:

❖ **Articles 15(4) and 16(4)** make special provisions for **socially and educationally backward classes of citizens (SEBCs**, **popularly known as OBCs), the Scheduled Castes (SCs) and Scheduled Tribes (STs).**
❖ The Constitution **(102nd Amendment) Act, 2018**: It granted constitutional status to the National Commission for Backward Castes (NCBC).

IT FURTHER INSERTED:

❖ **Article 338B,** which deals with the structure, duties, and powers of the NCBC.
❖ **Role of NCBC**: It was tasked with monitoring safeguards provided for socially and educationally backward classes, giving advice on their socio-economic development, inquiring into complaints, and making recommendations, among other functions.
❖ Article 342A, which deals with the powers of the President to notify a particular caste as an SEBC and the power of Parliament to change the list.

SUPREME COURT'S OBSERVATIONS:

The Maratha Reservation case:

❖ The SC had ruled that only the Centre had the power to draw up the OBC list, as per the above interpretation of the Constitution **(102nd Amendment) Act (Article 342A** only mentions the **President & Parliament** with no reference to states)
❖ To **reverse** the verdict and **to restore** the powers of the state governments to maintain the state list of OBCs, Parliament passed the **127th Constitution Amendment Bill, 2021.**
❖ Amendment in **Articles 366(26C) and 338B (9),** after which states will be able to directly notify OBC and SEBCs without having to refer to the NCBC and the **"state list"** was being taken out of the domain of the President and will be notified by the Assembly.

1.12	JUSTICE CLOCK

❖ Recently, **Justice Clocks** have been installed across the court complexes of **high courts.**
❖ Justice Clock is a **LED display message** sign board system **(electronic signage system).**
❖ It is to make effective use of database created through **National Judicial Data Grid (NJDG)** and to make the information available to public.
❖ **Initiative of Ministry of Law and Justice.**
❖ **Aim –** To bring awareness to the public about justice sector, advertising the various schemes of the department and to give status of various fields to the public.
❖ **Contents displayed** - The clock will display the schemes of the **Department of Justice** and how citizens can benefit from the projects such as e-Courts, Access to Justice and Legal Aid to Poor.
❖ At present the following contents are being displayed
❖ **Live Case Status** (The details of ongoing cases in respective Court rooms are displayed during Court proceedings.)
❖ **Case Pendency in District Courts**
❖ **E-courts videos**
❖ **NJDG Public Portal and District Court Services videos**
❖ **A total of 39 Justice Clocks are functional in 25 High Courts.**

1.13	DAKSHTA

- **DAKSHTA (Development of Attitude, Knowledge, Skill for Holistic Transformation in Administration)** For Young Professionals, was launched recently on the iGOT Karmayogi Platform
- **Objective**- **To equip young professionals and consultants in government** with the necessary competencies to effectively discharge their duties and responsibilities.
- It **consists of 18 courses and the collection covers a wide range of subjects** crucial to their roles, including data-driven decision making, code of conduct, communication skills, public policy research, stress management, and more.
- The **iGOT Karmayogi Platform**, an **online portal established under the Mission Karmayogi**, offers a comprehensive resource for capacity building, career management, and networking for government officials.
  - ✓ Nodal Ministry- **Ministry of Personnel, Public Grievances & Pensions**

1.14	NATIONAL CENTRE FOR GOOD GOVERNANCE

- NCGG has **successfully trained the 24th batch of civil servants from Maldives**.
- So far, 685 officers from Maldives have been imparted training.

ABOUT NATIONAL CENTRE FOR GOOD GOVERNANCE

- It is **an autonomous institute** set up in **2014**, under the aegis of the Department of Administrative Reforms and Public Grievances, **Ministry of Personnel, Public Grievances and Pensions**.
- It was previously known as the **National Institute of Administrative Research (NIAR).**
- It seeks to **carry out policy-relevant research and prepare case studies**.
- It **curates training courses for civil servants from India and other developing countries**;

> National Good Governance Day is observed annually on **December 25**.

- It provides **a platform for sharing existing knowledge and proactively seeking out and developing ideas** for their implementation in the government, both at the National & International levels.
- It is **governed by a Governing Body**, under the **Chairmanship of the Cabinet Secretary**.

1.15	MEIRA PAIBIS

- HOME Minister recently met with the **Meira Paibis** as part of his meetings with various civil society groups.
- The **Meira Paibis, also known as Imas or Mothers of Manipur**, are Meitei women who represent a powerful moral force in Manipur's civil society.
- It is **a women's social movement in Manipur formed in 1977.**
- They come **from various sections of society in the Imphal valley** and are widely respected for their activism.
- They Paibis are **loosely organized, led by groups of senior women, and lack rigid hierarchy or overt political leanings**.
- Role: **initially focused on fighting alcoholism and drug abuse** has now expanded to countering **human rights violations and the development of society** at large.

2. ECONOMY

2.1 COPPER

- ❖ **India** has become **net copper importer for fifth year in a row**.
  - ✓ India **used to be a net exporter until FY18**.
- ❖ India **imported 2,75,341 tonnes of copper** in the previous financial year. These include **both refined and finished copper**.
  - ✓ **Refined copper** is the **end product where impurities are removed from copper ore**.
  - ✓ **Finished copper** refers **to copper that has been processed and shaped into its final form** such as **wires, tubes, pipes, sheets** etc.
- ❖ **Reasons for increased demand**-
  - ✓ government's **thrust on infrastructure**
  - ✓ **strong rebound in economic activities** in sectors like real estate, consumer durables and electric vehicle manufacturing.
- ❖ **Domestic manufacturing**
  - ✓ India's total refined copper production capacity is about 7.85-lakh tonnes. Out of this
    - ➢ **Hindalco** has about **5-lakh tonne capacity**.
    - ➢ **Hindustan Copper** roughly has a capacity of about **70,000 tonnes**.
    - ➢ **Sterlite Copper** has **4 lakh tonnes per annum (LTPA) capacity** (but it is not operational since 2018).

ABOUT COPPER

- ❖ Copper is **3rd most used industrial metal after steel and aluminium.**
- ❖ It is **resistant to corrosion and does not rust**.
- ❖ It is **a good electrical conductor** and is **ductile.**
- ❖ **Uses**- **automotive and defence industries**, as well as in the **electrical industry** for the manufacture of **wires, electric motors, transformers, and generators**.

> **Ductility** is the ability of a metal to be drawn into a wire
>
> **Ores** of Copper- **Chalcopyrite, Bornite, Malachite, Chalcocite, Covellite, Cuprite**

- ❖ **Top copper producing countries** (as of 2022): **Chile, Peru, Democratic Republic of Congo**.
- ❖ Largest copper mines in India: **Malanjkhand** (MP), **Khetri** and **Kolihan**(Rajasthan)

2.1 NICDIT

- ❖ Minister of Finance **reviewed activities of National Industrial Corridor Development and Implementation Trust** (NICDIT).

ABOUT NICDIT

- ❖ NICDIT is **an apex body under Department of Industrial Policy and Promotion (DIPP)** (**Ministry of Commerce and Industry**)for coordinated and unified development of several industrial corridors including: **Delhi Mumbai Industrial Corridor, Chennai Bengaluru Industrial Corridor, Amritsar Kolkata Industrial Corridor, Bengaluru Mumbai Industrial Corridor.**
- ❖ It was **constituted in 2016**.

2.3 STRATEGIC OIL RESERVES IN SALT CAVERNS

- ❖ Government-owned engineering consultancy firm **Engineers India Ltd.(EIL)** is **studying prospects and feasibility of developing salt cavern-based** strategic oil reserves **in Rajasthan**.
- ❖ **Rajasthan**, which has **bulk of requisite salt formations in India**, is seen as the **most conducive for developing salt cavern-based strategic storage facilities**.

SALT CAVERN-BASED RESERVES VS. ROCK CAVERN-BASED RESERVES

- ❖ UNLIKE underground **rock caverns**, which are developed **through excavation**, **salt caverns are developed by process of solution mining**, which involves pumping water into geological formations with large salt deposits to dissolve the salt.
- ❖ Process is **simpler, faster, and less cost-intensive** than developing excavated rock caverns.
- ❖ Unlike rock caverns, **salt cavern-based storages can be created and operated** almost entirely **from the surface**.
- ❖ Salt cavern-based **oil storage facilities are also naturally well-sealed, and engineered for rapid injection and extraction of oil**.

GLOBAL PRECEDENCE

- ❖ The **entire SPR programme of the United States** has so far been **based on salt cavern-based storage facilities**.
- ❖ The **US Strategic Petroleum Reserve**, the **world's largest emergency oil storage**, consists of **four sites with deep underground storage caverns** created in **salt domes along the Gulf of Mexico coast in Texas and Louisiana**.
    - ✓ These have a **cumulative capacity of around 727 million barrels.**

STRATEGIC OIL RESERVES IN INDIA

- ❖ India currently has **an SPR capacity of 5.33 million tonnes, or around 39 million barrels** of crude, that can **meet around 9.5 days of demand**.
- ❖ Construction of strategic oil reserves facilities is managed by **Indian Strategic Petroleum Reserve Limited (ISPRL), special purpose vehicle**, under **Ministry of Petroleum and Natural Gas**.
- ❖ The country's **three existing strategic oil storage facilities** — at **Mangaluru and Padur in Karnataka**, and **Visakhapatnam in Andhra Pradesh** — are **made up of excavated rock caverns**.
- ❖ The country is **in the process of expanding its SPR capacity** by a cumulative 6.5 million tonnes at **two locations — Chandikhol in Odisha** (4 million tonnes) and **Padur** (2.5 million tonnes).

The **International Energy Agency** (IEA), a **Paris-based** autonomous intergovernmental organisation in which **India is an 'Associate' country, recommends** that all countries should hold **an emergency oil stockpile sufficient to provide 90 days of import protection**.

2.4   PETCOKE

- ❖ The government recently **permitted the import of Needle Pet Coke (NPC) for making graphite anode material** for **lithium-ion batteries as a feedstock** and not for any other purposes.
- ❖ The DGFT, however, said that the **sulphur content in the NPC should be less than 0.8 per cent**, which would be **monitored by state pollution control boards**.

ABOUT PETROLEUM COKE

- ❖ Petroleum coke or petcoke is **a spongy, solid residue from oil distillation**.
- ❖ It is **a coal substitute** and **can be burned for fuel in the same manner as coal**.
- ❖ It **notably has a higher energy content** and is **easier to transport and store**.
- ❖ It is **a byproduct created when bitumen is found in tar sands**.
- ❖ There are **two distinctive grades of Petroleum Coke** viz. **Calcinable or Green Petcoke** and **Fuel Grade Petcoke**.
    - ✓ **Uses of High Grade pet coke** is mainly as **an additive or as a source of carbon**
        - ➢ Electrodes for electrometallurgical industries, **Synthetic Graphite, Aluminum Anodes** etc.
    - ✓ **Uses of Fuel grade Petcoke**- as fuel in the **Cement manufacturing, Power Industry, Alumininium Refining, Steel Manufacturing**, **Lime Klins** and **Industrial Boilers.**

2.5   BIMA VAHAKS

- ❖ The **Insurance Regulatory and Development Authority of India** (IRDAI) issued **draft guidelines for Bima Vahaks**.
- ❖ It seeks to establish **a dedicated distribution channel at the level of Gram Panchayats**.
- ❖ **Bima Vahaks**, a core component of IRDAI's **'Insurance for all by 2047'goal**, **aims to improve accessibility and availability of insurance in country**.
- ❖ Three pillars of entire insurance ecosystem:
  - ✓ **Insurance customers** (policyholders),
  - ✓ **Insurance providers** (insurers) and
  - ✓ **Insurance distributers** (intermediaries).

OBJECTIVES OF BIMA VAHAK GUIDELINES

- ❖ Establish **dedicated distribution channel focused on enhancing insurance inclusion and creating awareness** in every Gram Panchayat.
- ❖ **Identification and development of local resources** within each **Gram Panchayat**, with a special focus on **encouraging onboarding of women as Bima Vahaks** to gain the trust of locals.
- ❖ The guidelines propose Corporate Bima Vahaks and Individual Bima Vahaks for the distribution channel.
  - ✓ **Corporate Bima Vahak** would be **legal persons** registered in accordance with the respective laws and engaged by an insurer.
  - ✓ **Individual Bima Vahak** could be **any individual appointed by an insurer** or appointed by a Corporate Bima Vahak.
- ❖ Activities assigned to Bima Vahaks include **collecting proposal information**, **KYC compliance**, **coordination and support in policy**, **claims-related servicing**, etc.

2.6	RESEARCH ANALYST

- ❖ As per reports, many finfluencers are now "renting out" research analyst (RA) licences for a fee.
  - ✓ A finfluencer — as a **financial influencer** is usually called — is one who gives the **ordinary investor information and advice on an array of financial topics** such as **stock market trading, personal finance** and **mutual funds**.
- ❖ Several finfluencers were quoted in the report as saying **that their applications are being rejected as RA regulations are very strict** in India.
- ❖ Currently, in India, **to become a registered RA**, a **person must hold a post-graduate degree or a professional qualification** and **market experience of five years**.
  - ✓ However, **most finfluencers do not meet this criterion**.

2.7	FOOT ROT DISEASE IN BASMATI

- ❖ Farmers have reported **"foot rot" disease** on the **saplings of Basmati variety of paddy** that are in the nurseries.

ABOUT FOOT ROT DISEASE

- ❖ It is also known as **Bakanae Disease.**
- ❖ It is **a soil and seed-borne deadly fungus** which is **seen only in the Basmati variety of paddy**.
- ❖ It is caused by **'Fusarium verticillioides' fungi**.
- ❖ The **infected saplings turn pale yellow and become elongated** and later, the **saplings start drying and usually die**.
- ❖ Symptoms sometimes appear after transplantation and the infected plants first grow way taller than the normal plants and die after a few days.

2.8	AROMA MISSION BY CSIR

- ❖ **CSIR- Indian Institute of Integrative Medicine (CSIR-IIIM)** is supporting farmers in the **cultivation of Lavender** in the **Bhaderwah**, **Doda district, J&K** under **CSIR-Aroma Mission**.
  - ✓ In India, the term **purple revolution** is generally **associated with Lavender production.**
- ❖ Aroma Mission aims to **promote the cultivation of aromatic crops for essential oils** that are in great demand by aroma industry for fuelling the growth of aroma industry and rural employment.
- ❖ Under it, **Lavender cultivation** is being **promoted in the temperate regions of J&K.**

2.9   FLYING GEESE MODEL

- ❖ **Morgan Stanley and Nomura** in their recent assessments said that this decadal growth will be led by countries like India and from southeast Asia (Indonesia etc.).
- ❖ They reported that **Asia's flying geese model** is **back in operation**.

ABOUT FLYING GEESE MODEL

- ❖ It is a **theory of industrial development in latecomer economies**, was **developed in the 1930s** by **Japanese economist Kaname Akamatsu**.
- ❖ It **intends to explain the catching-up process of industrialization of latecomer economies**, especially Japan and the East Asian Economies.
- ❖ This approach saw the **US (on global scale) and Japan (in Asia) as the lead geese**, followed by **Asian emerging economies, resulting in their economic success**.
- ❖ The **regional development as per this model** presupposes **the existence of hierarchy**, with **a dominant economy acting as the growth centre and followed by other developing economies**.

2.10   MV EMPRESS

- ❖ The Union Minister of Ports, Shipping & Waterways flagged off **MV Empress**, **India's first international cruise vessel** - from **Chennai to Sri Lanka**.
- ❖ The **MV Empress will sail to three Sri Lankan ports: Hanbantota, Trincomalee, and Kankesanturei.**
- ❖ An MoU was **signed during the first Incredible India International Cruise Conference in 2022 between Chennai Port and M/S Waterways Leisure Tourism Pvt Ltd** to start **domestic and international cruise service**.
- ❖ The **government also plans to develop three new international cruise terminals** in **Andamans, Puducherry, and Lakshadweep**, which are expected **to be operational by 2024.**

2.11   '100 DAYS 100 PAYS' CAMPAIGN

- ❖ The Reserve Bank of India (RBI) launched the **'100 Days 100 Pays' Campaign for Return of Unclaimed Deposits**.
- ❖ **Balances in savings / current accounts which are not operated for 10 years**, or **term deposits not claimed within 10 years** from date of maturity **are classified as "Unclaimed Deposits".**
- ❖ These amounts are transferred by banks to **"Depositor Education and Awareness" (DEA) Fund maintained by the Reserve Bank of India**.
- ❖ The campaign is aimed for **banks to trace and settle the top 100 unclaimed deposits of every bank** in **every district of the country within 100 days**.

> As of **February 2023**, the total amount of **unclaimed deposits transferred to the RBI by public sector banks (PSBs)** reached **Rs 35,012 crore.**

2.12   ANTARDRISHTI

- ❖ Reserve Bank of India (RBI) Governor Mr. Shaktikanta Das recently launched a **Financial Inclusion Dashboard**, named **Antardrishti**.

- ❖ The dashboard **will provide the required insight to assess and monitor the progress of financial inclusion** by capturing relevant parameters.
- ❖ The dashboard, **presently intended for internal use in the RBI**, will further **facilitate greater financial inclusion** through a multi-stakeholder approach.

2.13 THE ENERGY PROGRESS REPORT 2023

- ❖ Factors like high **inflation**, **uncertain macroeconomic outlook** and **debt distress** are keeping the world off-track for attaining **United Nations-mandated Sustainable Development Goal 7 by 2030**, according to a new UN report. **SDG 7 is to "ensure access to affordable, reliable, sustainable and modern energy for all."**
- ❖ The Report is produced annually by five of the custodian agencies responsible for tracking global progress toward Sustainable Development Goal 7 (SDG 7). The custodians developing the report are the **International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Statistics Division (UNSD), the World Bank, and the World Health Organization (WHO).**

ECONOMIC FACTORS

- ❖ Even though there has been considerable improvement across the measures, the present rate is insufficient to meet any of the **2030 targets.**
- ❖ Among the **major economic factors** delaying the realization of **SDG7 globally** are
  - ✓ The uncertain macroeconomic outlook,
  - ✓ High levels of inflation,
  - ✓ Currency fluctuations,
  - ✓ Debt distress in a growing number of countries,
  - ✓ Lack of financing,
  - ✓ Supply chain bottlenecks,
  - ✓ Tighter fiscal circumstances, and
  - ✓ Soaring prices for materials.

KEY HIGHLIGHTS OF REPORT

- ❖ The official dashboard of global, regional, and country progress on four important energy targets is included in the yearly SDG 7 tracking report:
  - ✓ **7.1:** Ensuring universal access to electricity and clean cooking solutions,
  - ✓ **7.2:** Substantially increasing the share of renewable energy,
  - ✓ **7.3:** Doubling progress on energy efficiency,
  - ✓ **7.A:** Increasing international collaboration in support of clean and renewable energy.

ACCESS TO ELECTRICITY (7.1):

- ❖ The proportion of individuals who have access to electricity increased from **83% in 2010 to 91% in 2020**, adding **1.3 billion** more people to the worldwide total.
- ❖ **733 million** fewer people lacked access in **2020** compared to **1.2 billion in 2010.**
- ❖ The difficulty of **reaching poorer** and **more rural unserved areas**, as well as the **unusual effects** of the COVID-19 outbreak, may be to blame for the recent slowdown in electricity progress.
- ❖ **By 2030**, **only 92%** of the world will be electrified at the current rate of development.
- ❖ Meeting the **2030** target requires increasing the number of new connections to **100 million a year**.

CLEAN COOKING (7.1):

- ❖ **In 2020, 69%** of the world's population had access to clean cooking fuels and technologies, a gain of **3% from 2021.**
- ❖ However, notably in **sub-Saharan Africa**, population growth outpaced a large portion of access improvements.
- ❖ Because of this, the overall number of individuals without access to clean cooking has stayed mostly unchanged for decades. Access improvements to populous, major Asian countries were the main cause of the surge.

RENEWABLES (7.2):

❖ Although the share of renewable capacity expansion surged to a record level in **2021**, the favourable global and regional trajectories conceal the fact that the nations with the greatest access needs were those where new capacity additions lagged.

❖ Additionally, the cost of manufacturing and exporting **solar photovoltaic (PV) modules, wind turbines, and biofuels** has grown due to rising commodity, energy, and transportation prices as well as trade restrictions, which has added uncertainty for upcoming renewable energy projects.

❖ Renewable shares need to reach well over **30% of 'total final energy consumption' by 2030**, up from **18% in 2019**, to be on track for reaching **net-zero energy emissions by 2050**.

ENERGY EFFICIENCY (7.3):

❖ It aims to double the global rate of annual improvement in primary energy intensity—the amount of energy used per unit of wealth created—**to 2.6% in 2010–30 versus 1990–2010.**

❖ From **2010 to 2019**, global annual improvements in energy intensity averaged around **1.9%,** well below the target.

❖ The rate of energy efficiency needs to be higher—consistently over **4%** for the rest of this decade—if the world is to reach net-zero emissions from the energy sector by **2050.**

INTERNATIONAL FINANCIAL FLOWS (7.A):

❖ **International public financial flows** to developing countries in support of clean energy decreased for the second year in a row, falling to **USD 10.9 billion in 2019**, despite the immense needs for sustainable development in most countries and growing urgency of climate change.

❖ Overall, the level of financing remains below what is needed to reach **SDG 7**, particularly in the most vulnerable and least developed countries.

2.14 NATIONAL MISSION ON ADVANCED AND HIGH-IMPACT RESEARCH (MAHIR)

❖ The government has launched a **'Mission on Advanced and High-Impact Research (MAHIR)'** with a view to leverage emerging technologies in the power sector and make the country a manufacturing hub.

❖ It aims to facilitate indigenous research, development and demonstration of the latest and emerging technologies in the power sector.

❖ The Mission will be funded by pooling financial resources of the **Ministry of Power, Ministry of New and Renewable Energy and the Central Public Sector Enterprises under the two Ministries**. Additional funding will be mobilized from Government of India's budgetary resources.

❖ The mission is Planned for an initial period of five years from **2023-24 to 2027-28.**

MISSION OBJECTIVES

❖ To identify emerging technologies and areas of future relevance for the Global Power Sector and take up indigenous end-to-end development of relevant technologies.

❖ To provide a common platform for Power Sector Stakeholders for collective brainstorming, synergetic technology development and devise pathways for smooth transfer of technology.

❖ To support pilot projects of indigenous technologies (developed especially by Indian Start-ups) and facilitate their commercialization.

❖ To leverage foreign alliances and partnerships to accelerate research & development of advanced technologies and to build competencies, capabilities and access to advanced technologies through bilateral or multilateral collaborations, thereby facilitating exchange of knowhow and Technology Transfer.

❖ To seed, nurture and scale up scientific and industrial R&D and to create vibrant & innovative ecosystem in the Power Sector of the count

EIGHT AREAS ARE IDENTIFIED FOR RESEARCH:

❖ Alternatives to Lithium-Ion storage batteries

❖ Modifying electric cookers / pans to suit Indian cooking methods

❖ Green hydrogen for mobility (High Efficiency Fuel Cell)

❖ Carbon capture
❖ Geo-thermal energy
❖ Solid state refrigeration
❖ Nano technology for EV battery
❖ Indigenous CRGO technology

STRUCTURE OF THE MISSION

❖ The Mission will have a two-tier structure - a **Technical Scoping Committee and an Apex Committee.**
❖ **The Technical Scoping Committee**, chaired by the **Chairperson of Central Electricity Authority**, will identify ongoing and emerging research areas globally, recommend potential technologies for development under the Mission, justify the techno-economic advantages, provide research outlines, and conduct periodic monitoring of approved research projects.
❖ **The Apex Committee**, chaired by **the Union Minister for Power & New and Renewable Energy** will deliberate on the technology and products to be developed and approve the research proposals. The Apex committee will look also into international collaborations.

2.15   VARIABLE RATE REVERSE REPO AUCTION

❖ The Reserve Bank of India (RBI) will conduct a four-day variable rate reverse repo auction for a notified amount of Rs 1 lakh crore.

INTRODUCTION

❖ The Reserve Bank of India (RBI), as the country's central banking institution, plays a vital role in managing the monetary policy framework and maintaining financial stability. One of the tools used by the RBI to regulate liquidity in the banking system is the Reverse Repo Auction.
❖ In line with this objective, the RBI recently conducted a **Two-Day Variable Rate Reverse Repo (VRRR) Auction** for **Rs 75,000 Crore.**
❖ Despite having surplus liquidity, there was muted response from banks to the **Variable reverse repo (VRRR) auction.**

REPO RATE

❖ The rate at which the **RBI issues loans to commercial banks** when there is a shortage of funds is the **repo rate.**
❖ It is used by monetary authorities to control inflation.
❖ Current repo rate announced by monetary policy committee is **6.50%.**

REVERSE REPO RATE

❖ It is the **variable or fixed interest rate** the RBI pays to commercial banks when they store excess cash reserves with the central bank.
❖ It is a monetary policy instrument which can be used to control the money supply in the country.
❖ Current reverse repo rate is at **3.35%.**

VARIABLE RATE REVERSE REPO (VRRR)

❖ **A reverse repo** is a fixed or variable interest rate at which banks lend to RBI.
❖ It is the subdivision of reverse repo.
❖ The **VRRR auction** is undertaken to reduce surplus liquidity in the system by withdrawing existing cash.

2.16   BSNL REVIVAL PACKAGE

❖ The **Union Cabinet** has approved a third revival package for state-owned telecom operator **Bharat Sanchar Nigam Ltd (BSNL)** with an outlay of **Rs 89,047.82** crore for allotment of **4G and 5G spectrum** through equity infusion. The approval sets the stage for the struggling telco to launch 4G, and, eventually, 5G services.
❖ **In 2019,** the government approved the first revival package for **BSNL with an outlay of Rs 69,000 crore,** followed by a second package worth Rs **1.64 lakh crore in 2022.**

- ❖ Due to these two packages, BSNL has started earning operating profits since **FY 2021-22.** Total debt of BSNL has reduced from **Rs 32,944 Crore to Rs 22,289 Crore.**

KEY HIGHLIGHTS

- ❖ The **authorized capital** of BSNL was increased from **Rs 1,50,000 crore to Rs. 2,10,000 crore.**
- ❖ It provided financial support for **capex (Capital Expenditure), viability gap funding for rural landlines, financial support for de-stressing the balance sheet and settlement of adjusted gross revenue (AGR) dues and merger of BBNL with BSNL.**
- ❖ With the third revival package, BSNL will emerge as a **stable telecom service provider** focused on providing connectivity to remotest parts of India.
- ❖ The Cabinet has made provisions to allot **airwaves to BSNL in the 700 MHz band,** making it the only other telco apart from Reliance Jio to have spectrum in the coveted frequency range. The **700 MHz band** is best suited for coverage in high-density areas, and is ideal for data networks and consumer-led services.
- ❖ The government also merged **Bharat Broadband Network Limited (BBNL) with BSNL.** With this merger, BSNL got an **additional 5.67 lakh kms of optical fibre** laid across **1.85 lakh village panchayats** through the **Universal Service Obligation Fund (USOF).**

2.17   COAL AND LIGNITE SCHEME

- ❖ The CCEA chaired by PM Narendra Modi has approved the continuation of the central sector plan **'Exploration of Coal and Lignite scheme' with an estimated expenditure of Rs 2,980 crore** with extension of time period from **2021-22 to 2025-26** co-terminus with the **15th Finance Commission cycle.**

KEY HIGHLIGHTS:

- ❖ The exploration for coal and lignite under the scheme is conducted in two broad stages:
  - ✓ **Promotional (Regional) Exploration and**
  - ✓ **Detailed Exploration in non-Coal India Limited blocks.**
- ❖ An outlay of **Rs 1,650 crore** will be provided for promotional (Regional) exploration and Rs 1,330 crore for detailed drilling in **non-CIL (Coal India Limited) areas.**
- ❖ Approximately **1,300 sq km area** will be covered under Regional exploration, and about **650 sq km area** will be covered under detailed exploration, it added.
- ❖ **Purpose:** The exploration for Coal and Lignite is required to prove and estimate the availability of coal resources in India, which would help further in preparing detailed project reports to start coal mining.

ABOUT COAL SECTOR IN INDIA:

- ❖ India has the fifth largest coal reserves, is second in coal production (after China) and is among the largest importer of coal (mainly from Indonesia, South Africa and Australia).
- ❖ **Coal accounts** for almost **50% share** in the total installed electricity generation capacity in India.
- ❖ The **top 5 States** in terms of total coal reserves in India are **Jharkhand, Odisha, Chhattisgarh, West Bengal and Madhya Pradesh.**

2.18   FIRST LOSS DEFAULT GUARANTEE (FLDG) FRAMEWORK

- ❖ **The Reserve Bank of India (RBI)** has approved the **First Loss Default Guarantee (FLDG) framework**, allowing fintech to partner with banks and non-Banking financial companies (NBFCs).

ABOUT FLDG FRAMEWORK

- ❖ **The First Loss Default Guarantee (FLDG) framework** is also known as **Default Loss Guarantee (DLG).**
- ❖ **FLDG** is a lending model between **fintech firms** and their partner banks and non-banking finance companies where the initial hit on a default is taken by the fintech firm that originated the loan.
- ❖ Under these agreements, the **fintech originates a loan** and promises to compensate the partners up to a pre-decided percentage in case customers fail to repay.
- ❖ The bank or **NBFC partners** lend through the fintech but from their books.

RBI GUIDELINES

- ❖ The RBI, after examining FLDG, permitted the arrangements between **banks and fintechs** or between **two regulated entities (REs).**
- ❖ The central bank said an RE can enter into DLG arrangements only with an LSP or other REs with which it has entered into an outsourcing (LSP) arrangement.
- ❖ The **LSP-providing DLG** must be incorporated as a company under the **Companies Act, 2013.**
- ❖ The RBI has allowed banks to accept DLG in digital lending only.
- ❖ if the guarantee is in the form of a cash deposit, or fixed deposits in a bank with a lien in favour of the RE, or a bank guarantee in favour of the RE.
- ❖ Banks and NBFCs should ensure that the total amount of DLG cover on any outstanding portfolio does not exceed **5% of the amount of that loan portfolio.**

> **Fintech**, a combination of the terms "financial" and "technology," is the application of new technological advancements to products and services in the financial industry
>
> It refers to the application of software and hardware to financial services and processes, making them faster, easier to use and more secure.

2.19 ISHAD MANGO

- ❖ Recently, the delicious **Ishad Mango** from **Uttara Kannada (Karnataka)** has earned its much-awaited **geological indicator (GI) tag.**

ABOUT ISHAD MANGO:

- ❖ It is grown predominantly around **Ankola**, is tasty and contains a lot of **pulp.**
- ❖ It is also called the **Oriental mango**, as it was once canned and exported to various countries under this name. The fruit has been cultivated for over **400 years in Ankola** and its surrounding area.
- ❖ It has two variants — **Kari Ishad**, which has thin skin, more pulp and is sweeter, and **Bili Ishad**, which has thick skin and less pulp and sweetness.
- ❖ The **Kari Ishad** is accepted as one of the finest quality mangoes due to its unique aroma, luscious taste, high amount of pulp, shape, and size.

ABOUT GEOGRAPHICAL INDICATION (GI) TAG

- ❖ **Geographical Indication (GI)** is an indication used to identify goods having special characteristics originating from a definite geographical territory.
- ❖ **The Geographical Indications of Goods (Registration and Protection) Act, 1999** seeks to provide for the registration and better protection of geographical indications relating to goods in India.
- ❖ It is governed and directed by the **WTO** Agreement on **Trade-Related Aspects of Intellectual Property Rights (TRIPS).**
- ❖ It was decided and also stated under **Articles 1 (2) and 10** of the **Paris Convention** that the protection of industrial Property and Geographical Indication are elements of **Intellectual Property.**
- ❖ It is primarily an agricultural, natural or a manufactured product (handicrafts and industrial goods).
- ❖ This tag is **valid** for a period of **10 years** following which it can be renewed.

OTHER MANGEOS WITH GI TAG

- ❖ **Gir Kesar Mango - Gujarat**
- ❖ **Appemidi mango - Karnataka**
- ❖ **Marathwada Kesar mango - Maharashtra**
- ❖ **Alphonso mango - Maharashtra**
- ❖ **Malihabadi Dusseheri Mango -Uttar Pradesh**
- ❖ **Malda Laxman Bhog Mango - West Bengal**
- ❖ **Khirsapati mangoes - West Bengal**
- ❖ **Malda Fazli Mango - West Bengal**

2.20 UPI TRANSACTIONS

* Recently the banks have put daily limits for the transactions facilitated by the **Unified Payments Interface (UPI).**

UNIFIED PAYMENTS INTERFACE (UPI)

* **UPI** is a digital payment system through which a user can both send and receive money through a **Virtual Payment Address (VPA).** The money will be directly debited from the customer's bank account.
* It was developed **by National Payments Corporation of India (NPCI) in 2016.**

VIRTUAL PAYMENT ADDRESS (VPA)

* **VPA** is a unique identifier that helps UPI to track a person's account.
* VPA can be used to make and request payments through a UPI-enabled app. There is no need to fill bank account details repeatedly for making multiple payments.

UPI TRANSACTION LIMIT

* **Limit set by NPCI:**
* At present, users can make up to **20 transactions or Rs. 1 lakh** in a single day - either all at once or through the day.
* For certain specific categories of transactions such as the **capital markets, collections (such as bills), insurance and forward inward remittances, the limit is Rs. 2 lakh.**
* In December 2021, the limit for the UPI-based **ASBA (Application Supported by Blocked Amount) IPO** and retail direct schemes was increased to **Rs. 5 lakh** for each transaction.
* **Limits set by Banks and UPI apps**: They can set limits with their own guidelines for UPI transactions. However, these limits must be within the overall upper limit set by the NPCI.
* The limit varies from small banks like Canara Bank which allows **Rs. 25,000** transactions, to big banks like SBI that have set a limit of **Rs. 1 lakh.**
* **Google Pay, Paytm, and Amazon Pay** have set a limit of **Rs. 1 lakh** per day along with a total of up to ten transaction limits across all UPI apps and bank accounts.
* **Reason:** The limits are set to balance out customer convenience and potential fraud/risk concerns.

WHY IS UPI THE MOST PREFERRED PAYMENT MODE?

* **Timely Transfer:** It is based on the IMPS platform and works 24x7. Thus helps transfer funds instantly the moment a request is submitted.
* **Multiple Accounts Linking:** UPI apps allow linking over one bank account. One can simultaneously use the UPI IDs for multiple bank accounts, sending and receiving funds.
* **Simple Interface:** There are multiple smartphone apps for UPI activities which come with a simple and user-friendly interface.

INTERNATIONALISATION OF UPI:

* Several countries across the globe are adopting **UPI for Person-to-Person (P2P)**, **Person-to-Merchant (P2M) and cross-border payments.**
* **RBI** has also taken steps for cross border linkage of fast payment systems of **India and Singapore** i.e. **UPI-PayNow.**

2.21 FAME-II SCHEME

* The government has reduced the subsidy provided under **FAME-II scheme** applicable on **electric two-wheelers** registered on or after **June 1, 2023.**

FAME INDIA SCHEME

* The **Faster Adoption and Manufacturing of Electric and Hybrid Vehicles (FAME)** scheme was launched in **2015.**
* **Aim** - It is to support hybrid/electric vehicles market development and manufacturing eco-system.
* **Ministry** – Ministry of Heavy Industries.
* It is a part of **National Electric Mobility Mission Plan.**

❖ The incentive is linked to battery capacity of e-vehicles with a cap **20% of the cost of vehicle.**

FAME II

❖ The scheme was **commenced on April 2019 for a period of 3 years.**

❖ Incentive cap increased from **20% to 40%** of the capital cost of the e-2W.

❖ Only advanced battery and registered vehicles will be incentivized under the scheme.

❖ In 2022, it was further **extended for a period of 2 years up to March 31, 2024.**

RECENT NOTIFICATION

❖ The government has **reduced** the subsidy provided under FAME-II scheme applicable on electric two-wheelers registered on or after June 1, 2023.

❖ For electric two-wheelers, the demand incentive will be **Rs 10,000 per kWh.**

❖ The cap on incentives for electric two-wheelers will be 15% of the ex-factory price of vehicles from 40% at present.

2.22	DUGDH SANKALAN SATHI APP

❖ Recently, the **Union Minister of Heavy Industries** unveiled the ground-breaking **"Dugdh Sanakalan Sathi Mobile App**" at Mussorie, Uttarakhand.

ABOUT DUGDH SANKALAN SATHI APP

❖ It is designed and developed by **Rajasthan Electronics & Instruments Limited** (REIL).
  ✓ REIL is **a "Mini Ratna" Central Public Sector Enterprise under the Ministry of Heavy Industries**.

❖ It **aims to improve the quality of milk, foster transparency among stakeholders, and streamline operations** at the grassroots village level, including Milk Cooperative Societies.

❖ It will **inform all services to milk producers** in **English, Hindi, Punjabi, Telugu and other languages**.

❖ It will **help in realizing the commitment of Government to digitize the process** and **facilitate Direct Benefit transfer to milk producers**.

❖ **Real-time milk price will be updated from the cloud server**, ensuring **transparency** and **eliminating human errors**.

❖ **Direct beneficiary transfers of milk payments** and **government subsidies** to the milk producers' bank accounts through the app.

2.23	KARI ISHAD MANGO

❖ **Kari Ishad mango** from **Ankola taluk of Uttara Kannada, Karnataka** has received the **Geographical Indication (GI) tag** from the Geographical Indications Registry under the Union Government.

❖ The GI certificate was issued to **Matha Totagars Farmer Producer Company Limited**.

❖ The mango is recognized for its exceptional attributes, including a **distinctive aroma, delightful taste, generous pulp content, and desirable shape and size**.

2.24	NATIONAL INTERNET EXCHANGE OF INDIA (NIXI)

❖ NIXI celebrated its 20th Foundation Day on June 19th (established in 2003).

❖ It is **a not-for-profit organization** (section 8 company) under **Ministry of Electronics and IT (MeitY)**.

❖ It acts as **a neutral meeting point of Internet service providers** (ISPs) with primary objective of **facilitating exchange of domestic internet** traffic between peering ISP members.

❖ **Four services under NIXI are-**
  ✓ **Setting IXPs**, towards building Internet Exchange Points,
  ✓ **.IN Registry**, managing and operation of **.IN country code** domain and **.BHARAT IDN (Internationalized Domain Name) domain** for India.
  ✓ **Indian Registry for Internet Names and Numbers (IRINN)**, managing and operating Internet Protocol (IPv4/IPv6).
  ✓ **Data Centre services** under NIXI-CSC towards data storage services.

2.25	ASIA PACIFIC PLANT PROTECTION COMMISSION

- ❖ The **Asia Pacific Plant Protection Commission** unanimously elected **India as chair of the Standing Committee on Integrated Pest Management (IPM)** for the biennium 2023-24 during the 32nd **Session held in Bangkok**.

ABOUT ASIA PACIFIC PLANT PROTECTION COMMISSION

- ❖ It is an **intergovernmental organization that promotes cooperation** among countries in the **Asia-Pacific region** to enhance plant health and plant protection.
- ❖ Established in **1956** as a regional body approved by the **Food and Agriculture Organization (FAO) of the United Nations**.
- ❖ Members- **25 member countries, including India**.
- ❖ The Commission **administers the Regional Plant Protection Agreement for Asia and the Pacific**.
- ❖ It reviews the **plant protection situation** at the **national level** in member countries, and **also at the regional level**.
- ❖ The Commission consists of representatives of all member countries and elects amongst them **a Chairperson who serves for a period of two years**.
- ❖ The **Director-General of the Food and Agriculture Organization** appoints and provides the secretariat that coordinates, organizes and follows up the work of the Commission.

2.26	CPI-AL/RL RELEASED

- ❖ All-India **Consumer Price Index Number for Agricultural Labourers and Rural Labourers** (CPI-AL/RL) was released by the Labour Bureau under the **Ministry of Labour and Employment**.
- ❖ **Base year** of CPI-AL/RL is **1986-87**.
- ❖ It **covers data from 600 sample villages selected from 20 States every month**, by the **National Statistical Office (NSO).**

2.27	IMPLIED VOLATILITY

- ❖ According to **RBI bulletin**, **Indian rupee** was turning out to be one of **the most stable currencies** with implied volatility at its lowest level since 2008.
- ❖ **Implied volatility** is the metric that **captures the market's view of likelihood of fluctuations in its value**.
- ❖ However, it doesn't predict the direction in which the price change will proceed.
  - ✓ It can often be thought to be a proxy of market risk.

2.28	JOHA RICE

- ❖ Scientists explored **nutraceutical properties of Joha rice** (a **GI Tag rice from Assam**) and detected **two unsaturated fatty acids: linoleic acid (omega-6)** and **linolenic (omega-3) acid**.
- ❖ It is **unique in aroma and grain characteristics** and distinct from other aromatic rice like Basmati
- ❖ It is **grown in Sali/ Kharif season.**
- ❖ Major Joha varieties included in this are **Kola Joha, Keteki Joha, Bokul Joha and Kunkuni Joha**.
- ❖ **Joha rice has a more balanced ratio of omega-6 to omega-**3 in comparison to widely consumed non-scented variety.
- ❖ Joha varieties are **mostly short or medium grained and have very low yield potential**.
- ❖ It is effective in **lowering blood glucose** and **preventing diabetes onset**.

2.29	CRITICAL MINERALS

- India has identified **30 critical minerals** that it considers **essential for economic development and national security** of the country in order **to ensure "self-reliance"** and to **address "the vulnerability" in its supply chain**.
- The **'Report of the Committee on Identification of Critical Minerals'**, comprises the list of thirty critical minerals, including **antimony, beryllium, bismuth, cobalt, copper, gallium, germanium, graphite, hafnium, indium, lithium, molybdenum, niobium, nickel, phosphorous, potash, titanium, tungsten and rare earth elements.**
- With a **few exceptions** such as **copper, gallium, graphite, cadmium, phosphorus, potash, and titanium**, **India is 100% import dependent for most of these minerals**.
- India was **recently inducted into the Mineral Security Partnership** (MSP).

ABOUT CRITICAL MINERALS

- It is a **metallic or non-metallic element** that has two characteristics :-
  - ✓ It is **essential for the functioning of our modern technologies**, economies or national security and
  - ✓ There is a **risk that its supply chains could be disrupted.**
- The 'criticality' of minerals changes with time as supply and society's needs shift.
- They are used to **manufacture advanced technologies, including mobile phones, computers, fibre-optic cables, semiconductors, banknotes, and defence, aerospace and medical applications etc.**
- Top Producers: **Chile, Indonesia, Congo, China, Australia and South Africa.**

ABOUT MINERAL SECURITY PARTNERSHIP

- It is an ambitious new initiative to bolster critical mineral supply chains, **announced by the United States (US) and key partner countries in June 2022**.
- The goal of the alliance is **to ensure that critical minerals are produced, processed, and recycled in a manner** that supports the ability of countries to realise the full economic development benefit of their geological endowments.
- The focus of the grouping would be on **the supply chains of minerals such as Cobalt, Nickel, Lithium and also the 17 "rare earth" minerals**.

2.30 START UPS

- New additions in the unicorn list declined sharply in 2023, **indicating a slowdown in the Indian startup ecosystem** as per a report released by **Huron named ASK private wealth Huron India future Unicorn Index, 2023**.
- The overall number of unicorns declined from the previous year.
- There were **51 gazelles and 96 cheetahs in 2023 in India**.

DIFFERENT CATEGORIES OF START-UPS

- **Unicorns**
  - ✓ refers to **a privately held startup company with a value of over $1 billion**.
  - ✓ It is **commonly used in the venture capital industry**.
  - ✓ The term was first popularised by **venture capitalist Aileen Lee** when she referred to the 39 startups that had a valuation of over $1 billion as unicorns.
  - ✓ The **valuation** of unicorns is **not expressly linked to their current financial performance** but is **largely based on their growth potential**, as perceived by investors and venture capitalists.
  - ✓ There are **more than 1,000 unicorn companies** around the world as of March 2022.
- **Gazelles**
  - ✓ **Startups valued between $500 million** and **US$1bn**; are likely to turn unicorns **in three years**.
- **Cheetahs**
  - ✓ **Startups valued at $250 million** and are likely to turn unicorn in **five years**.

2.31 UTPRERAK

- ❖ The Power ministry recently established **UTPRERAK**, a Centre of Excellence to Accelerate Adoption of Energy Efficient Technologies in Indian Industry.

ABOUT UTPRERAK

- ❖ The **Unnat Takniki Pradarshan Kendra** (UTPRERAK) is the CoE to Accelerate Adoption of Energy Efficient Technologies and seeks to play a catalytic role in improving the energy efficiency of the Indian industry.
- ❖ It is **also named as Advanced Industrial Technology Demonstration Centre (AITDC)**
- ❖ It has been **set up by the Bureau of Energy Efficiency (BEE)**.
- ❖ The Centre is mandated to become the **key reference and resource institution** on industrial energy-efficient technologies.
- ❖ It will **demonstrate and showcase energy-efficient technologies** in key industry sectors.
- ❖ It will **act as an exhibition cum information centre and knowledge repository.**
- ❖ It will be a **knowledge exchange platform** where best practices from across various key sectors can be diffused among industry professionals through workshops and seminars.
- ❖ It is **expected to provide intensive training to more than 10,000 energy professionals** from the industry.

ABOUT BUREAU OF ENERGY EFFICIENCY

- ❖ It is a **statutory body** set up under the provisions of the **Energy Conservation Act of 2001**, **under the Union Ministry of Power.**
- ❖ Objective – to develop policy and strategies with a **thrust on self-regulation and market principles within the overall framework of the Energy Conservation Act (EC Act), 2001** and to **reduce energy intensity in the Indian economy.**

3. GEOGRAPHY

3.1   HELMAND RIVER

❖ **Iran and Afghanistan** are locked in **a long-standing dispute** over **water sharing from the Helmand River.**

ABOUT HELMAND RIVER

❖ The Helmand is **Afghanistan's longest river**.
❖ It **originates near Kabul in the western Hindu Kush mountain range** and flows in a **southwesterly direction through desert areas** for a total of about 1,150 kilometers **before emptying into Lake Hamun, which straddles the Afghanistan-Iran border.**
   ✓ **Lake Hamun** is the **largest freshwater lake in Iran**.
   ✓ It **used to be one of the world's largest wetlands** fed by Helmand.
❖ It is **separated from the watershed of the Kabul River** by the **Unai Pass**.
❖ The Helmand River is a **vital source of water for both sides, supporting agriculture, livelihoods and ecosystems** in the region.

THE DISPUTE

❖ Afghanistan and Iran signed the **Helmand River Treaty** in **1973** to **regulate the allocation of river water**.
   ✓ But the **accord was neither ratified nor fully implemented**, causing disagreements and tensions to persist.
❖ **Iran has accused Afghanistan of violating its water rights for** years, arguing that far less water than the amount agreed to in the 1973 treaty flows into Iran.

3.2   MAGNETITE

Bihar government has decided to sign an **MoU with Geological Survey of India** for conducting remote sensing and aerial survey of the southern part of the state to prove the presence of **magnetite-bearing rocks** as well as **ultramafic rocks** which usually host **Chromite (Cr), Nickel (Ni), Platinum Group of Elements (PGE)** and **gold.**

ABOUT MAGNETITE

❖ Magnetite is **an oxide of iron**.
❖ It is the **most magnetic of all the naturally occurring minerals on earth**.
   ✓ It is a natural magnet.
❖ Magnetite **contains about 72% metallic iron**.
❖ Magnetite is a **black, opaque, magnetic mineral** that leaves a black streak when rubbed across a hard rough surface.
❖ It is **one of the most abundant metal oxides**, and **its crystal structure contains both the ferrous and ferric forms of iron ions**.
   ✓ It is often **confused with hematite and ilmenite (Titanium).**
❖ More often, magnetite **occurs in its massive form, commonly** called **'lodestone'**.

3.3   CYCLONE "BIPARJOY"

❖ After Mocha in the Bay of Bengal, the second storm of the **2023 North Indian Ocean** named **Biparjoy** has developed in the Arabian Sea.

TROPICAL CYCLONE

❖ Tropical cyclones are intense circular storm that originates over warm tropical oceans.
❖ It is characterized by **low atmospheric pressure, high winds, and heavy rain.**
❖ It draws its energy from the sea surface and maintaining its strength as long as it remains over warm water.
❖ It can elevate of the sea surface **by 6 metres (20 feet)** above normal levels.

❖ It can occur over the late summer months (July–September in the Northern Hemisphere and January–March in the Southern Hemisphere).

CYCLONE "BIPARJOY"-

❖ A very severe cyclonic storm along the coastline of **Karnataka, Goa and Maharashtra in the Arabian Sea.**
❖ The cyclone is expected to keep the monsoon a little subdued.
❖ The name **"Biparjoy"** was suggested by Bangladesh and the word **means 'disaster' or 'calamity' in Bengali.**

NAMING OF TROPICAL CYCLONES -

❖ Worldwide, there are **6 Regional Specialised Meteorological Centres (RSMCs)** and **5 regional Tropical Cyclone Warning Centres (TCWCs)** mandated for issuing advisories and naming of tropical cyclones.
❖ **Indian Metrological Department (IMD)** is one of the six RSMCs to provide tropical cyclone and storm surge advisories to 13 member countries under the WMO/Economic and Social Commission for Asia-Pacific (ESCAP) Panel.
❖ Countries include **Bangladesh, India, Iran, Maldives, Myanmar, Oman, Pakistan, Qatar, Saudi Arabia, Sri Lanka, Thailand, United Arab Emirates and Yemen.**

3.4 SUBANSIRI HYDROELECTRIC POWER PROJECT

❖ State-run hydropower company **NHPC Ltd.** will soon start trial runs for the **Subansiri Lower project.**

ABOUT LOWER SUBANSIRI HYDROELECTRIC POWER PROJECT:

❖ It is the **biggest hydroelectric project** undertaken in India so far.
❖ It is a run-of-river scheme on river **Subansiri.**
❖ **Location:** The Project is located near **North Lakhimpur** on the border of **Arunachal Pradesh and Assam.**
❖ **Capacity: 2000MW**
❖ It is a **concrete gravity dam 116 m high** from river bed level.
❖ It is being developed by the state-run **National Hydro Power Corporation (NHPC).**

KEY FACTS ABOUT THE SUBANSIRI RIVER:

❖ It originates in the **Tibet Plateau** and is the largest tributary of the **Brahmaputra River.**
❖ The high topographic variation makes this river a potential zone for harnessing it for the hydropower.

WHAT IS A GRAVITY DAM?

❖ **Gravity dams** are massive structure dams which are constructed of concrete or stone masonry.
❖ Concrete gravity dams usually run in a straight line across a broad valley and resist the horizontal thrust of the retained water entirely by their own weight.
❖ This type of structure is durable and requires very little maintenance.

3.5 KALASA BANDURI PROJECT

❖ Recently, tenders floated for implementation of **Kalasa Banduri project** were put out without obtaining forest and environment clearance.

ABOUT KALASA-BANDURI PROJECT

❖ Aims to divert water **from two tributaries of the Mahadayi river (also known as Mandovi): Kalasa and Banduri** to the **Malaprabha river.**
  ✓ **Malaprabha river is a tributary of Krishna river.**
❖ **Mahadayi or Mhadei**, the **west-flowing river**, **originates in Bhimgad Wildlife Sanctuary (Western Ghats), Belagavi district of Karnataka** and **drains into Arabian Sea**.
❖ Entire project aims to construct **several dams on the river Mandovi**.
❖ Aimed at **facilitating drinking water for towns in drought-hit northern Karnataka**.
  ✓ The areas include **Dharwad, Belagavi, Bagalkote and Gadag** among others.

3.6 AURORAS

❖ Researchers have **revealed global observations of auroras** associated with **carbon dioxide using satellites.**

ABOUT AURORAS

❖ Auroras are caused by **interaction of charged particles** (electrons and protons) of solar wind with atoms of upper atmosphere i.e. ionosphere.

❖ In the Northern Hemisphere, the phenomenon is called the **northern lights (aurora borealis)**, while in the Southern Hemisphere, it's called the **southern lights (aurora australis)**.

❖ The usually observed **green and red auroras happen between 100 kilometres and 250 kilometres above** the surface of the planet due to **an excited state of atomic oxygen**.

CO_2 AURORAS

❖ When **charged particles crash into planet's atmosphere**, they interact with many **different atoms and molecules including Carbon dioxide**.

  ✓ While the **gas is known for acting as a greenhouse gas** due to its presence in the lowest part of the atmosphere, **trace parts of carbon dioxide also exist in the atmosphere at the edge of space**.

❖ **When CO_2 molecules about 90 km above Earth become excited during an aurora**, they emit **infrared radiation**.

❖ This leads to **more infrared radiation than is typically observed in the planet's atmosphere.**

4. ART AND CULTURE

4.1 PURANA QILA

A fresh **round of excavations at the site of Delhi's Purana Qila or Old Fort** has uncovered evidence of the continuous history of the city since the pre-Mauryan era.

❖ Findings include
  - ✓ shards of **Painted Gray Ware pottery** which are usually dated to around 1200 BC to 600 BC.
  - ✓ remains of a **900-year-old Vaikuntha Vishnu** from the **Rajput period,**
  - ✓ a terracotta plaque **of Goddess Gaja Lakshmi** from the **Gupta period,**
  - ✓ the structural **remains of a 2,500-year-old terracotta ring well** from the **Mauryan period**, and
  - ✓ a **well-defined four-room complex from the Sunga-Kushan period** dating back to 2,300 years ago, **besides beads, seals, copper coins and a bone needle**.
❖ The excavations have **revealed nine cultural levels**, representing different historical periods, including **pre-Mauryan, Mauryan, Sunga, Kushana, Gupta, post-Gupta, Rajput, Sultanate, and Mughal.**

ABOUT PURANA QILA

❖ It is **one of the oldest forts in Delhi** and built on the **banks of river Yamuna**.
❖ It is believed by many to be the **site of Indraprastha**, as **mentioned in the Mahabharat.**
❖ The present citadel at Purana Qila started its **construction in the reign of Humayun** and was **completed by Sher Shah Suri.**
❖ The **Qila was inspired by Jama Masjid,** which was established 15 years before the reconstruction of Qila.
❖ It is **rectangular in shape and is spread over an area of 1.5 kilometers.**
❖ Another amazing feature of the Purana Qila are the **three gates** that are a **display of a happy blend of Hindu and Muslim styles of architecture**.
  - ✓ **Bara Darwaza**,
  - ✓ **Humayun Gate**, and
  - ✓ **the Talaqqi Gate**, which is often referred to as the **forbidden gate**.
  - ✓ All of the **gates are double-storeyed** and comprise of **huge semi-circular bastions** flanking either of their sides.
❖ **Purana Qila Complex** also includes
  - ✓ **Qila-e-Kuhna mosque**- built by **Sher Shah**, it reflects a **transitional stage between architecture of Lodhis and Mughals**.
  - ✓ **Sher Mandal**- Built by **Sher Shah**, an octagonal structure built in red sandstone and decorated with white and black marble inlay.
    - ➢ **Humayun** made it into **a library** and **died after falling from the steps of this structure**.

4.2 GOLCONDA FORT

❖ The Ministry of Culture celebrated the **Telangana Formation Day (June 2nd, 2014)** at Golconda Fort.

ABOUT GOLCONDA FORT

❖ It is located in the **western part of Hyderabad city**.
❖ It was **originally known as Mankal**, and **built on a hilltop in the year 1143**.
❖ It was originally **a mud fort** under the **reign of Raja of Warangal**.
❖ Later it was **fortified between 14th and 17th centuries by the Bahmani Sultans** and then by the **Qutub Shahi dynasty**.
❖ Golconda was the **principal capital of the Qutub Shahi kings** (who ruled the region in 16th and 17th century).
❖ The fort finally **fell into ruin in 1687**, after **an eight-month-long siege** led to its fall at the hands of the **Mughal emperor Aurangzeb**.
❖ **Qutb Shahi Sultans developed the present architecture**, a gigantic granite stronghold.

- ❖ The inner fort **contains ruins of palaces, mosques and a hilltop pavilion**, which rises about 130 meters high and gives a bird's eye view of other buildings.
- ❖ **Acoustical effects at Fateh Darwaza (Victory gate)** are one among the many famous engineering marvels at Golconda.

4.3 THIRUVAVADUTHURAI MATTH

- ❖ Recently **PM placed the Sengol or sceptre** presented by **head of Thiruvavaduthurai Math** to India's first PM, in the **new Parliament building**.
- ❖ It was established by **Namasivaya Murthy**, **a Saivite saint and scholar**, in 16th century, and is a **non-Brahmin Math**.
- ❖ The Math, foremost **among the 18 Saivite Maths**, has made **unparalleled contributions to the Tamil language, music and Saivite philosophy**.
- ❖ It is **one of the richest religious institutions**, owning thousands of acres of land across the State, managing over 50 temples, 69 branches of the Math and educational institutions.
- ❖ The **Heads of Math were also patrons of Tamil scholars and musicians**.
- ❖ **Thirumoolar**, **Siddhar** and **one of the Saivaite saints and author of Thirumanthiram**, attained **enlightenment under a Peepal tree** in Thiruvavaduthurai.
- ❖ **Thiruvavaduthurai** gets its name from the **legend** that **Goddess Parvathi worshipped Lord Siva as a cow**. **'Aa' means cow** and **'thurai' means the riverside**.
  - ✓ Math is **on the southern banks of river Cauvery**.

4.4 "HAMARI BHASHA, HAMARI VIRASAT"

- ❖ The Ministry of State for Culture inaugurated the exhibition **"Hamari Bhasha, Hamari Virasat "** under the Azadi Ka Amrit Mahotsav (AKAM) at the **National Archives of India in New Delhi,** commemorating the **75th International Archives Day.**

ABOUT THE EXHIBITION

- ❖ The exhibition aims to celebrate India's linguistic diversity, highlighting its status as one of the most linguistically diverse countries globally, with approximately **788 languages spoken.** India is thus one of the four most linguistically diversified countries in the world, along with **Papua New Guinea, Indonesia, and Nigeria.**
- ❖ The exhibition features a variety of original manuscripts, including the ancient Gilgit Manuscripts (written between the **5th -6th centuries CE,** which is the oldest surviving manuscript collection in India), **Tattvartha Sutra (Ancient Jain Text), Ramayana, and Srimad Bhagwad Gita,** among others. Furthermore, the **National Archives of India** has made over **72,000 manuscripts available**, both physically and through digitization, ensuring their accessibility to people worldwide.

WHAT ARE MANUSCRIPTS?

- ❖ A **manuscript** is a handwritten composition on **paper, bark, cloth, metal, palm leaf** or any other material dating back at least seventy-five years that has significant scientific, historical or aesthetic value.
- ❖ These are found in hundreds of **different languages and scripts.** Often, one language is written in a number of different scripts.
- ❖ For example, **Sanskrit** is written in **Oriya script, Grantha script, Devanagari script and many other scripts.**
- ❖ These are distinct from historical records such as epigraphs on rocks, farmans, revenue records which provide direct information on events or processes in history. Manuscripts have knowledge content.

ABOUT GILGIT MANUSCRIPTS:

- ❖ It was written between the **5" -6" centuries CE,** which is the oldest surviving manuscript collection in India.
- ❖ It was written on the **birch bark folios documents** written on pieces of inner layer of the bark of birch trees were found in **Kashmir region.**
- ❖ It contains both **canonical and non-canonical Jain and Buddhist works** that throw light on the evolution of many religious-philosophical literature.

ABOUT THE DAY

❖ **International Archives Day** is a day of celebration and awareness of the importance and value of archives and archivists. It is celebrated on **June 9** every year, since 2008, to commemorate the date when the International Council on Archives (ICA) was created under the auspices of **UNESCO in 1948.**

4.5 JAGANNATH PURI YATRA

❖ Jagannath Puri Yatra begun recently.
❖ Also known as the **'Festival of Chariots'**, this occasion begins in **the month of Ashadha**.
❖ The **festival signifies the annual visit of Lord Jagannath, Balaram, and Subhadra** to the **Gundicha temple in Odisha**.
❖ Every year, the **Rath Yatra takes place for nine days and is known as the biggest chariot procession globally**.
❖ The three chariots carrying the deities are built and embellished in preparation to begin the yatra
❖ These are **constructed by expert carpenters known as 'Maharana'**.
❖ Each of the chariots has its own name.
   ✓ While **Lord Jagannath's chariot is called Nandighosh, Lord Balabhadra, and Devi Subhadra's chariots are named Taladhwaja and Darpadalana respectively**.
   ✓ These raths are carried by devotees

ABOUT JAGANNATH TEMPLE

❖ The temple is **believed to be constructed in the 12th century by King Anatavarman Chodaganga Deva** of the **Eastern Ganga Dynasty**.
❖ Main temple is constructed, **in Kalinga architecture**, in such a way that **no shadow of temple falls on ground at any time of the day**.
❖ Jagannath Puri temple **is called 'Yamanika Tirtha'** where, according to Hindu beliefs, **the power of 'Yama', the god of death has been nullified in Puri due to the presence of Lord Jagannath.**
❖ This temple was **called the "White Pagoda"** and is **a part of Char Dham pilgrimages (Badrinath, Dwaraka, Puri, Rameswaram).**
❖ There are **four gates to the temple**-
   ✓ **Eastern 'Singhdwara'** which is the main gate with two crouching lions,
   ✓ **Southern 'Ashwadwara'**,
   ✓ **Western 'Vyaghra Dwara** and
   ✓ **Northern 'Hastidwara'**.
   ✓ There is a carving of each form at each gate.

4.6 STATUE OF UNITY

The **Statue of Unity Area Development and Tourism Governance Authority** (SOUADTGA) has recently issued a tender to resume the suspended helicopter joyride services at the Statue of Unity.

ABOUT STATUE OF UNITY

❖ It was **created** as a tribute to the **'Iron Man of India'**, Sardar Vallabhbhai Patel.
❖ It is **located in Gujarat**, by the **banks of River Narmada on the River Island of Sadhu Bet** overlooking the **Narmada Dam**.
❖ The **statue**, 182-metre tall, is **described as the world's tallest as it exceeds the height of China's Spring Temple Buddha by 177 feet**.
❖ The statue **was built by Indian construction major Larsen & Toubro (L&T)** and **designed by Padma Bhushan-winning sculptor Ram V Sutar.**

4.7 AMBUBACHI MELA

- ❖ **Ambubachi Mela**, four day annual fair, begun recently at **Kamakhya temple** located atop the **Nilachal hills in Guwahati**, Assam.
- ❖ This mela is also **known as Ameti or Tantric fertility festival**.
- ❖ It is **celebrated during the monsoon season** that happens to fall during the Assamese month Ahaar, around the middle of June.
- ❖ It is celebrated to mark the annual menstruation of Goddess Kamakhya (reigning deity).
- ❖ It also marks as an occasion to promote awareness about menstrual hygiene.

ABOUT KAMAKHYA TEMPLE

- ❖ Kamakhya Temple is **one of the 52 Shakti peeths or Seat of Shakti followers**.
- ❖ It is one of the **most revered centres of Tantric practices**.
- ❖ It had been **modelled out of a combination of two different styles**- the **traditional nagara or North Indian** and **Saracenic or Mughal style of architecture**.
  - ✓ This **unusual combination** has been named the **Nilachala Style of Architecture**.
- ❖ This is the **only temple of Assam having a fully developed ground plan**.

4.8   UPANISHADS

- ❖ PM gifted a **first edition print** of book **"The Ten Principal Upanishads"** (from 1937) to US President.
- ❖ The book is **translated from Sanskrit by Shri Purohit Swami** and **Irish poet WB Yeats** (won Nobel Prize in Literature in 1923).
- ❖ Upanishads are **one of the four texts** that together compile each of the **Vedas (Rig, Yajur, Sama, and Atharva)**.
- ❖ **Upanishad** is derived from **upa (near), ni (down) and sad (to sit)**. Hence, the **term implies the pupils, intent on learning, sitting near the teacher to acquire knowledge and truth**.
- ❖ They **serve to explore the fundamental principles of the religion**.
- ❖ Dated to **roughly 800-500 BC**, Upanishads discuss concepts such as transmigration.
- ❖ There are **over 200 Upanishads**, of these, **only 10 are the principal Upanishads: Isha, Kena, Katha, Prashan, Mundaka, Mandukya, Tattiriya, Aitareya, Chhandogya and Brihadaranyaka.**
- ❖ The Upanishads are the **most sacred late Vedic and post-Vedic Sanskrit texts** which are considered to contain **the ultimate truth and the knowledge that leads to spiritual emancipation**.

4.9   KHARCHI PUJA

- ❖ PM recently greeted people on the occasion of **Kharchi Puja**.

ABOUT KHARCHI PUJA

- ❖ **Kharchi Puja**, also called the **Festival of 14 Gods, is celebrated in Tripura**.
  - o The 14 Gods are worshipped by the Royal priest, 'Chantai.
- ❖ It is **performed during the months of July-August** on the eighth day of the **new moon**.
- ❖ Kharchi is derived from two Tripuri words–'**khar' or kharta meaning sin** and '**chi' or si meaning cleaning**.
- ❖ Festival is centred around worship of **Chaturdasa Devata, ancestral deity of the Tripuri people**.
- ❖ It **lasts for seven days**, and it takes place at old **Agartala in the Fourteen Gods temple** known as the **'Chaturdasha Devata' temple premises**.
- ❖ The Kharchi Puja **deities do not have a full body**; they have **only heads which are worshipped.**
- ❖ On the day of the puja, **the fourteen Gods** are taken from the temple to the **river Saidra** by the **Chantai members** and given bathe with the holy river water, **then carried back to the temple**.

4.10   TAM PA LING

- ❖ Recent research **focuses on Tam Pà Ling Cave** for studying the arrival of modern humans in mainland Asia.
- ❖ It revealed that **humans were present in the vicinity of Tam Pà Ling Cave for roughly 56,000 years**.

- ❖ The age of the lowest fossil, suggests modern **humans arrived in this region between 86,000 and 68,000 years ago.**
- ❖ Even researchers found **a toothsome 150,000 years old belonging to a Denisovan**.
- ❖ This suggests the **site may lie on a previously used dispersal route among hominins.**

ABOUT TAM PÀ LING CAVE

- ❖ It is a **sloping cave situated high** in the **Annamite mountain range** in **Northern Laos**.
- ❖ The **stratigraphy of the site indicates formation by periodic slope wash deposition** from the muddy slope at the entrance of the cave.

ABOUT DENISOVANS

- ❖ Denisovan are the **now-extinct human relatives** otherwise known **only from remains found in Siberia and Tibet**.
- ❖ They lived lakhs of years ago, **coexisting with Neanderthals in some regions** and **interbreeding with early modern humans** in some cases.
- ❖ They were **first identified as a separate species in 2010**, following the discovery of a fragment of a finger bone and two teeth, **dating back to about 40,000 years ago, in the Denisovan Cave in Siberia**.

5. SCIENCE AND TECHNOLOGY

5.1   ACINETOBACTOR BAUMANNII

❖ Scientists used **AI** to discover a **new antibiotic abaucin** that can **kill a deadly superbug Acinetobacter baumannii**.

ABOUT ABAUCIN

❖ Abaucin is **known to compromise the normal function of a protein called CCR2**.
❖ It was originally **developed to treat diabetes**.
❖ Abaucin had **"modest bactericidal activity against A. baumannii"** in a medium containing other compounds that the bacteria resisted.

ABOUT ACINETOBACTER

❖ **Acinetobacter** is a **group of bacteria** commonly found in **environment, like in soil and water**.
❖ Most common cause of infections is **Acinetobacter baumannii**, which accounts for **most Acinetobacter infections in humans**.
❖ **A. baumannii** is a **Gram-negative bacteria**, which means it **has a protective outer membrane that allows it to resist antibiotics**.
   ✓ It has been **associated with hospital-acquired infections in India**.
❖ It can **cause infections in blood, urinary tract, and lungs, or in wounds**.
❖ **WHO** has **classified it as a critical threat among its "priority pathogens"** – a group of bacteria families that pose greatest threat to human health.

SIGNIFICANCE

❖ **This discovery is significant because** of the rise of **antimicrobial resistance** and the **struggle to identify new classes of antibiotics**.
❖ It also clarifies how machines can help speed up the identification, discovery, and testing of new antibiotics.

ABOUT AMR

❖ It refers to the **ability of microbes to evolve to resist the drugs** that have been developed to beat them.
❖ As a result, **many drugs, but especially antibiotics, have become less effective or ineffective against disease-causing bacteria**, allowing the diseases to become more prevalent again.
❖ The **global cost of antimicrobial resistance is expected to be $300 billion to more than $1 trillion every year**.
❖ **India** is a **'hotspot'** of **antimicrobial resistance** because of-
   ✓ overuse of antibiotics, among people and animals,
   ✓ improper disposal of pharmaceutical waste etc.

5.2   NEURALINK CHIP

❖ **Elon Musk's** neurotechnology company **Neuralink** has received **US Food and Drug Association** approval to **begin human trials**.
❖ Neuralink is making **a Class III medical device** known as **a brain-computer interface (BCI).**
❖ The **device connects the brain to an external computer via a Bluetooth signal, enabling continuous communication** back and forth.
❖ **Working**
   ✓ The device **itself is a coin-sized unit called a Link**. It's implanted within a small disk-shaped cutout in the skull **using a precision surgical robot**.
   ✓ The robot splices **a thousand tiny threads from the Link to certain neurons in the brain**.
   ✓ **Each thread is about a quarter the diameter of a human hair**.

❖ **Benefits**- the device could **enable precise control of prosthetic limbs, giving amputees natural motor skills**.
   ✓ It could **revolutionise treatment for conditions such as Parkinson's disease, epilepsy**, and **spinal cord injuries**.
   ✓ It also shows **some promise for potential treatment of obesity, autism, depression, schizophrenia and tinnitus**.

5.3 SONIC BOOM

❖ A sonic boom rattled US's Washington and Virginia after two F-16 fighter jets chased an "unresponsive aircraft" through the sky.

ABOUT SONIC BOOM-

❖ A **sonic boom is a thunderous noise caused by an object**, like an aircraft, **moving faster than the speed of sound**.
❖ **Mechanism**- As the **object zooms through the sky**, the **air molecules around it are pushed aside with tremendous force, generating shock waves along its flight path**.
   ✓ The **release of pressure, following the shock waves' buildup**, is **heard as the sonic boom**.
❖ The **intensity of the sonic boom is determined by**
   ✓ the **distance between the craft and the ground**,
   ✓ **size and shape of the aircraft**,
   ✓ **types of maneuvers that it makes**, and
   ✓ **atmospheric pressure, temperature, and winds**.
❖ Generally, **a larger aircraft will cause stronger shock waves**, and **therefore, a louder sonic boom**.
   ✓ **Double sonic booms** can be detected if the **aircraft is of extra length**, one emanating from the **leading edge of the plane** and **one from the trailing edge**.

5.4 PHAGE THERAPY

❖ A recent study shows that the **public is in favour of the development of phage therapy i.e bacteria-killing viruses as an alternative to antibiotics**.

BACKGROUND

❖ There has been an **increase in Antimicrobial Resistance (AMR)** due to **improper and over use of antibiotics**.
❖ **Antibiotics**, while removing harmful bacteria, **simultaneously decimates the microbiota**.
❖ As per some estimates, AMR will **result in death of 10 million people from drug resistance diseases** every year **by 2050**.

ALTERNATIVE

❖ **Bacteriophage therapy** or simply phage therapy holds promise **as an alternative treatment option**.
   ✓ **Bacteriophages, or phages**, are **viruses that infect and replicate only in bacterial cells**.
   ✓ Bacteriophages were **discovered by Frederick Willian Twort in 1915 (Great Britain)** and **Felix d'Herelle in 1917 (France)**.
❖ **Each phage targets** only **a particular bacterial strain or species**.
❖ **Advantages**
   ✓ The most striking advantage of bacteriophage therapy is the **ability to tailor treatment accurately to kill the pathogenic bacteria — provided the diagnostic procedures are highly accurate.**
   ✓ Phages are **unlikely to damage human cells** due to significant differences in bacterial cells and human cells.
   ✓ Since they can replicate, **initial dosage can be relatively small**.
   ✓ **Inherently nontoxic** as they **are made up of nucleic acids and proteins**.
❖ **Issues**
   ✓ **Lack of clinical trials,**

- ✓ **time consuming process of finding right phages**,
- ✓ it will **also require re-training of medical professionals** to focus on **accurately diagnosing specific pathogens**.
- ✓ **difficulties in patenting phages** as they are natural entities etc.

5.5 FATTAH MISSILE

- ❖ As tensions with the US over Tehran's nuclear programme remain high, Iran has added a new weapon to its arsenal in the form of a hypersonic missile that can fly at **15 times the speed of sound.**
- ❖ The Missile is named by the **Iranian Supreme Leader Ayatollah Ali Khamenei 'Fattah'** in Farsi, which means **conqueror.**
- ❖ The Missile is the first-ever domestically-made hypersonic ballistic missile created by **Islamic Revolutionary Guard Corps (IRGC), Iran.**
- ❖ The missile had a range of up to **1,400 kilometres (870 miles).**
- ❖ The Speed of the missile is **Mach 15.**
- ❖ It can bypass the most advanced **anti-ballistic missile systems**.

HYPERSONIC MISSILES

- ❖ Hypersonic missiles are maneuverable, unlike the ballistic missiles that follows a set course or a ballistic trajectory.
- ❖ It moves at **5 times the speed of sound** or greater and are manoeuvrable, making them difficult for defence systems and radars to target.
- ❖ Like traditional ballistic missiles, they can deliver nuclear weapons.

5.6 SECURITIES APPELLATE TRIBUNAL (SAT)

- ❖ **The Securities Appellate Tribunal (SAT)** quashed the order passed by the **Securities and Exchange Board of India (SEBI)** cancelling Brickwork Ratings' licence as a credit rating agency.

ABOUT SECURITIES APPELLATE TRIBUNAL (SAT):-

- ❖ It is a statutory body established under the provisions of the Securities and Exchange Board of India Act, 1992.
- ❖ It hears and disposes of appeals against orders passed by the **Securities and Exchange Board of India, the Pension Fund Regulatory and Development Authority (PFRDA) and the Insurance Regulatory Development Authority of India (IRDAI).**
- ❖ It consists of a **Presiding Officer & Two other members.**
- ❖ The Presiding officer shall be appointed by the Central Government in consultation with the Chief Justice of India or his nominee.
- ❖ It has the same powers as vested in a **civil court.** Further, if any person feels aggrieved by SAT's decision or order can appeal to the Supreme Court.

SECURITIES AND EXCHANGE BOARD OF INDIA (SEBI)

- ❖ **The Securities and Exchange Board of India** was established as a statutory body in the year 1992 and the provisions of the Securities and Exchange Board of India Act, 1992 (15 of 1992) came into force on January 30, 1992.
- ❖ The basic functions of the Securities and Exchange Board of India is to protect the interests of investors in securities and to promote and regulate the securities market.

PENSION FUND REGULATORY AND DEVELOPMENT AUTHORITY (PFRDA)

- ❖ **The Pension Fund Regulatory and Development Authority (PFRDA)** is a statutory regulatory body established under the Pension Fund Regulatory and Development Authority Act, 2013.
- ❖ It was established to oversee the National Pension System (NPS), and regulate India's pensions sector.

INSURANCE REGULATORY DEVELOPMENT AUTHORITY OF INDIA (IRDAI)

- ❖ **The Insurance Regulatory and Development Authority of India (IRDAI or IRDA)** was established in India in 2000 under **the Insurance Regulatory and Development Authority Act, of 1999.**
- ❖ It was formed based on the recommendations of the **Malhotra Committee**, which advocated for reforms in the insurance sector.

5.7   PRADHAN MANTRI KRISHI SINCHAYEE YOJANA (PMKSY)

- ❖ The **Jharkhand government** has formed a four-member panel to conduct a **"high-level investigation"** into "widespread irregularities" in the implementation of **"Per Drop More Crop"** , a key element of the Centre's ambitious **Pradhan Mantri Krishi Sinchayee Yojana.**

ABOUT THE SCHEME

- ❖ The scheme **"Pradhan Mantri Krishi Sinchayee Yojana: Per Drop More Crop"** was launched by the Dept. of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Govt. of India on **1st July 2015.**
- ❖ The scheme mainly focuses on enhancing water use efficiency at the farm level through **Micro Irrigation** (Drip and Sprinkler Irrigation System). Besides, it also supports micro-level water storage, and water conservation/management activities (Other Interventions) to supplement source creation for Micro Irrigation.
- ❖ **PMKSY** is a **Centrally Sponsored Scheme** (Core Scheme). Centre- States will be **60:40** per cent. In the case of the north-eastern region and hilly states, it will be **90:10.**

OBJECTIVES:

- ❖ Increase the area under micro irrigation technologies to enhance water use efficiency in the country.
- ❖ Increase the productivity of crops and income of farmers through precision water management.
- ❖ Promote micro-irrigation technologies in water-intensive/consuming crops like **sugarcane, banana, cotton, etc.,** and give adequate focus to extend the coverage of field crops under micro-irrigation technologies.
- ❖ Make potential use of micro irrigation systems for promoting fertigation.
- ❖ Promote micro-irrigation technologies in **water-scarce, water-stressed, and critical groundwater blocks/districts.**

COMPONENTS OF SCHEME

- ❖ **Accelerated Irrigation Benefits Programme (AIBP):**
  - ✓ It aims for financial support to **irrigation projects**.
  - ✓ The inclusion criteria have been relaxed for projects under tribal and drought-prone areas.
- ❖ **Har Khet Ko Pani (HKKP):**
  - ✓ It aims for the enhancement of physical access on the farm and the expansion of cultivable areas under assured irrigation.
  - ✓ It consists of four sub-components, being **Command Area Development & Water Management (CAD&WM), Surface Minor Irrigation (SMI), Repair, Renovation and Restoration (RRR) of Water Bodies, and Ground Water (GW) Development component.**

5.8   PREPAID PAYMENT INSTRUMENTS (PPIS)

- ❖ A committee formed to assess Customer Service Standards in RBI Regulated Entities has advised extending Deposit Insurance and Credit Guarantee Corporation (DICGC) coverage to PPIs.

ABOUT PREPAID PAYMENT INSTRUMENT (PPI)

- ❖ **Prepaid Payment Instruments (PPIs)** are a form of digital payment that allows users to **buy goods and services, transfer funds, and pay bills using the value stored in them.**
- ❖ PPIs can be issued by banks or other entities authorized by the **Reserve Bank of India (RBI)** under the **Payment and Settlement Systems Act 2007**, and they can be in various formats such as cards, mobile wallets, or online accounts.

Types

- ❖ There are two types of PPIs – small PPIs and full-KYC (know your customer) PPIs.
    - ✓ **Small PPIs have a limit of Rs 10,000** and do not require full-KYC verification. They can be further divided into two subcategories: those that can be loaded with cash and those that cannot.
    - ✓ **Full-KYC PPIs have a higher limit of Rs 2 lakh** and require the user to provide identity and address proof. PPIs can be loaded or reloaded using various methods, such as cash, bank account transfer, or credit and debit cards. However, cash loading is restricted to **Rs 50,000 per month** and is subject to the overall limit of the PPI.
- ❖ Currently, **PPIs** do not have any protection against fraud or unauthorized transactions, unlike bank deposits which are covered by **the Deposit Insurance and Credit Guarantee Corporation (DICGC).**
- ❖ A committee appointed by the RBI to review the **Customer Service Standards** in **RBI Regulated Entities** has suggested that the RBI should consider extending DICGC cover to PPIs as well.
- ❖ This would mean that **PPI holders** would get compensation in case of loss of money due to fraud or failure of the PPI issuer. If this recommendation is accepted by the RBI, it would be a big relief for PPI holders.

DEPOSIT INSURANCE AND CREDIT GUARANTEE CORPORATION (DICGC)

- ❖ The **Deposit Insurance and Credit Guarantee Corporation (DICGC)** is a specialised division of the Reserve Bank of India (RBI) that provides deposit insurance to bank customers in India.
- ❖ Deposit insurance is a system that protects the deposits of small savers in case of a bank failure.
- ❖ **The DICGC was established in 1978** under the DICGC Act, 1961 and is under the jurisdiction of the Ministry of Finance, Government of India.
- ❖ Deposit insurance covers all types of bank deposits, such as savings, fixed, current and recurring deposits, up to a limit of **Rs. 500,000 per depositor per bank.** This limit was increased from **Rs. 100,000 to Rs. 500,000** in February 2020.
- ❖ The premium for deposit insurance is paid by the insured banks themselves, so the depositors do not have to bear any cost for this protection. **The DICGC** has the power to cancel the registration of a bank if it fails to pay the premium for three consecutive half-year periods.

5.9   ONE-TIME SETTLEMENTS (OTS)

- ❖ **The Reserve Bank of India (RBI)** has overhauled regulations governing **one-time settlements (OTS)** with defaulters and technical write-offs of loans to harmonise the instructions across all regulated entities.

OTS SCHEME

- ❖ The **One-time Settlement (OTS)** tool is used by lenders to recover dues from individuals with a default payment history. The lender agrees for a **one-time settlement amount** which will be lower than the total amount due.

PURPOSE OF THE DETAILED GUIDELINES

- ❖ The primary objective of the detailed guidelines provided by the **RBI** is to establish a comprehensive framework for **OTS and technical write-offs.**
- ❖ These guidelines aim to define the **process, set precedents, and outline a graded framework for staff accountability,** all within specific timelines.
- ❖ The guidelines also emphasize the need for a **settlement policy** that includes permissible sacrifices for different exposures and focuses on maximizing recovery while minimizing expenses.

APPROVAL REQUIREMENTS

- ❖ The RBI mandates that compromise settlements for fraud or willful defaulters must receive approval from the board of the regulated entity. In cases where the payment period for a compromise settlement exceeds **three months**, it will be treated as a restructuring.
- ❖ Such compromise settlements, along with technical write-offs, need to be approved either by the Managing Director and CEO or a board level committee, and subsequently reported to the board.

COOLING PERIOD

❖ Borrowers opting for an OTS are subject to a cooling period of at least 12 months for farm credit exposures. During this period, regulated entities cannot assume fresh exposures with these borrowers. Additionally, when there are ongoing judicial recovery proceedings against a borrower, any settlement reached must be approved by the judicial authorities, as specified by the RBI.

EXPANSION OF OTS FRAMEWORK

❖ An important development is the extension of the OTS framework to include **urban co-operative banks (UCBs).** Previously, this framework was limited to commercial banks. This expansion acknowledges the growing reliance of commercial banks on OTS as an effective means of recovery, particularly in light of the delays and complexities associated with other recovery routes such as the Insolvency and Bankruptcy Code (IBC).

5.10 DRISHTI MISSION'

❖ An **IIT-Madras**-incubated space-tech startup, **GalaxEye Space Solutions Pvt Ltd(Galaxeye Space)**, is building the world's first multi-sensor earth observation satellite **"Drishti".**

ABOUT MISSION

❖ The startup is going to launch **"Drishti mission"**, its **first satellite**, in **2024.**
❖ It will be **India's first** and the world's highest-resolution multi-sensor imaging satellite.
❖ **GalaxEye** is focused on deploying a satellite constellation featuring a unique sensor based on data fusion to provide the most comprehensive dataset of imagery from space.
❖ This data **fusion technology** will deliver unprecedented insights and data from space, enabling satellite constellations to **conduct all-weather imaging** without being hindered by atmospheric interference commonly experienced by single-sensor satellites.
❖ The technology will allow the production of extremely high-resolution images through a compact satellite constellation, and will provide global coverage in less than **12 hours.**

ABOUT GALAXEYE SPACE SOLUTIONS PVT LTD:

❖ Galaxeye was established in 2021 by a team of 5 students/alumni of IIT- Madras who were qualified as the only Asian Finalists at the SpaceX Hyperloop Pod Competition 2019.
❖ Chief Executive Officer (CEO)– Suyash Singh
❖ Headquarters– Bengaluru, Karnataka

5.11 JATAN VIRTUAL MUSEUM BUILDER

❖ The Central government plans to complete **3D digitisation of all museums** under its administrative control by the year-end for better conservation of artefacts.

KEY HIGHLIGHTS

❖ Museums include **Salar Jung museum, Hyderabad, the Allahabad Museum in Prayagraj, the Indian Museum, Kolkata, the Victoria Memorial Hall, the National Museum and the National Gallery of Modern Art.**
❖ Besides aiding conservation, **3D digitisation** in the museum space can offer visitors new ways to access and explore the collection.
❖ **3D models** can be used in augmented reality and virtual reality learning experiences, and facilitate **3D printing.**

3D SCANNING

❖ It will mean analysing a real-world object or environment to collect three-dimensional data of its shape and possibly its appearance. The collected data is then used to construct **digital 3D models.**
❖ The entire process was being carried out by the **Ministry of Electronics and Information Technology (MeitY)**. A Memorandum of Understanding has been signed between the MeitY and Union Culture Ministry for this.

JATAN VIRTUAL MUSEUM BUILDER SOFTWARE

❖ The **3D digitisation** would be done using the **JATAN virtual museum builder software** which has been designed and developed by **Human Centres Design and Computing Group, Centre for Development of Smart Computing, Pune.**

❖ **JATAN** is a digital collection management system for Indian museums.

❖ It is a client server application with features such as image cropping, watermarking, unique numbering, and management of digital objects with multimedia representations.

❖ It can create 3D virtual galleries and provide public access through web, mobile or touch screen kiosks.

ABOUT C-DAC

❖ It is the apex research and development wing of the **Ministry of Electronics and Information Technology.**

❖ It was established in the year **1988.**

❖ Its main purpose was to carry out research and development in **Electronics, IT and other associated areas.**

❖ It was setup to build **Supercomputers** in the context of the denial of the import of **Supercomputers by the USA.**

❖ C-DAC build India's first indigenously built **supercomputer Param 8000 in 1991.**

❖ **Applications of Param 8000:** long-range weather forecasting, remote sensing, drug design and molecular modelling.

5.12 HIROSHIMA AI PROCESS

❖ The annual **Group of Seven (G7) Summit**, hosted by **Japan**, took place in **Hiroshima** initiated the **Hiroshima AI process (HAP).**

❖ **HAP** is an effort by **G7 countries** to determine a way forward to regulate **artificial intelligence (AI).**

❖ **Hiroshima AI process (HAP)** made a plan for ministers from the respective countries to meet by the end of the year to establish common rules on promoting **trustworthy AI.**

❖ **HAP** will work in cooperation with the **OECD and Global Partnership on Artificial Intelligence (GPAI)** will discuss on generative AI by the end of this year.

GLOBAL PARTNERSHIP ON AI (GPAI)

❖ It is an international initiative to support responsible and human-centric development and use of **Artificial Intelligence (AI).**

❖ **Aim** - To bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.

❖ It built around a shared commitment to the **OECD Recommendation on Artificial Intelligence.**

❖ **GPAI** is a group of **25**-member countries.

❖ **India** joined the group as a founding member in 2020.

❖ It brings together engaged minds and expertise from **science, industry, civil society, governments, international organisations and academia to foster international cooperation.**

G7

❖ It is an **intergovernmental economic group** consisting of **7 largest IMF** advanced economies such as **Canada, France, Germany, Italy, Japan, the UK, and the US.**

❖ **EU** is also represented within the **G7** as an invitee.

❖ These countries are the **7 major advanced economies** as reported by the **IMF.**

❖ Formerly called **G8 with Russia** in it, but due to **Crimean crisis, Russia** was ejected from the group.

❖ **G7 summit** is being held annually to discuss economic policies, while the **G7 finance ministers** have met at least semi-annually.

❖ It has no binding impact on policy, and all decisions and commitments made at **G7 meetings** need to be ratified independently by governing bodies of member states.

5.13 VAISHVIK BHARTIYA VAIGYANIK (VAIBHAV) PROGRAMME

❖ The Government has launched a new fellowship programme to **connect the Indian STEMM** (Science, Technology, Engineering, Math & Medicine) diaspora with **Indian academic and R&D institutions for collaborative research work** leading to sharing of knowledge, wisdom, and best practices in the frontier areas of science & technology.

ABOUT VAIBHAV FELLOWSHIPS PROGRAMME:

❖ The **VAIBHAV** Fellowships Programme is designed to **promote** collaboration and research engagement between outstanding scientists and technologists of Indian origin residing outside of India and Indian institutions.

❖ The fellowship is **open to NRIs** (Non-Resident Indians), **OCIs** (Overseas Citizens of India), and **PIOs** (Persons of Indian Origin) who are actively involved in research activities in their respective countries.

❖ VAIBHAV Fellows is required to **identify** an Indian institution for collaboration and can spend up to two months per year for a maximum period of three years in India.

❖ Funding provided by the government for the fellowship amounts to **INR 4,00,000 per month** for the entire duration.

❖ The **primary aim** of the programme is **to enhance** the research ecosystem in Indian higher educational institutions by facilitating collaborations between Indian institutions and renowned global institutions.

❖ The programme achieves this by promoting the mobility of faculty and researchers from overseas institutions to India.

❖ To be eligible for the fellowship, researchers must be affiliated with institutions ranked in **the top 500 of the QS World University Rankings.**

❖ Applicants **must hold** a Ph.D., M.D., or M.S. degree from a recognized university.

❖ A total of **75 fellows** will be selected and invited to work in 18 identified knowledge verticals, including quantum technology, health, pharmaceuticals, electronics, agriculture, energy, computer sciences, material sciences, and more.

❖ The implementation of the VAIBHAV Fellowships Programme is **overseen** by the **Department of Science and Technology (DST) under the Ministry of Science and Technology.**

5.14 CHOLEDERM

❖ An advanced wound care product developed by the **Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST),** named **Cholederm,** has won the approval of the **Central Drugs Standard Control Organisation (CDSCO)** as a **Class D medical device.**

❖ Cholederm is a **wound healing material** derived from the extracellular matrix of **the de-cellularised gall bladder of pigs and tissue engineered as membrane forms of a scaffold.**

❖ It healed different types of skin wounds including burn and diabetic wounds in rats, rabbits or dogs etc. faster than similar products currently available in the market

❖ It is the **first indigenously developed product** to meet all regulatory requirements.

❖ The scaffold modulated the scarring reactions in subcutaneous, skeletal-muscle and cardiac tissues.

❖ It is the **Central Drug Authority** for discharging functions assigned to the Central Government under the **Drugs and Cosmetics Act of 1940.**

❖ It works under the **Ministry of Health & Family Welfare.**

❖ **Drugs Controller General of India (DCGI):**

❖ DCGI is the head of the department of the CDSCO of the Government of India responsible for approval of licences of specified categories of drugs such as blood and blood products, IV fluids, vaccines and sera in India.

5.15 BRAIN ELECTRICAL OSCILLATION SIGNATURE PROFILING

❖ BEOSP, also known as **Brain Fingerprinting/Brain mapping/ P-300 test**, is a **neuro psychological method of interrogation**.

❖ It is designed to bring up the information which could be hidden in a person's brain by **sensing brain wave responses** respective to **words, phrases, or pictures presented**.

- ❖ BEOSP test is **carried out via a process known as electroencephalogram (EEG Machine)**, conducted to study the **electrical behaviour of human brain**.
- ❖ It is **a non-invasive technique with a great degree of sensitivity**.
- ❖ Unlike polygraph test, it **does not involve a question answer session** with accused.
  - ✓ In a **polygraph** test, **accused person's physiological indicators are taken into account which includes blood pressure, pulse rate, respiration and skin conductivity**.
- ❖ **Brain mapping is considered much more credible** than polygraph test.

> BEOS was developed by **Champadi Raman Mukunandan**, a neuroscientist, former professor and **head of clinical psychology at National Institute of Mental Health and Neurosciences, Bangalore**.

COURT'S STAND

- ❖ **Supreme Court,** in **Selvi versus State of Karnataka case (2010)**, stated that **narco analysis, polygraph and brain mapping tests cannot be forced upon any individual without their consent** and test results **cannot be admitted solely as evidence**.

5.16 PHONONS

- ❖ **Scientists have successfully split phonons**, demonstrating **their quantum properties** and ability to manipulate and control quantum states.
  - ✓ Achievement may **lead to development of sound-based versions of quantum computers** or **extremely sensitive measuring devices in future**.
- ❖ A phonon is **a definite discrete unit or quantum of vibrational mechanical energy**, just as a photon is a quantum of electromagnetic or light energy.
- ❖ **These are quasiparticles that represent collective vibrations of atoms or molecules** in a solid material.
- ❖ These are **packets of energy for sound waves**.
- ❖ These need **a medium such as air or water**.
- ❖ **Phonons of different wavelengths can interact and mix when they bump into each other**, producing **a different wavelength**.

5.17 GEMCOVAC-OM

- ❖ **India's first indigenous mRNA vaccine** for the **Omicron variant, GEMCOVAC-OM**, developed by Pune-based **Gennova Biopharmaceuticals Ltd**, was approved under emergency use guidelines by the **Drug Controller General of India** recently.
- ❖ It is a **mRNA COVID-19 booster vaccine**.
- ❖ It is a **lyophilized (freeze dried) vaccine, stable at 2- 8 °C, is delivered **using a device called Tropis**.
  - ✓ **Tropis** use the **technology that propels liquid at high pressure to deliver vaccines through the skin without utilising needles**.
- ❖ **Clinical trials** and **approval of new drugs/vaccines** are governed by the **New Drugs and Clinical Trial Rules 2019** under the provisions of the **Drugs and Cosmetics Act, 1940.**
- ❖ **Central Drugs Standard Control Organisation** (CDSCO) headed by the **DCGI is the authority** to grant approval of Vaccine.
- ❖ **Vaccine Testing and subsequent approval involves preclinical phase** (without testing on humans) and **three phases of human clinical trials**.

ABOUT MRNA VACCINE

- ❖ It is type of vaccine that **use messenger RNA (mRNA) molecules** to provide instructions to the body's cells for producing a protein that triggers an immune response against a pathogen.
  - ✓ **Messenger RNA** is a type of RNA that is **necessary for protein production**.
- ❖ Once the **mRNA is injected into the body**, the **cells read the instructions** and **produces the protein**.
- ❖ This **then stimulates the immune system to recognize and mount a response** against the targeted pathogen.

❖ mRNA from vaccines **does not enter the nucleus** and **does not alter DNA**.

5.18 BIODEGRADABLE PAPER SUPERCAPACITOR FROM SEAWEEDS

❖ Recently, scientists at **Gujarat Energy Research and Management Institute (GERMI)** have developed the **thinnest, lightweight and biodegradable paper-based supercapacitor.**

ABOUT BIODEGRADABLE SUPERCAPACITOR

❖ Supercapacitor is **an electrochemical charge storage device with a fast charging/discharging cycle, high power density and a longer lifecycle**.
❖ This supercapacitor which **can fully charge a device within 10 seconds**, has been **developed from seaweed** (marine macroalgae).
❖ **Features- high tensile strength and performance**, as well as **cost-effective**
❖ **Applications-** electronics, memory backup systems, airbags, heavy machines, electric vehicles, etc.

ABOUT SEAWEEDS

❖ **Seaweeds are macroalgae** attached to rock or other substrata and are found in coastal areas.
❖ They are the **primitive, marine non-flowering marine** algae **without real tissue differentiation between root, stem and leaves**
❖ They are classified as **Chlorophyta(green), Rhodophyta (red) and Phaeophyta (brown)** based on **their pigmentation**.
❖ **Green seaweed** has a high amount of a particular type of cellulose in its cell wall.
❖ **Large seaweeds form dense underwater forests** known as **kelp forests**, which act as underwater nurseries for fish, snails and sea urchins.

5.19 LAB GROWN DIAMONDS

❖ **PM Modi** has gifted an **eco-friendly lab-grown 7.5-carat diamond**, placed in an exquisite **Kashmiri papier-mâché box**, to the **U.S. First Lady Jill Biden**.
❖ **LGD are developed from a carbon seed** placed in **a microwave chamber and superheated into a glowing plasma ball**.

> **Carat** is the **unit of measurement for the physical weight of diamonds**.
>
> **One carat equals 0.200 grams** or **1/5 gram and is subdivided into 100 points.**

❖ The **process creates particles that crystallize into diamonds in weeks**.
❖ LGDs are **chemically, physically and optically diamond** and thus are difficult to identify as "lab-grown."
❖ LGDs are produced **through 2 technologies-**
   ✓ **High-Pressure High Temperature (HPHT)** and
   ✓ **Chemical Vapour Deposition (CVD).**
   ✓ **India** is one of the **leading producers of these diamonds using CVD technology.**
   ✓ As per industry estimates, **India's share in its global trade in the financial year 2021-22 was 25.8%.**
❖ Applications- Besides the **jewellery industry, lab-grown diamonds are used in computer chips, satellites, and 5G networks** as they can be used in extreme environments due to their potential to operate at higher speeds while using less power than silicon-based chips.
❖ The **lab-grown diamond jewellery market is expected to rapidly rise to $5 billion by 2025 and exceed $15 billion by 2035.**

OTHER INFO

❖ **Kashmiri papier-mâché** involves meticulous **preparation of paper pulp and naqqashi**, where skilled artisans paint elaborate designs.
❖ It has a **GI tag**.

5.20 CHIRAL BOSE LIQUID STATE

- ❖ A recent research by physicists shows that the chiral bose-liquid state may be an entirely new state of matter.
- ❖ Usually **matter exists** as a **solid, liquid or gas**.
- ❖ But, **quantum states of matter**, such as **plasma, time crystals, and Bose-Einstein condensate** also exist at the atomic scale, and at **extremely low temperatures approaching absolute zero**.
- ❖ **Chiral Bose-liquid state** – It is a new phase discovered by physicists in **a frustrated quantum system**, where **infinite possibilities result from the interaction of particles**.
- ❖ The research team developed **a bilayer semiconductor device or a frustration**.
  - ✓ The **top layer** of the device was made **electron-rich**, and had **free movement of electrons**.
  - ✓ The **bottom layer only had holes**, which are **slots an electron can occupy**.
  - ✓ The two layers were brought extremely close together.
  - ✓ The **machine is then triggered to create a local imbalance resulting in electrons** not having **enough holes to** fill (similiar to the game of musical chairs).
  - ✓ This kicks off the **novel state called the chiral bose-liquid state**.
- ❖ This **new state can be used to understand the quantum world better** as in this state the electrons can be **frozen into predictable patterns**, **can be made resilient to changes in spin and** can even **synchronise their movements**.

5.21   PINK BOLLWORM

- ❖ Pink bollworm – responsible for damaging nearly 4 lakh acre of cotton in 2021 – has been observed in certain fields within Bathinda and Mansa districts of Punjab .

ABOUT PINK BOLLWORM (PECTINOPHORA GOSSYPIELLA)

- ❖ It is one **of the most destructive pests of cotton.**
- ❖ Originally native to India, it is **now recorded in nearly all the cotton-growing countries of the world**.
- ❖ Adults only last for 2 weeks, but **females will lay 200 or more eggs**.
- ❖ Adults **lay eggs on cotton bolls; once hatched, the larvae eat the seeds and damage the fibres** of the cotton, reducing the yield and quality.
- ❖ It has **also been observed to attack hibiscus, okra, and hollyhock plants**.

5.22   TITAN AND MATSYA-6000

- ❖ The **Titan** submersible has imploded in the **Atlantic Ocean**.
- ❖ **Titan is a submersible**, or an **underwater vehicle** operated by **the privately owned U.S. company OceanGate** that organises underwater expeditions for **both research and tourism**.
- ❖ Titan tragedy offers lessons for proposed Indian submersible dive because India is in the process of designing the **submersible,'MATSYA 6000'**

ABOUT 'MATSYA 6000'

- ❖ **'MATSYA 6000'** vehicle is being **designed and developed by National Institute of Ocean Technology (NIOT), Chennai** under **Ministry of Earth Sciences**.
- ❖ It will **carry three persons to a depth of 6000 metres** for exploration of **deep-sea resources like minerals into the Indian Ocean**, at a point about 1,500 km away from Kanyakumari.
- ❖ It has an **endurance of 12 hours under normal operation** and 96 hours in case of emergency for human safety.

ABOUT DEEP OCEAN MISSION

- ❖ The Centre had approved the **Deep Ocean Mission** at a total budget of Rs. **4,077 crore** for five years.
- ❖ It is a **multi-ministerial, multi-disciplinary programme** with emphasis on development of deep-sea technology that includes development of Manned Submersible rated for 6000 metre water depth.
- ❖ Also **technologies for deep sea mining, exploration of deep-sea minerals resources and marine biodiversity, development of ocean climate change advisory services, deep sea surveys and exploration, and capacity building in Marine Biology** to be developed.

THE NATIONAL INSTITUTE OF OCEAN TECHNOLOGY (NIOT)
❖ Established in **November 1993** as an **autonomous society** under the **Ministry of Earth Sciences**.
❖ It is managed by a **Governing Council** and **the Director is the head of the Institute.**
❖ Aims to **develop reliable indigenous technologies to solve the various engineering problems associated** with **harvesting of non-living and living resources in** the Indian **Exclusive Economic Zone (EEZ).**

5.23	PROJECT TAARA

❖ Indian telco **Bharti Airtel and Google's parent Alphabet project** are planning to **use lasers to bring Internet services to remote parts of India**.
❖ **Taara**, a project from **Alphabet's X moonshot labs**, aims to bring high-speed Internet access to rural and remote areas of India.
❖ Taara has **already connected internet services in 13 countries, including Australia, Kenya, and Fiji**.
❖ It **uses a technology component from X's failed Loon project**, which tried to deliver Internet connectivity via high-altitude balloons.
❖ Project Taara **utilises Free Space Optical Communication (FSOC) technology** where **free space acts as a communication channel between transceivers that are in line-of-sight.**
   ✓ It **uses beams of light to deliver high-speed, high-capacity connectivity over long distances**.
   ✓ It can transmit **data at high speeds of up to 20 Gbps bidirectional through up to 20 km distances**.
❖ FSOC refers to **outdoor optical wireless communication (OWC), whereas short distance (largely indoors) OWC is called light Fidelity (LiFi).**
❖ **LiFi uses light within Visible Light Spectrum to Invisible light spectrum to transmit data.**
❖ **Benefits** of FSOC- cost-effective and quickly deployable, can transmit data at high speeds.
❖ **Challenges faced**: **signal reliability is compromised by conditions like fog and haze**, or interruptions like **birds flying in front of the signal**; requires better mirror controls and motion detection capabilities etc.

5.24	FIBONACCI SPIRALS

❖ New study shows that **few plants don't follow a Fibonacci pattern**.
❖ Researchers led by the University of Edinburgh have unearthed evidence of **non-Fibonacci spirals in a fossilized plant that lived approximately 407 million years ago.**

ABOUT FIBONACCI SPIRALS
❖ The characteristic of being arranged in spirals that adhere to a numerical sequence called the Fibonacci sequence.
❖ **Spirals occur frequently in nature** and **can be seen in plant leaves, animal shells vortex of hurricane and even in the double helix of our DNA.**
❖ In most cases, **these spirals relate to the Fibonacci sequence** – a **set of numbers where each is the sum of the two numbers that precede it (1, 1, 2, 3, 5, 8, 13, 21 and so on).**
❖ They are **extremely widespread in plants and can even be recognised with the naked eye.**

5.25	5G & BEYOND HACKATHON 2023

❖ The **Department of Telecommunications (DoT)** has announced the **'5G & Beyond Hackathon 2023.**
❖ The **primary objective** of this hackathon is to **identify cutting-edge ideas with an India-focused approach that can be transformed into practical 5G and beyond products and solutions.**
❖ It is **open to individuals, students, start-ups, and academic institutions across India**.

ABOUT 5G

❖ It is the next generation cellular technology that **will provide faster and more reliable communication** with **ultra-low latency.**
❖ The peak network data speeds are expected to be in the **range of 2-20 Gigabit per second (Gbps).**
❖ 5G mainly **works in 3 bands**, namely **low, mid and high frequency spectrum**.

6. DEFENCE

6.1 CMF

- ❖ The **United Arab Emirates** has withdrawn from Combined Maritime Forces coalition.
- ❖ CMF is a **multinational maritime partnership**, that **focuses on counter-narcotics, counter-smuggling, suppressing piracy, training** etc.
- ❖ It was **established in 2001** with headquarters in **Bahrain**.
- ❖ CMF also respond **to environmental and humanitarian incidents**.
- ❖ Combined task forces of CMF **include Maritime Security Operations outside Arabian Gulf, Maritime Security Operations inside Arabian Gulf, Red Sea maritime security** etc.
- ❖ CMF is commanded by **a U.S. Navy Vice Admiral**.
- ❖ **38 Member countries** (before UAE exit)-
  - ✓ **Australia, Bahrain, Belgium, Brazil, Canada, Denmark, Djibouti, Egypt, France, Germany, Greece, India, Iraq, Italy, Japan, Jordan, Kenya, Republic of Korea, Kuwait, Malaysia, the Netherlands, New Zealand, Norway, Oman, Pakistan, the Philippines, Portugal, Qatar, Saudi Arabia, Seychelles, Singapore, Spain, Thailand, Türkiye, UAE, United Kingdom, United States, and Yemen.**

6.2 MH-60R ROMEO

- ❖ The **Indian Navy** achieved a unique feat after **an MH-60 'Romeo' multi-mission helicopter landed** on the **indigenously-built aircraft carrier INS Vikrant**.

ABOUT MH-60R HELICOPTER

- ❖ It is the **world's most advanced maritime helicopter** and is the **most capable naval helicopter** available today designed to operate from frigates, destroyers, cruisers and aircraft carriers.
- ❖ Manufactured by **Lockheed Martin**.
- ❖ It is an **all-weather helicopter** designed to support multiple missions with state-of-the-art avionics and sensors.
- ❖ Main missions of the MH-60R Seahawk are **Anti-Submarine Warfare (ASW)** and **Anti-Surface Warfare (ASuW)**.
- ❖ It can **detect and track submarines and surface ships** and **attack with torpedoes and missiles**.
- ❖ It carries **advanced airborne active sonar**, **multi-mode search radar** and **nose-mounted forward-looking infrared (FLIR) turret**.
- ❖ It has an **integrated self-defense system**.

6.3 AGNI-1

- ❖ A successful **training launch** of a **medium-range ballistic missile, Agni-1** was carried out by the **Strategic Forces Command** from **APJ Abdul Kalam Island, Odisha.**
- ❖ The user training launch **successfully validated all operational and technical parameters** of the missile.

ABOUT SERIES MISSILES

- ❖ The Agni series of missiles are the **mainstay of India's nuclear delivery options**.
- ❖ The development of Agni missiles **started in early 1980** under the **Integrated Guided Missile Development Programme**.
- ❖ The **Agni 1 to 4 missiles have ranges from 700 km to 3,500 km** and they have **already been deployed**.

OTHER AGNI MISSILE TESTS IN RECENT TIMES

- ❖ Last year, India successfully test-fired the nuclear-capable ballistic missile Agni-V that can strike targets at ranges up to 5,000 km.
  - ✓ It is aimed at **boosting India's nuclear deterrence against China** which has **missiles like Dongfeng-41** having ranges **between 12,000-15,000 km.**

- ❖ India also successfully test-fired indigenously-developed **new generation medium-range ballistic missile Agni Prime**.
  - ✓ The missile's strike range is **between 1,000 km and 2,000 km.**

ABOUT INTEGRATED GUIDED MISSILE DEVELOPMENT PROGRAMME (IGMDP)

- ❖ Conceptualised by **Dr A P J Abdul Kalam** to enable India to attain self-sufficiency in the field of missile technology.
- ❖ The missiles developed under the programme were **(P-A-T-N-A)** :-
  - ✓ **Prithvi**- **Short-range surface-to-surface ballistic** missile
  - ✓ **Agni**- **Intermediate-range surface-to-surface ballistic** missile
  - ✓ **Trishul**- **Short-range low-level surface-to-air** missile
  - ✓ **Nag**- Third-generation **anti-tank missile**
  - ✓ **Akash**- **Medium-range surface-to-air** missile

6.4   EXERCISE EKATHA

- ❖ It is an **annual exercise** conducted **between the navies of India and Maldives**.
- ❖ It aims to **enhance interoperability in diving and special operations**.
- ❖ Other exercises:
  - ✓ **The Indian Army and the Maldives National Defence Forces** have been conducting **Exercise Ekuverin** meaning **'Friends'** since **2009**.

6.5   VARUNASTRA

- ❖ The Indian Navy has successfully test-fired an indigenously developed **heavyweight torpedo**, **"Varunastra" in Arabian Sea.**

ABOUT

- ❖ **Varunastra** is a ship-launched **anti-submarine torpedo** and was designed and developed by the **Naval Science and Technological Laboratory in Visakhapatnam under the Defence Research and Development Organisation.**

FEATURES

- ❖ The Varunastra HWT is an electrically-powered torpedo capable of anti-submarine and anti-ship operations. It has a maximum strike range of **40 kilometers** and can travel at speeds of more than **70 kilometers per hour** at a maximum depth of **600 mts.** The torpedo is equipped with an active-passive acoustic homing system and a low-drift inertial navigation system.
- ❖ It has acoustic homing with a wide look angle capable of tracking silent targets.
- ❖ Varunastra was inducted by **Indian Navy in 2016** and can be fired from all **Anti-submarine warfare (ASW)** ships capable of firing heavy-weight torpedoes in an intense counter measures environment.

SIGNIFICANCE

- ❖ The successful engagement of an underwater target by a **Made-in-India** heavy-weight torpedo is a significant milestone in the Indian Navy's and DRDO's quest for accurate delivery of ordnance on target in the underwater domain.
- ❖ It will replace the older torpedoes on all naval ships that can fire a heavyweight torpedo.

6.6   AGNI PRIME'

- ❖ **Defence Research and Development Organisation (DRDO)** has successfully conducted flight tests of the New Generation Ballistic Missile **"Agni Prime"** from **Dr. APJ Abdul Kalam Island** off the coast of Odisha.

AGNI PRIME MISSILE

- ❖ **Agni-P** is a two-stage canisterised **solid propellant ballistic missile** with dual redundant navigation and guidance system.

- It is a canisterised **surface-to-surface ballistic missile with a 1,000–2,000 km** range capability.
- The **Agni-P** is an upgraded version of the Agni class that was developed as part of the **IGMDP (Integrated Guided Missile Development Programme).**
- The Defence Research and Development Organisation created the Agni Prime, also referred to as the Agni P, as a medium-range ballistic missile to replace the **Agni-I and Agni-II missiles.**
- In addition to the most recent navigation technologies, the missile has **new composites, propulsion systems, and inventive guidance and control methods.**
- It was tested for the first time in June 2021.
- It is the **sixth missile** in the **Agni (missile) series** of ballistic missile and lighter than all the earlier Agni series of missiles.

AGNI MISSILES

- **Agni class** of missiles are the mainstay of India's nuclear launch capability, which also includes the **Prithvi short-range ballistic missiles, submarine-launched ballistic missiles and fighter aircraft.**
- Agni missiles are **surface-to-surface ballistic missiles** with a great range and nuclear weapons capability.
- Under **the Integrated Guided Missile Development Programme (IGMDP)**, the **Agni-I**, the first missile in the series, was created and tested in **1989.**
- Realising the strategic significance of the **Agni missile programme** after it was successful and separated from the IGMDP.
- In India's defence budget, it was recognised as a special programme and received sufficient funding for future development. The **Agni series of missiles** is entering service as of November 2019.

> **Integrated Guided Missile Development Program**
>
> - It was conceived by **Dr. A.P.J. Abdul Kalam** to enable India attain self-sufficiency in the field of missile technology. It was approved by the Government of India in 1983 and completed in March 2012.
> - The **5 missiles (P-A-T-N-A)** developed under this program are:
>   - ✓ **Prithvi:** Short-range surface-to-surface ballistic missile.
>   - ✓ **Agni:** Ballistic missiles with different ranges, i.e., Agni (1,2,3,4,5)
>   - ✓ **Trishul:** Short-range low-level surface to air missile.
>   - ✓ **Nag:** 3rd generation anti-tank missile.
>   - ✓ **Akash:** Medium-range surface-to-air missile.

RANGE OF AGNI MISSILES:

- Agni I: Range of **700-800 km.**
- Agni II: Range more than **2000 km.**
- Agni III: Range of more than **2,500 Km.**
- Agni IV: Range is more than **3,500 km** and can fire from a road mobile launcher.
- Agni V: The longest of the Agni series, an **Inter-Continental Ballistic Missile (ICBM)** with a range of over **5,000 km.**
- Agni VI: The longest of the Agni series, an **Inter-Continental Ballistic Missile (ICBM)** with a range of ICBM **11,000–12,000 km (Under development).**

6.7   EXERCISE AIR DEFENDER 23

- **Exercise Air Defender 23**, the **largest air deployment exercise in NATO history**, will be held in **Germany.**

ABOUT EXERCISE

- The **Air Defender 23** exercise will see **10,000 participants** and **250 aircraft** from **25 nations** respond to a simulated attack on a NATO member country.
- The exercise will be held across **Germany**, with some of the training taking place at **Ramstein Air Base**, which is one of NATO's largest air bases.
- The exercise is being held in response to the increased threat posed by **Russia** following its invasion of **Ukraine.** The exercise is designed to demonstrate NATO's readiness to respond to any threat to its airspace.

❖ A total of **25 nations** are actively participating in Air Defender 23. These include **Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Japan, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Slovenia, Spain, Sweden, Turkey, the United Kingdom, and the United States.**

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

❖ It is a military alliance established by the **North Atlantic Treaty (also called the Washington Treaty)** of April, 1949, by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.

❖ There are currently **31-member** states.

❖ Its original members were B**elgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.**

❖ **Joining the original signatories were Greece and Turkey (1952), West Germany (1955, from 1990 as Germany), Spain (1982), the Czech Republic, Hungary, and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017), North Macedonia (2020), and Finland (2023).**

❖ **Headquarters: Brussels, Belgium**

6.8   ANJADIP AND SANSHODHAK

❖ **Two warships Anjadip and Sanshodak** were launched recently.

ANJADIP:

❖ 'Anjadip' is the **3rd of eight ships** of **Shallow Water Craft (SWC) Project.**

❖ The ship has been named Anjadip to **signify** the **strategic maritime** importance accorded to the island of Anjadip, located off Karwar, Karnataka.

❖ The island is connected to the mainland by a breakwater and is **part of INS Kadamba.**

❖ The 'Arnala' class of ships would **replace the current 'Abhay' class of Anti-Submarine Warfare Corvettes of the Navy**.

❖ These are designed to undertake anti-submarine operations in coastal waters, low intensity maritime operations, subsurface surveillance among others.

❖ The ships would have **80 per cent indigenisation.**

SANSHODHAK:

❖ A warship 'Sanshodhak', – the **fourth Survey Vessel Large (SVL)** – of Indian Navy, was launched recently.

❖ The ship named **'Sanshodhak'**, meaning **'Researcher'**, **signifies the primary role of the ship as a Survey Vessel.**

❖ SVL ships will **replace the existing Sandhayak Class survey ships**, with new generation hydrographic equipment, to collect oceanographic data.

❖ With a **capability** to carry **four Survey Motor Boats and an integral helicopter**, the primary role of the ships would be to undertake full scale coastal and deep-water hydrographic surveys of ports and navigational channels.

❖ The ships would also be deployed for collecting oceanographic and geophysical data for defence as well as civil applications.

❖ The SVL will have **over 80 per cent indigenous content.**

6.9   INS VIKRAMADITYA

❖ **INS Vikramaditya** has recently been operationalised after an exhaustive refit lasting nearly two and a half years.

ABOUT INS VIKRAMADITYA:

❖ It is a **modified Kiev-class aircraft carrier** which entered into service with the Indian Navy in 2013.

❖ It has been **renamed** in honour of Vikramaditya, a **legendary emperor of Ujjain, India.**

HISTORY:

❖ The carrier **served** with the **Soviet Navy** and later with the **Russian Navy** (as Admiral Gorshkov) before being decommissioned in 1996.

❖ It was later bought by India in 2004 for $2.33bn.

❖ It was **commissioned in 2013** after refurbishing.

FEATURES:

❖ It has an overall **length** of about **284 meters** and a maximum **beam** of about **60 meters.**

❖ The ship has a total of **22 decks.** It can carry more than 1,600 personnel, including crew.

❖ Displacement: 44,500 Tonnes

❖ It has a **maximum speed** of more than 30 knots and can achieve a maximum range of 7,000nmi.

❖ It can endure up to 45 days at sea.

❖ It is powered by **08 new-generation steam boilers.**

❖ The ship has the **ability to carry** over 30 aircraft comprising an assortment of **MiG 29K/Sea Harrier**, **Kamov 31, Kamov 28, Sea King, ALH-Dhruv and Chetak helicopters.**

❖ The aircraft carrier can be armed with a wide range of weapons, including anti-ship missiles, beyond visual range air-to-air missiles, guided bombs, and rockets.

❖ The ship is **equipped** with state-of-the-art launch and recovery systems along with aids to enable smooth and efficient operation of ship-borne aircraft.

6.10   MQ-9B PREDATOR DRONE

❖ The **Defence Ministry** has accorded its approval to procure **30 MQ-9B Predator drones (Sea Guardian variant)** from the US to crank up the surveillance apparatus of the armed forces.

ABOUT MQ-9B PREDATOR DRONE:

❖ The MQ-9B drone is a variant of the **MQ-9 "Reaper",** an **unmanned aerial vehicle (UAV)** capable of remotely controlled or autonomous flight operations.

❖ These are high-altitude long-endurance drones armed with strike missiles which can take out enemy targets with high accuracy.

❖ It was **developed** by **General Atomics Aeronautical Systems(GA-ASI**), primarily for the United States Air Force (USAF).

❖ The MQ-9B has **two variants** — **SkyGuardian** and its **sibling SeaGuardian.**

❖ The Indian Navy has been operating the MQ-9B Sea Guardian since 2020.

FEATURES OF MQ-9B SEA GUARDIAN:

❖ It can carry up to 5,670 kg and has a fuel capacity of 2,721 kg.

❖ The drone can operate at over 40,000 feet.

❖ The Predator also has a maximum endurance of 40 hours, making it useful for long-hour surveillance.

❖ It can **support** land, maritime surveillance, anti-submarine warfare, anti-surface warfare, strike, electronic warfare and expeditionary roles.

❖ It is also capable of **automatic take-offs and landings.**

❖ It can safely integrate into civil airspace, enabling joint forces and civil authorities to deliver real-time situational awareness anywhere in the maritime domain -- day or night.

6.11   TAPAS UAV

❖ **Indian Navy** and **DRDO** have successfully carried out control capabilities of TAPAS unmanned aerial vehicle from a distant ground station to onboard INS Subhadra.

❖ It is known as **Tapas-BH 201**(Tactical Airborne Platform for Aerial Surveillance-Beyond Horizon 201), formerly referred to as **Rustom-II.**

❖ It is **a Medium Altitude Long Endurance (MALE) unmanned aerial vehicle**.

❖ It is capable of **operating at altitudes of up to 28,000 feet** with **an endurance of over 18 hours**.

❖ The drone has **a 20.6-meter wingspan and a maximum speed of 225 kmph.**

- ❖ It can **carry a variety of payloads up to a maximum of 350 kgs**.
- ❖ It is being **developed by Aeronautical Development Establishment (ADE), Defence Research & Development Organisation (DRDO).**
- ❖ It is designed to fulfil **the Intelligence, Surveillance, Target Acquisition, Tracking & Reconnaissance (ISTAR) requirements** of the **tri-services**
- ❖ It can effectively **operate in both day and night conditions**.
- ❖ It is **pre-designed to carry certain weapons and can be converted into an armed platform** as and when required by the user.

6.12   THEATRE COMMAND

- ❖ The Indian Army, Navy, and Air Force have achieved a consensus on the establishment of theatre commands by 2024.
- ❖ The revised plan entails the **creation of three integrated theater commands**, each **headed by a senior three-star general, namely, a Lieutenant General, an Air Marshal, or a Vice Admiral**.
- ❖ These commands will be responsible for **managing northern borders with China**, **western front with Pakistan**, and **a maritime command in peninsular India**.
    - ✓ Moreover, the **proposal for an Air Defence Command (ADC)** has been **dropped**.

ABOUT THEATRE COMMAND

- ❖ **Theatre Command** means **putting specific number of personnel from three services (Army, Navy and Air Force) under a common commander** in a **specified geographical territory**.
- ❖ **Shekatkar committee** and **Kargil review committee** had recommended the creation of theatre commands.
- ❖ India has **19 military commands in total with 17 of them service-oriented**.
    - ✓ **Army-7, IAF-7, and Navy- 3**
- ❖ Currently, India has two unified commands:
    - ✓ **Andaman and Nicobar Command**, which is geographical.
    - ✓ **Strategic Forces Command**, which is **functional and handles the country's nuclear arsenal**.

6.13   INS KIRPAN

- ❖ **India** has gifted missile corvette INS Kirpan to **Vietnam**.

ABOUT INS KIRPAN

- ❖ It is an indigenously-built in-service missile corvette.
- ❖ It is **a Khukri class missile corvette commissioned** into the Navy on January 12, **1991**.
- ❖ It **has a displacement displacing capacity of close to 1,400 tonnes**.
- ❖ It is capable of a **speed of more than 25 knots**.
- ❖ The Khukri class are **equipped with Diesel Engines assembled** in India.
- ❖ The ship is fitted with **a medium-range gun, 30 mm close-range guns, chaff launchers, and surface-to-surface missiles**.
- ❖ It performs a wide variety of roles, including **coastal and offshore patrol, coastal security, surface warfare, anti-piracy, and Humanitarian Assistance and Disaster Relief (HADR) operations**.

6.14   EXERCISE KHAAN QUEST

- ❖ Indian Army will participate in **Ex Khaan Quest** (in **Mongolia**), a multinational **peacekeeping joint exercise**.
- ❖ It **features participation from military contingents and observers from over 20 countries.**
- ❖ The exercise is **co-sponsored by Mongolian Armed Forces (MAF) and the United States Army Pacific Command (USARPAC).**
- ❖ The **Indian Army is represented by a contingent from the GARHWAL RIFLES**.

❖ The exercise will **prepare participants for future UN Peacekeeping missions**, develop peace operations capabilities and enhance military readiness.

6.15 RAW

❖ Recently, the **Appointments Committee of Cabinet** has approved the **appointment of senior IPS officer Ravi Sinha** as the **chief of India's external intelligence agency Research and Analysis Wing (R&AW)** for a period of **two years**.

ABOUT RESEARCH AND ANALYSIS WING (R&AW)

❖ It was **established in 1968 to** handle the **India's international intelligence affairs.**
❖ **After the 1962 China-India war** and the **Indo-Pakistani war in 1965**, India established a separate and distinct external intelligence organization – the **Research and Analysis Wing**.
❖ In 1968, then India's Prime Minister Indira Gandhi appointed **R. N. Kao as the first director of RAW**.
❖ At present, the **intelligence arm operates under the aegis of the Prime Minister's Office**.
❖ It collects military, economic, scientific, and political intelligence through covert and overt operations.
❖ The agency is also **charged with monitoring terrorist elements** and **smuggling rings** that transport weapons and ammunition into India.

6.16 SARMAT MISSILE

❖ Russian President recently said that, **Russia's new generation of Sarmat intercontinental ballistic missiles**, which are capable of carrying 10 or more nuclear warheads, would soon be deployed for combat duty.
❖ The **RS-28 Sarmat is Russia's new generation intercontinental ballistic missiles**.
❖ It is **capable of carrying 10 or more nuclear warheads.**
❖ It is **designed and built by the Makeyev Rocket Design Bureau, Russia**.
❖ Range-**18,000 kilometres**.
❖ **Maximum speed of 25,500kph**.

6.17 AIP SYSTEM

❖ Recently, **Larsen & Toubro and the Defence Research and Development Organisation** (DRDO) signed a contract for the realisation of two Air Independent Propulsion (AIP) System Modules for Kalvari (Scorpene) Class of submarines of the Indian Navy.

ABOUT AIR INDEPENDENT PROPULSION (AIP) SYSTEM

❖ AIP is a marine propulsion technology that allows non-nuclear submarines to operate without access to atmospheric oxygen.
❖ AIP is **mostly implemented as an auxiliary source**, with the traditional diesel engine handling surface propulsion.

> **Types of Submarines**
>
> **Conventional or Diesel-electric submarine**: They need atmospheric oxygen to run the diesel generator which in turn charges the batteries.
>
> **Nuclear Submarine**: It is a submarine powered by a nuclear reactor, but not necessarily nuclear-armed. They have considerable performance advantages over conventional submarines.

❖ It **allows the submarines to stay for longer hours in water**. The submarines need to come to the surface of the water to charge their batteries.
  ✓ This is reduced by AIP System.
❖ It **decreases the noise levels made by the submarines**. This makes it hard to detect the submarines.
❖ Types of AIP: Open-cycle systems, Closed-cycle diesel engines, Closed-cycle steam turbines Stirling cycle engines and Fuel cells.
❖ Indigenous AIP propulsion system by DRDO is a modular system that **can be easily configured for any conventional submarine platform**.
❖ It relies on the innovative **Phosphoric Acid Fuel Cell technology**.

6.18 SIPRI RELEASES 'STATE OF ARMAMENTS, DISARMAMENT AND INTERNATIONAL SECURITY'

❖ Global inventory of nuclear warheads has increased over the past year as per **SIPRI's** latest **'State of Armaments, Disarmament and International Security'.**

ABOUT STATE OF ARMAMENTS, DISARMAMENT AND INTERNATIONAL SECURITY

❖ It is an **annual assessment of the Sweden-based think tank Stockholm International Peace Research Institute (SIPRI).**

❖ As on January 2023, the **world has 9,576 nuclear weapons in military stockpiles for potential use**.
   ✓ That is an increase of 86 weapons from January 2022.

❖ Of this stockpile, **an estimated 3,844 warheads were 'deployed' with missiles and aircraft.**

❖ Around **2,000 of these 'deployed' weapons** — nearly all of which **belonged to Russia or the USA**—were kept in **a state of high operational alert.**
   ✓ **This** means that they were **fitted to missiles or held at airbases hosting nuclear bombers**.

❖ **Nine nuclear-armed states — the United States, Russia, the United Kingdom, France, China, India, Pakistan, North Korea and Israel** — continue to modernise their nuclear arsenals and have deployed several new nuclear-armed or nuclear-capable weapon systems in 2022.

❖ **The estimate of the size of China's nuclear arsenal increased from 350 warheads in January 2022 to 410 in January 2023.**

❖ **India was estimated to have a growing stockpile of about 164 nuclear weapons**, up from 160 the previous year.
   ✓ These weapons were assigned to a maturing nuclear triad of aircraft, land-based missiles and nuclear-powered ballistic missile submarines (SSBNs).

❖ **Pakistan possessed approximately 170 nuclear warheads as of January 2023** — up from 165 from the previous year.

ABOUT SIPRI

• The SIPRI is **an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.**

• **Established in 1966 at Stockholm**, Sweden, SIPRI provides **data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.**

7. SPACE

7.1 INDIAN SCIENTISTS DISCOVER NEW EXOPLANET

❖ A new **Jupiter-size exoplanet** with the **highest density known till this date (~14 g/cm3) and mass 13 times than that of Jupiter**, has been **discovered by an international team** of scientists led by Prof. Abhijit Chakraborty at the **Exoplanet Research Group of the Physical Research Laboratory (PRL), Ahmedabad.**

❖ ISRO said that the **discovery** of this **massive exoplanet** was made **using the indigenously made PRL Advanced Radial-velocity Abu-sky Search spectrograph (PARAS)** at the **1.2 m telescope of PRL** at its **Gurushikhar Observatory in Mt. Abu** by measuring the mass of the planet precisely.

> This discovery marks the **third exoplanet discovery by India,** and by the PRL scientists using PARAS spectrograph and the PRL 1.2m telescope, following the **discoveries in 2018 (K2-236b)** and **2021 (TOI-1789b).**

❖ The **newly discovered exoplanet is found around the star called TOI4603 or HD 245134** and is **located 731 light years away**.
   ✓ It **orbits very close to its host star at a distance less than 1/10th the distance between our Sun and Earth** and completes one revolution in mere **7.24 days**

❖ **NASA's The Transiting Exoplanet Survey Satellite (TESS) initially declared TOI4603** as a possible candidate to host a secondary body of unknown nature.

❖ The **planet falls into the transition mass range of massive giant planets and low-mass brown dwarfs with masses ranging from 11 to 16 times** the mass of Jupiter.
   ✓ **Less than five exoplanets are currently** known in this mass range so far.

> **Brown dwarfs** are objects which have a size between that of a giant planet like Jupiter and that of a small star.

ABOUT EXOPLANETS

❖ An **exoplanet is any planet beyond our solar system**.

❖ Most orbit other stars, but free-floating exoplanets, called **rogue planets, orbit galactic center** and are **untethered to any star**.

❖ Compositions of exoplanets range from very rocky (like Earth) to very gas-rich (like Jupiter and Saturn).

7.2 QUASI MOON

❖ Astronomers have discovered a **quasi-moon named 2023 FW13** with the help of the **Pan-STARRS telescope in Hawaii**.
   ✓ **A quasi-moon is a space rock (asteroid) that orbits both the Earth and the Sun** but is bound by the Sun's gravity.

❖ Experts believe that it **has been orbiting Earth since 100 BC**.

❖ It will **revolve around the earth for the next 1500 years**, i.e., till AD 3700.
   ✓ After this, it will leave the Earth's orbit.

> Earlier, a **quasi-satellite known as Kamo'oalewa** was also **discovered in 2016**.

❖ There will be no danger to the earth from this asteroid.

❖ **2023 FW13 revolves around the Sun** in the same amount of time that the Earth takes (365 days), plus **it also revolves around the Earth**.

❖ **Orbit**
   ✓ New Moon – 2023 FW13 orbits outside Earth's 'hill sphere'.
   ✓ The **'Hill Sphere'** of an astronomical body is such **a region, where the gravitational force of the planet is the most powerful**.
   ✓ To be retained by a planet, **a moon must have an orbit that lies within the planet's Hill sphere**.
   ✓ The radius of the **Earth's 'hill sphere' is 1.5 million kilometers**, while the **radius of 2023 FW13 is larger than this**, i.e., **1.6 million kilometers**.
   ✓ At the same time, the **radius of the 'Hill Sphere' of our Moon is only 60 thousand kilometers**.

7.3 EINSTEIN TELESCOPE

- ❖ A **number of European institutions** have formed the **Einstein Telescope Collaboration** to build a next generation gravitational wave observatory deep beneath the surface of the Earth.
- ❖ **CERN** has entered into an agreement with the collaboration in 2022, and held a workshop earlier this year.
- ❖ CERN is bringing its expertise with **underground vacuum chambers** to the table.

ABOUT EINSTEIN TELESCOPE

- ❖ It is **an advanced gravitational-wave observatory**, currently **in the planning stage**.
- ❖ It **builds on the success of current, second-generation laser-interferometric detectors Advanced Virgo and Advanced LIGO**, whose **breakthrough discoveries of merging black holes (BHs)** and neutron stars over the past 5 years have ushered scientists into the new era of gravitational-wave astronomy.
- ❖ The **Einstein Telescope** will achieve a greatly improved sensitivity **by increasing the size of the interferometer from the 3km arm length of the Virgo detector to 10km**, and by implementing a series of new technologies.
- ❖ The **expected sensitivity** of the Einstein Telescope will be **at least a factor of ten times that of Ligo**.

ABOUT CERN

- ❖ CERN is the **European Organization for Nuclear Research** where scientists probe the **fundamental structure of the universe**.
- ❖ **Established in 1954**.
- ❖ It has **23 member states**- 22 members are European countries while **Israel is the only non-European nation** that has full membership in CERN.
- ❖ India is the **associate member of CERN**.
- ❖ **CERN is located in Geneva** and it is an official Observer to the United Nations (UN).

ABOUT GRAVITATIONAL WAVES

- ❖ They are **'ripples' in space-time caused by** some of the **most violent and energetic processes** in the Universe.
- ❖ **Albert Einstein predicted the existence of gravitational waves in 1916** in his general **theory of relativity**.
- ❖ These cosmic ripples travel at the speed of light, carrying with them information about their origins, as well as clues to the nature of gravity itself.
- ❖ The **strongest gravitational waves** are produced by cataclysmic events such **as colliding black holes, supernovae, and colliding neutron stars**.

7.4 UNOOSA

- ❖ **Aarti Holla-Maini**, a satellite industry expert of Indian origin, has been selected by United Nations Secretary-General as the **Director of the United Nations Office for Outer Space Affairs (UNOOSA).**

ABOUT THE UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS (UNOOSA)

- ❖ It is the UN office responsible for **promoting international cooperation in the peaceful uses** of outer space.
- ❖ It forms **part of the United Nations Office at Vienna** and **serves as the Secretariat for the UN General Assembly's only committee dealing exclusively** with those issues: the **Committee on the Peaceful Uses of Outer Space.**
- ❖ UNOOSA implements the **United Nations Programme on Space Applications (PSA)**.
- ❖ UNOOSA is also **responsible for implementing the Secretary-General's responsibilities under international space law** and **maintaining the United Nations Register of Objects Launched into Outer Space.**
- ❖ It also **prepares and distributes documents, reports, studies and publications on various aspects of space science and technology applications** and international space law.
- ❖ It **works to improve the use of space science and technology for the economic and social development** of all countries, particularly developing countries.
- ❖ UNOOSA is also the **current secretariat** of the **International Committee on Global Navigation Satellite Systems (ICG).**

8. ENVIRONMENT

8.1 EARTH SYSTEM BOUNDARIES

❖ Seven of eight **earth system boundaries (ESBs)** that are **critical for stability of the planet's health and survival of species** have already been crossed, a new research paper by the Earth Commission published in Nature journal said recently, suggesting that **the very future of humanity may now be at risk from the climate crisis**.

❖ **About ESBs**
   ✓ ESBs are **scientifically quantified safe and just limits for climate, freshwater, biodiversity and different kinds of pollution**.
   ✓ By operating within these limits, **we can maintain a stable and resilient planet** with accessibility to necessary resources.
   ✓ **These are hard limits and even temporary overshooting of some** of the boundaries **can permanently damage the planet's critical systems**.

❖ The **seven ESBs that have been crossed** are:
   ✓ **climate (two local exposure boundaries**-- wet **bulb temperatures of over 35 °C for at least 1 day of the year** and **extent of low-elevation coastal zones)**,
   ✓ **functional integrity**,
   ✓ and levels of **surface water**,
   ✓ **groundwater**,
   ✓ **nitrogen**,
   ✓ **phosphorus** and
   ✓ **aerosols**.

❖ The **eighth**, which has **not been crossed**, is **under two heads**.
   ✓ **In climate**, **1.5 degree C warming is still "safe" but not "just."**
      ➤ "Safe and just" was crossed at 1 degree C.
   ✓ The **global annual mean interhemispheric aerosol optical depth (AOD) difference**, a proxy for degree of air pollution globally has **also not been crossed.**

❖ **India**, along with **other parts of South Asia, Europe, parts of Africa is a ESB transgression hotspot** with the **Himalayan foothills experiencing at least 5 ESB transgressions**.

8.2 MYRISTICA SWAMPS

❖ Climate change and human intervention are threatening the Myristica swamps of Kerala.

ABOUT MYRISTICA SWAMPS

❖ These **swamps are found in the Sacred Groves or evergreen forest patches** and are **included in the littoral and swamp forest groups**.
❖ They have **evolved over millions of years** and are **comprised of old-growth trees**.
❖ In India, these unique habitats **occur in the Western Ghats** and a **smaller distribution exists in the Andaman and Nicobar Islands**.
❖ The **55-acre Kammadam Kavu is the largest in Kerala**.
   ✓ This grove is home to a Myristica swamp over 2-3 acres.
❖ The Myristica swamp, like a mangrove, is found inside a forest. But **mangroves thrive in saline water, Myristica requires freshwater**.
❖ This **species has stilt roots, or knee roots** that **pop up above the water level to breathe** creating a varied **habitat for many life forms**.
❖ Found in **freshwater areas**, these **groves harbour endemic and endangered plant species** including those with medicinal properties.

- ✓ One of the **most endangered endemic species is the Myristica malabarica**, a wild relative of **nutmeg** used extensively in **Ayurveda**.
- ✓ **Myristica fatue**, which **is very rare with just under 20 trees** in Kerala.
- ✓ The **Syzygium travencuricum** is listed as **'Vulnerable'** in the IUCN Red Data book.
- ❖ Amphibians like **frogs, toads and caecilians also flourish in these swamps** as these species prefer mating and reproduction in waterlogged patches.
- ❖ These groves also have **close ties with indigenous rituals and religion**.
- ❖ They have **deities related to snake and tree worship**, and are **protected by local communities, attached to temples** or privately owned.
- ❖ **Threats**- main causes for the destruction of the swamps are **human intervention, mismanagement of rivers and climate change**.

PREVENTIVE MEASURES

- ❖ It is **essential to keep the rivers healthy**, as the **waterbodies nurture these swamps**.
  - ✓ If the rivulets disappear, the Myristica swamps will disappear.
  - ✓ With **rivers drying out**, the **swamps are being invaded by semi-evergreen and deciduous species** such as legumes, white dammer, terminalia and **woody climbers, large flowering plants and invasive species**.

8.3 | ENVIRONMENTAL INFORMATION AWARENESS CAPACITY BUILDING AND LIVELIHOOD PROGRAMME (EIACP)

- ❖ **EIACP Programme Centre at Raipur** has created **a world record by taking a LiFE (Lifestyle for Environment) pledge** of **over 12.38 lakh by people to conserve environment**.

ABOUT EIACP

- ❖ It is a **project funded by Ministry of Environment, Forests and Climate Change (MoEF&CC)**.
- ❖ It is **one of the Central Sector sub-scheme** being implemented **in alignment with Mission LiFE**.
- ❖ The **Environmental Information System (ENVIS) is renamed EIACP** (Environmental Information, Awareness, Capacity Building and Livelihood Programme).
  - ✓ **ENVIS** came into **existence as a planned programme in 1983**.
- ❖ ENVIS EIACP serves as **a one-stop platform for the dissemination of environmental information, informed policy formulation** on various facets of the environment and **facilitation of alternate livelihoods through green skilling**.
- ❖ It is **dedicated to raising awareness, building capacity, and promoting sustainable actions** among individuals and communities across India.

ABOUT MISSION LIFE (LIFESTYLE FOR ENVIRONMENT)

- ❖ It was first proposed by the **Indian PM at COP 26 (Glasgow)**.
- ❖ It is envisioned as an India-led global mass movement that will **nudge individual and collective action to protect and preserve the environment**.
- ❖ It emboldens the spirit of the P3 model, i.e. **Pro Planet People.**
- ❖ It functions on the basic principles of **'Lifestyle of the planet, for the planet and by the planet'**

8.4 | AMRIT DHAROHAR AND MISHTI INITIATIVES LAUNCHED

- ❖ On the eve of World Environment Day (June 5), **Ministry of Environment, Forest and Climate Change (MoEF&CC)** has launched **Amrit Dharohar** and **Mangrove Initiative for Shoreline Habitats and Tangible Incomes (MISHTI) initiatives**.

ABOUT AMRIT DHAROHAR SCHEME

- ❖ Amrit Dharohar aims at promoting the **unique conservation values of Ramsar Sites** through active public participation.

- ✓ **India currently has 75 Ramsar sites** that are wetlands of international importance and designated **under the Ramsar Convention on Wetlands**.
- ❖ It aims **to encourage optimal use of wetlands for enhancing biodiversity, carbon stock, ecotourism opportunities and income generation** for local communities.
- ❖ The scheme intends to **achieve sustainable ecosystem development** and will be **implemented over** the **next three years (2023-26)**.

Note- This is **not to be confused** with **Amrit Sarovar Mission**

ABOUT MISHTI SCHEME

- ❖ MISHTI: **"Mangrove Initiative for Shoreline Habitats and Tangible Incomes"** was announced in the Union Budget 2023-24 to promote and conserve mangroves.
- ❖ The Programme will cover approximately 540 sq km area across nine (9) coastal States and four (4) UTs in five years (2023-2028).
- ❖ It will create around 22.8 million man-days with estimated carbon sink of 4.5 million tons of Carbon.

> **Amrit Sarovar Mission**
>
> - It is aimed at developing and rejuvenating **75 water bodies in each district of the country** as a part of celebration of Azadi ka Amrit Mahotsav.
>
> - The target was **creation of 50,000 water bodies of a size of about an Acre or more by August 15, 2023**, which has been achieved ahead of schedule.
>
> -The Mission **encouraged mobilisation of citizen and non-govt resources** for supplementing these efforts.
>
> - Under **Ministry of Rural Development**

- ❖ It will also create potential areas for nature tourism and livelihood potential for local communities.
- ❖ It will operate through convergence between MGNREGS, CAMPA Fund and other sources.
- ❖ The Government of India covers 80% of the project cost, while the State Governments contribute the remaining 20%.

ABOUT MANGROVES

- ❖ Mangroves are **unique, natural eco-system having very high biological productivity and carbon sequestration potential**, besides working as a **bio-shield**.
- ❖ They are found in tropical and sub-tropical intertidal regions characterized by **high rainfall (between 1,000 to 3,000 mm)**, temperature range (26° C- 35° C) and **calm water with sufficient sediments** to set down roots.
- ❖ **West Bengal** has the **highest mangrove cover, followed by Gujarat and Andaman and Nicobar Islands**.

8.5 KAZIRANGA NATIONAL PARK AND TIGER RESERVE

- ❖ **Three persons** engaged as mahouts in the **Kaziranga National Park and Tiger Reserve** have been arrested for capturing and consuming a rare species of a freshwater turtle inside the one-horned rhino habitat.

POND TURTLES

- ❖ **Spotted pond turtles (Geoclemys hamiltonii)** are named for the yellow or white spots on their **black heads, legs and tails.**
- ❖ They have large heads and short snouts, and their webbed feet help them swim.
- ❖ They are also known as **Black Pond Turtle, Black Spotted Turtle, Hamilton's Terrapin.**
- ❖ They bask in the sun to regulate their body temperature. Their need for warm water and an intense basking area is important.
- ❖ They are found in large, deep rivers in **India, Assam, Pakistan and Bangladesh.**
- ❖ In India, the species is distributed across the north, northeast and a few parts of central India
- ❖ These turtles are primarily carnivorous and eat aquatic invertebrates.
- ❖ Spotted pond turtles are crepuscular, meaning they are most active at twilight (dusk and dawn).
- ❖ **Conservation Status:**
  - ✓ International Union for Conservation of Nature (IUCN): **Endangered**

✓ CITES: **Appendix I**

KAZIRANGA NATIONAL PARK

❖ **Kaziranga National Park** is a prestigious national park of India situated in the northeastern part of the country in the district of **Golaghat and Nagoan** in the state of Assam.

❖ It was created in the year of **1904.**

❖ It was declared a National Park in **1974.**

❖ It was declared a tiger reserve in **2007.**

❖ **Kaziranga** was declared a World Heritage Site by **UNESCO** for its unique natural environment in the year of **1985.**

❖ The park has been identified as an Important Bird Area by the Birdlife International Society as it is home to various species of migrating and inhabitant birds.

❖ It is situated on the banks of the **river Brahmaputra.**

FAUNA:

❖ It is home to the **One-horned rhinoceros, Leopard, Fishing Cat, other Lesser cats, royal Bengal tiger, Large Indian Civet, Small Indian Civet, Sambar, Barking deer, Hog deer, Gaur, Hog Badger, Capped Langur, etc.**

❖ It is also one of the last remaining homes of the endangered and endemic western hoolock gibbon, the only species of apes found in India.

❖ It is one of the last homes of the **critically endangered Bengal florican.**

FLORA:

❖ It is a mix of eastern wet **alluvial grasslands, semi-evergreen forests and tropical moist deciduous forests.**

❖ It is primarily famous for its dense and tall elephant grasses inter mixed with small swamplands.

❖ It also includes an abundant cover of **water lilies, water hyacinths and lotus.**

8.6   DIMETHYL ETHER (DME)

❖ The researchers at **IIT Kanpur** have successfully developed India's first **100% Dimethyl Ether (DME)-fuelled tractor/vehicle** for both on- and off-road applications.

ABOUT DIMETHYL ETHER:

❖ It is a synthetically produced alternative to **diesel** for use in specially designed **compression ignition diesel engines.**

❖ It can be produced indigenously, and several countries, like **Japan, USA, China, Sweden, Denmark, and Korea,** are already using DME to power their vehicles.

❖ **The DME-fuelled engine** emitted extremely low particulate and soot emissions and almost **no smoke** without using expensive exhaust gas after-treatment devices and **advanced engine technologies.**

❖ It can be a viable alternative fuel and engine technology to adapt to conventional diesel engines used in **India's economy's agricultural and transport sectors.**

PROPERTIES OF DIMETHYL ETHER

❖ It has a very **high cetane number**, which is a measure of the fuel's ignitibility in compression ignition engines.

❖ Under normal atmospheric conditions, DME is a **colourless gas.**

APPLICATION OF DIMETHYL ETHER

❖ It is used extensively in the chemical industry and as an **aerosol propellant.**

❖ It is used in **chemical industries** and also to produce **dyes and plastics.**

8.7   "SAGAR SAMRIDDHI"

❖ The Union Minister of Ports, Shipping & Waterways (MoPSW) and Ayush **Shri Sarbananda Sonowal** has launched the **'SAGAR SAMRIDDHI'** - online dredging monitoring system.

ABOUT SAGAR SAMRIDDHI

❖ The online dredging monitoring system shall accelerate the **"Waste to Wealth"** campaign of the MoPSW bringing in transparency & efficiency.
❖ The new system is in line with the Prime ministers' vision of **Zero Defect and Zero Effect** to minimize human error.
❖ It is developed by **National Technology Centre for Ports, Waterways and Coasts (NTCPWC)** the technological arm of MoPSW.
❖ The new technology shall bring in marked improvement against the old system of **Draft Loading Monitor system.**
❖ The new systems shall be used in the major ports to bring about significant change in project implementation and bring down cost of dredging through use of dredged materials. This shall help in environment sustainability and bring down operational costs and improve transparency and efficiency.

CAPABILITIES OF 'SAGAR SAMRIDDHI' INCLUDE:

1. Real time dredging progress report

2. Daily and monthly progress Visualisation

3. Dredger performance and downtime monitoring

4. Easy location track data with snapshot of loading, unloading and idle time

ABOUT DREDGING:

❖ It is the act of removing silt, sediments, debris and other material from the bottom of lakes, rivers, harbors and other water bodies.
❖ It is a routine necessity that is essential to maintain and increase the depth of **navigation channels**, anchorages or berthing areas to ensure the safe passage of **boots and ships.**
❖ The water bodies have a tendency of sedimentation, the natural process of sand and silt washing downstream that gradually fills channels and harbors.

IMPLEMENTATION:

❖ At present, the **Cochin Port (Kochi, Kerala)** and **Mumbai Port Mumbai, Maharashtra),** have adopted the **Sagar Samriddhi system.**
❖ The **New Mangalore Port (Mangaluru, Karnataka)** and **Deendayal Port (Kutch, Gujarat)** it is running the system on a trial basis.
❖ The MoPSW has mandated all **Major Ports** and **Inland Waterways Authority of India (IWAI)** to monitor the dredging activity through this system with customisation from NTCPWC.

> **Waste to wealth** is a mission by the government to identify, develop and deploy technologies to treat waste to generate energy, recycle materials and extract worth.

ABOUT NTCPWC

❖ **National Technology Centre for Ports, Waterways and Coasts (NTCPWC)** was set up as an incubation centre at the **Indian Institute of Technology Madras (IITM), Chennai during 2018.**
❖ It was established under the **Sagarmala Programme of MoPSW** with the **total investment of ₹ 77 Crores** at **IIT Madras.**
❖ The aim of the centre is to enable **research & development** for the marine sector, enabling solutions towards achieving the ultimate goal of building a robust marine industry in the country.
❖ It functions as the technological arm of the Ministry of Shipping and provides scientific support to ports, **IWAI,** and other institutions.
❖ This state-of-the-art centre has world class capabilities for undertaking the 2D & 3D investigations of research and consultancy nature for the **Port, Coastal, and Waterways sector.**

8.8 SUNDARGARH ARCH

❖ The **Odisha** state unit of the Geological Survey of India (GSI) has proposed to declare the **'Natural Arch'** in the **Kanika range of Sundargarh forest division**, a Geo Heritage Site.
  ✓ If it is done, it will be the biggest natural arch of the country to have the Geo Heritage tag.
❖ The **Sundargarh natural arch**, present in the **ferruginous sandstone of the Upper Kamthi formation**, dates back to **about 184 to 160 million years** in the lower to middle Jurassic age.
❖ It is **an oval-shaped arch and has a length of 30 metres at the base and is 12 metres high**.
  ✓ The alcove of the natural arch has a maximum height and width of 7 metres and 15 metres, respectively.
❖ Formation of the natural arch could be due to **fault activities and the nature of lithotype, which have enhanced the process of sub-aerial weathering** over a long period.
❖ Apart from the arch at Sundargarh, India has **two others**- **one at Tirumala hills in Tirupati** and another at **Andaman and Nicobar**.
  ✓ However, both of them are **smaller compared to the one in Sundargarh**.

ABOUT GEO HERITAGE SITES (GHSS)

❖ These are **sites of rare and unique geological, geo-morphological, mineralogical, petrological, and paleontological significance**, including caves and natural rock sculptures of national and international interest.
❖ **GSI** declares **geo-heritage sites/ national geological monuments for protection and maintenance**.

ABOUT GEOLOGICAL SURVEY OF INDIA

❖ Founded in **1851**, it is one of the oldest of scientific agencies in the world and the **second oldest survey in India after Survey of India (founded in 1767)**.
❖ GSI, headquartered at **Kolkata**, has six Regional offices located at **Lucknow, Jaipur, Nagpur, Hyderabad, Shillong and Kolkata.**
❖ Presently, Geological Survey of India is an attached office to the **Ministry of Mines**.

8.9 INDIAN SKIMMER

❖ Six **Indian Skimmer eggs laid beside a barrage** in **Uttar Pradesh's Bijnor were washed away** recently due to the **strong flow of water from the dam**, said conservationists.

ABOUT INDIAN SKIMMER

❖ It is also known as **Indian scissors bill**.
❖ They are **more widespread in winter**; the **Indian skimmer is found in the coastal estuaries of western and eastern** India.
  ✓ **Chambal River** is an important nesting site for Indian Skimmer
❖ Major Threats include **Habitat degradation**, **excessive and widespread increases in disturbances** near the **rivers**, **predation by corvids** like house crows etc.
❖ **IUCN** Red List Status: **Endangered**

8.10 DUCK-BILLED DINOSAUR

❖ Scientists in **Chile** have discovered **a new species of duck-billed dinosaur** that lived 72 million years ago in the far south of Chile.
❖ **Gonkoken nanoi** is the **name of this new dinosaur species** from an ancestral lineage of **hadrosaurs**, which would have migrated to the Southern Hemisphere long before more advanced forms, and it is **believed that they may have even reached Antarctica.**
❖ Gonkoken nanoi, the fifth species of dinosaur discovered in Chile, was actually found in 2013, kicking off a decade-long investigation.

- ❖ The name **Gonkoken** comes from the **Tehuelche language, the first inhabitants of the region**, and means **"similar to a wild duck or a swan."**
- ❖ It is **a species of herbivorous dinosaur** previously unknown in the southern hemisphere.
- ❖ These were **slender-looking dinosaurs, which could easily adopt a bipedal and quadrupedal posture** to reach the vegetation at height and ground level.
- ❖ This **type of duck-billed dinosaur was common in North America, Asia and Europe** during the Cretaceous period.

8.11   BHITARKANIKA NATIONAL PARK

- ❖ A 10-year-old boy was allegedly killed recently following an attack by a crocodile sparking fresh bouts of man-animal conflict in areas in close vicinity of Bhitarkanika National Park.

ABOUT BHITARKANIKA NATIONAL PARK

- ❖ It is located in **Kendrapara district in the state of Odisha**.
- ❖ It is **India's second-largest mangrove ecosystem after the Sunderbans**.
- ❖ It is a 145 Sq. km large national park, designated in 1998.
- ❖ It was declared a Ramsar site in August 2002

> **Kendrapara district is** the only district in India where all three species of crocodiles -- salt-water, gharial and mugger.

- ❖ This **National Park is a network of creeks and canals** which are inundated with waters from **rivers Brahmani, Baitarani, Dhamra and Patasala**, forming a unique ecosystem.
- ❖ Flora comprises of mangrove species, casuarinas, and grasses like the indigo bush.
- ❖ Bhitarkanika has **one of the largest populations of saltwater crocodiles** in India.
- ❖ The **Gahirmatha Beach, which forms the boundary of the park in the east**, is the largest colony of the **Olive Ridley Sea Turtles**.
- ❖ Other mammals **include monkeys, jackals, common langurs, otter, sambar deer, jungle cats, fox, Mongoose, wolfs, fishing cats, hyenas**, etc.

ABOUT SALTWATER CROCODILE

- ❖ Saltwater crocodiles, or estuarine crocodiles, are **enormous creatures and the world's largest living reptiles.**
- ❖ **Global habitat-** It **inhabits brackish waters of wetlands and marine intertidal environments from Sri Lanka, India, Bangladesh, and Myanmar east to the Solomon Islands and Vanuatu and south to Australia's northern coast**.
- ❖ They are **nocturnal hunters**.
- ❖ The **species is known for its aggressive nature, as shown by numerous attacks on people and livestock** each year.
- ❖ IUCN: **Least Concern**

8.12   LEED CERTIFICATION

- ❖ According to the Green Business Certification Inc. and US Green Building Council, **India ranks first globally in LEED Zero-certified green building projects surpassing the US and China**.
- ❖ India has **73 LEED Zero certified projects, comprising 45% of the more than 150 total LEED Zero certifications**.
- ❖ **Haryana and Tamil Nadu** are leading the way in certifications.
- ❖ In India, **realty firm DLF and FMCG player ITC are leading in the LEED Zero green certification initiative**.

ABOUT LEED CERTIFICATION

- ❖ **Leadership in Energy and Environmental Design** is the **world's most widely used green building rating system** in the world.
- ❖ It is **available for virtually all building types**.

❖ This certification provides a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social and governance benefits.

❖ It is **a globally recognized symbol of sustainability achievement and leadership.**

❖ To achieve LEED certification, **a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health and indoor environmental quality**.

❖ This rating system is developed by the **United States Green Building Council (USGBC).**

❖ It has 4 types of ratings: **Certified<Silver<Gold<Platinum**.

GREEN RATING FOR INTEGRATED HABITAT ASSESSMENT (GRIHA)

❖ It is the national rating system of India for any completed building construction.

❖ It was **jointly set up by The Energy and Resources Institute (TERI)** and **the Ministry of New and Renewable Energy**.

❖ Aim- **To help design green buildings and help evaluate the 'greenness' of the buildings.**

8.13	HI-WISE REPORT

❖ **Water, Ice, Society, and Ecosystems in the Hindu Kush Himalaya (Hi-Wise) Report** was recently released by **International Centre for Integrated Mountain Development (ICIMOD).**

❖ The **Hindu Kush Himalaya** (HKH) is one of the highest mountain ranges in the world. It is also referred as the Third Pole and water tower of Asia.

MAJOR FINDINGS-

❖ Many areas around the world have passed **"peak water"** and communities are dealing with less **glacier meltwater**.
   ✓ For the HKH, the peak point has not been reached yet, but it is coming soon.

❖ As Himalayan glaciers melt due to climate change, **water availability in the Indus, Ganges, and Brahmaputra is set to increase (through 2050) in the short term** and **decrease in the long term** (~80% by 2100).

❖ The HKH has seen a **65% faster loss of glacier mass**.

❖ The **Eastern/ lesser Himalayas have fewer glaciers** compared to their western counterparts. Hence, **rivers in the region get less contribution from glaciers** and are less likely to be affected overall.

❖ **Climate change** is **severely affecting biodiversity in HKH**.
   ✓ For example, **the habitat of Himalayan ibex** is **likely to reduce by 33 to 64%**.

ABOUT ICIMOD

❖ It is a **regional intergovernmental learning and knowledge-sharing centre** serving the **8 regional member countries (RMCs) of the HKH region** – **Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan.**

❖ It was **established in 1983** and is **headquartered at Lalitpur**, which is located in the **Kathmandu valley** of **Nepal**.

❖ **ICIMOD promotes and fosters partnerships** amongst the RMCs to secure a better future for the people and environment of the HKH region.

8.14	WORLD HYDROGRAPHY DAY- JUNE 21ST

❖ It is observed annually on **June 21st.**

❖ It is officially recognized and implemented by the **International Hydrographic Organisation (IHO)**.

❖ It serves as a platform to highlight the crucial work carried out by hydrographers worldwide and to promote the significance of hydrography itself.

❖ The theme for this year is: **"Hydrography - underpinning the digital twin of the ocean."**

ABOUT HYDROGRAPHY

- ❖ Hydrography is the **branch of applied sciences** that deals with the **measurement and description of the physical features of oceans, seas, coastal areas, lakes and rivers**, as well as with the **prediction of their change over time**.
- ❖ This is **done mainly with specialised ships and boats operating echo sounders and sonars**, but also using **survey aircraft fitted with lasers**.
- ❖ Hydrography also involves measuring the tide and the currents.
- ❖ It **includes shore features, natural and manmade, lights and towers that will aid in fixing a ship's position**, as well as the **physical aspects of the sea and seabed**.
- ❖ The most well-known **application of hydrographic information is for making the nautical charts that all mariners use for navigation**.

ABOUT INTERNATIONAL HYDROGRAPHIC ORGANISATION (IHO):

- ❖ IHO was **established in 1921** as a prominent entity focused on addressing various aspects of marine life.
- ❖ HQ - **Monaco**
- ❖ It **works to ensure that all the world's seas, oceans and navigable waters** are **surveyed and charted**, thereby **supporting the safety of navigation and the protection of the marine environment**.
- ❖ It **coordinates the activities of national hydrographic offices** and **sets standards in order to promote uniformity** in nautical charts and documents.

> The **Indian Naval Hydrographic Department** functions under the **Indian Navy** as the nodal agency conducting hydrographic surveys and producing nautical charts in India.

8.15   GANGOTRI NATIONAL PARK

- ❖ **Gangotri national park** (GNP) authorities would soon be transferring around 50 hectares of land to Army and ITBP to develop new bunkers and border outposts near the LAC.

ABOUT GANGOTRI NATIONAL PARK

- ❖ It was established in **1989** and is situated in **Uttarkashi, Uttrakhand** in the upper catchment of **Bhagirathi River**.
- ❖ **Gaumukh** at Gangotri glacier, **the origin of river Ganga**, **is located inside the park**.
- ❖ The park area forms a viable **continuity between Govind National Park and Kedarnath Wildlife Sanctuary.**
- ❖ The **northeastern section of the park** forms the **international boundary of India and Tibet (China).**
- ❖ **Area- 2,390 sq km** across a highly mountainous part of the country.
- ❖ **Major peaks** within the park include **Chaukhamba I, Satopanth, Chaukhamba II, Chaukhamba III, and Kedarnath Main.**
- ❖ **Western Himalayan subalpine conifer forests** dominate at **lower elevation.**
  - ✓ These forests are filled with fir trees intermixed with deodar, oak, spruce, and rhododendrons trees.
- ❖ **Higher elevations** in the park are home to **Western Himalayan alpine shrubs.**
  - ✓ Alpine meadows are also common beneath the massive glaciers.
- ❖ Various rare and endangered species like **bharal or blue sheep, black bear, brown bear, himalayan monal, himalayan snowcock, himalayan tahr, musk deer and snow leopard** are found in the park.

8.16   BLUE OCEAN EVENT

- ❖ The term **"Blue Ocean Event"** refers to a **hypothetical event** in which the **Arctic Ocean becomes ice-free during the summer months**.
- ❖ It **describes a scenario where the extent of sea ice in the Arctic** has melted to such a degree that **only small, scattered patches** or **a completely ice-free ocean surface remains**.
- ❖ BOE represents a **critical tipping point in the Arctic system**, as **more sea ice melts**, it **reduces the amount of sunlight reflected into space**, leading to further warming and ice loss.

8.17 WHITE-RUMPED VULTURE

❖ To revive the vulture population in the state of Madhya Pradesh, **20 white-rumped vultures** were recently brought to **Vulture Conservation Centre in Kerwa** from **Pinjore in Haryana**.

ABOUT WHITE-RUMPED VULTURE (GYPS BENGALENSIS)

❖ It is a medium-sized **Old-World vulture**.
❖ It is also **known as Indian White-backed Vulture** or **Oriental White-backed Vulture**.
❖ Global Distribution: **Pakistan, India, Bangladesh, Nepal, Bhutan, Myanmar (Burma), Thailand, Laos, Cambodia, and southern Vietnam.**
❖ In the 1980s, the global population was estimated at several million individuals, and it was thought to be **"the most abundant large bird of prey in the world".**
  ✓ As recent as **2021**, the **global population was estimated at less than 6,000 mature individuals**.
❖ Protection Status:
  ✓ IUCN red list : **Critically Endangered**
  ✓ Wildlife Protection Act 1972: **Schedule-1**

8.18 PELAGIC BIRDS

❖ Following the **passage of Cyclone Biparjoy near Jakhau in Kutch, birdwatchers and enthusiasts** have reported **sightings of Pelagic birds, including species like shearwaters, petrels, storm petrels and terns** in places not typically associated with their presence.

ABOUT PELAGIC BIRDS

❖ These are seabirds that **live on open seas and oceans rather than inland or around** more restricted waters such as lakes and rivers.
❖ They can be **found thousands of miles offshore** but can get blown onto land during high winds and storms.
❖ The **only other time they come inland is to breed**.
❖ Examples- **albatrosses, frigatebirds, fulmars, petrels, shearwaters, and tropicbirds**.
❖ Most of them eat **fish, crustaceans, mollusks, or aquatic vegetation.**
❖ Generally, they have **dense, waterproof feathers and layers of fat** to keep them warm.
❖ A unique feature about seabirds is that **they have desalination filters** in their bills that can eliminate salt from the water they drink.
❖ They have **exceptionally long and thin wings** that allow them to **fly effortlessly for long periods without rest**.
❖ Some have **webbed or partially webbed feet for swimming, plucking fish from the shallows, or executing precise, plunging dives**.
❖ In general, seabirds **live longer than other wild birds**; most have an average lifespan of 50 years.
❖ Almost all seabirds **live in colonies, migrate annually, and mate for life**.
❖

8.19 RED-EARED SLIDERS TURTLE

❖ Officers of the Customs Air Intelligence Unit (AIU) seized **6,850 live red-eared sliders**, a **species of turtle**, from two male passengers at the Tiruchi international airport.

ABOUT RED-EARED SLIDERS TURTLE (TRACHEMYS SCRIPTA ELEGANS)

❖ It is known for its **distinct red stripes behind each ear**.
❖ The red-eared slider is **native to South-Eastern USA and Mexico**.
❖ It is **a semi-aquatic turtle from fresh and brackish water ecosystems.**
❖ It **spends the majority of its time either in the water foraging or basking on rocks and logs**.
❖ The species is **considered as one of the world's 100 worst invasive non-native species**.
❖ In the wild, **red sliders can live from 20 to 50 years**.
❖ These are **fed mainly on plants and small animals**, such as crickets and fish etc.
❖ **IUCN red list status : Least Concern**

8.20	HASARIUS MUMBAI

❖ A new species of **jumping spider** named **'Hasarius Mumbai' was recently discovered from the rocks** close to the streams at the Bombay Natural History Society's (BNHS) conservation education centre in **Goregaon East**.

ABOUT HASARIUS MUMBAI

❖ It is a **newly discovered species of jumping spider**.
❖ These are spiders who, instead of trapping their prey in a web, **stalk and hunt them by pouncing**.
❖ It has **multiple eyes that give a 360-degree view** of its surroundings and a bulbous body covered in hair.
❖ In India, there are **only two other Hasarius species** which have been documented, namely **H. Adansoni**, which is found across the country, including in urban areas, and **kjellerupi**, which was documented from the **Nicobar Islands**.

8.21	IOD AND ENSO

❖ With the **El Nino phenomenon almost certain** to affect the Indian monsoon this year, **high hopes are pinned on the development of a positive Indian Ocean Dipole** (IOD) and its ability to counterbalance the El Nino effect.
❖ **IOD** is defined by the **difference in sea surface temperature between the eastern and western sides of the Indian Ocean.**
  ✓ The IOD was identified as **an independent system in 1999.**

RELATION BETWEEN EL NIÑO-SOUTHERN OSCILLATION (ENSO) AND IOD

❖ The air circulation in the Indian Ocean is from west to east, and in opposite directions at the upper level.
❖ In a **normal year warm water from the west Pacific cross over to the Indian Ocean** and make the air rise and strengthening the air circulation.
❖ **During EL nino**, the **western side of the Pacific is cooler than normal because of which the Indian Ocean side also gets cooler and helps in the development of positive IOD**.
❖ Similarly **negative IOD is associated with LA-Nina.**
❖ Researchers believe that **while external factors such as ENSO can trigger IOD, many times is caused by the local circulations**.
❖ A **positive IOD helps rainfall along the African coast, and Indian subcontinent** while suppressing it in the eastern Indian Ocean, and the **opposite happens during a negative IOD**.
❖ The **impact of IODs is much weaker as compared to ENSO** but they **can subdue the impact of ENSO**.

8.22	GLOBAL ENVIRONMENT FACILITY

❖ The **64th GEF council meeting** was recently held **in Brasilia, Brazil**.
❖ The GEF Council approved the **disbursement of $1.4 billion** to accelerate efforts to tackle the climate, biodiversity, and pollution crises.
  ✓ Of this, **$653 million has been set aside** for biodiversity and this would be used to help countries update their National Biodiversity Strategies and Action Plans, biodiversity programmes and meet the targets of the **Kunming-Montreal Global Biodiversity Framework (GBF).**
  ✓ The Framework was **adopted at Convention on Biological Diversity COP15 in 2022**.

ABOUT GEF

❖ GEF is a **multi stakeholder partnership** to tackle various environmental issues **established during the 1992 Rio Earth Summit of UNFCCC.**
❖ GEF **funding is provided by participating donor countries** and is **mobilized through a replenishment process every four years**.
❖ It serves as "financial mechanism" to five conventions-
  ✓ **Convention on Biological Diversity (CBD).**

✓ **United Nations Framework Convention on Climate Change (UNFCCC).**
✓ **Stockholm Convention on Persistent Organic Pollutants (POPs).**
✓ **UN Convention to Combat Desertification (UNCCD).**
✓ **Minamata Convention on Mercury.**

❖ The **GEF Assembly is composed of all 185 member countries**, or participants including India.
❖ The **GEF Council is the main governing body**, with 32 members appointed by constituencies of GEF member countries.
❖ Secretariat- **Washington, D.C**.

8.23 BURMESE PEACOCK SOFTSHELL TURTLES

❖ The Burmese peacock softshell turtle eggs have recently hatched in Myanmar.
❖ Burmese peacock softshell turtles , also known as **Nilssonia Formosa**, is endemic to Myanmar.
❖ It is **one of five species in the genus Nilssonia**.
❖ It is **an oviparous species**, meaning **it lays eggs externally which then hatch after an incubation period.**
❖ IUCN red list status: **Critically Endangered**
❖ **Threats**: highly sought after in East Asian food markets, habitat loss, accidental captures by fishermen, etc.

8.24 SEALIONS AND ALGAL BLOOMS

❖ A recent outbreak of **algae bloom** - commonly known as **red tide** - has sickened and killed an unknown number of sea lions and dolphins in California.

ABOUT SEA-LION
❖ It is **a marine mammal that belongs to the family Otariidae**.
❖ These are **known for their semi-aquatic lifestyle**, spending a significant amount of time both on land and in the water.
❖ They have **a streamlined body with a large head and a long, flexible neck.**
❖ They **inhabit rocky shorelines, islands, and sandy beaches**.
❖ Globally, they can be found in various regions, including the **Pacific Ocean, the Atlantic Ocean, and parts of the Indian Ocean.**
❖ **Sea lions are carnivorous** and primarily feed on **fish, such as herring, anchovies, sardines, and squid.**
❖ Currently, there are **six subspecies of sea lions**: **Australian sea lions, California sea lions, Galapagos sea lions, New Zealand sea lions, South American sea lions, and Steller sea lions.**
❖ **Threats**- Introduced species, such as **dogs, carry diseases that can spread to sea lions**. They are vulnerable to the effects of climate change on ocean currents, which impacts their fish prey abundance. They are also **victims of bycatch in fisheries**.

ABOUT ALGAL BLOOMS
❖ An algal bloom is the **rapid increase of the algae population in aquatic ecosystems**, both in **fresh and marine waters**, where it is known as either **water bloom or marine bloom, respectively**.
❖ They **thrive where there is an abundance of two nutrients; phosphorus and nitrogen**, usually caused **by runoff of nutrients (animal waste, fertilizers, sewage) from the land**.
❖ It causes the **production of a neurotoxin called domoic acid**.
❖ The colors range from green, red, brown, and yellow. The major types of algal blooms are **cyanobacteria (blue-green algae)** and **red tides (red algal blooms).**
❖ Algal bloom are among the most common forms of **eutrophication**, which **depletes the supply of oxygen, leading to the death of animal life.**

9. SCHEMES

9.1 'SHAKTI' SCHEME

- ❖ The Karnataka government has launched **'Shakti smart cards'** to Provide free travel to women in state-run buses, starting from June 11.
- ❖ The government has already issued a set of guidelines on the **'Shakti' scheme**, which is one of the major poll promises by the Congress party in Karnataka.
- ❖ According to the transport department of Karnataka, women can apply for Shakti smart cards through sevasindhu.karnataka.gov.in from June 11.
- ❖ Government buses in Karnataka ferry about **40 lakh women daily.**
- ❖ The number is expected to rise by 10 percent under the free travel scheme, which will cost the government about **Rs 4,700 crore per year.**

OTHER SCHEMES LAUNCHED BY KARNATAKA

- ❖ **'Gruha Jyoti'** offering 200 free units of electricity to domestic consumers will be launched from Kalaburagi from July 1.
- ❖ **'Anna Bhagya' scheme** offering 10 kg scheme offering 10 kg free rice or food grain to the BPL families will be launched from Mysuru.
- ❖ **'Gruha Lakshmi' scheme** (Providing monthly financial assistance of Rs.2,000 to the head woman of a house), the Chief Minister said it will be launched on August 16 from the district headquarter town of Belagavi.
- ❖ **'Yuva Nidhi' scheme** offering unemployment allowance of Rs 3,000 to the graduates and Rs 1,500 to the diploma holders, Siddaramaiah said those graduates and diploma holders who passed the exams in 2022-23 will get the allowance for 24 months if they do not get job within six months of passing their exam.

9.2 PM MATRU VANDANA YOJANA

- ❖ The **Prime Minister of India** has lauded the new initiative of celebrating **'Pradhan Mantri Matru Vandana Yojana'** as **'God Bharai' ceremony** in Dausa, Rajasthan.

ABOUT PM MATRU VANDANA YOJANA:

- ❖ It is a **Centrally Sponsored Direct Benefit Transfer (DBT)** scheme launched in **2017.**

OBJECTIVES

- ❖ Providing **partial compensation** for the wage loss in terms of cash incentive, so that the woman can take adequate rest before and after delivery of the first child
- ❖ To **improve health-seeking** behaviour amongst **Pregnant Women & Lactating Mothers (PW&LM).**

FEATURES

- ❖ The scheme is to **provide** maternity benefits to women belonging to socially and economically disadvantaged sections of society.
- ❖ The maternity benefit is to be provided to a woman for the **first two living children** provided the second child is a girl
- ❖ Under this scheme **monetary benefit of Rs. 5,000** is given to the expecting mothers from the time of the initial stage of pregnancy to till the time the child is born.
- ❖ Additionally, **Rs. 1,000** is provided under the **Janani Suraksha Yojana** post-institutional delivery.
- ❖ The Rs. 5,000 is provided in **three instalments.**
- ❖ The **first instalment** of Rs. 1,000 is paid at the time of registration of the pregnancy.
- ❖ The **second instalment** of Rs. 2,000 is paid at the time of completing 6 months of pregnancy and receiving at least one antenatal checkup.

- ❖ The **third instalment** of Rs. 2,000 is received after the birth and registration of birth of such child and after such child receives the first cycle of immunization for BCG, OPV, DPT and Hepatitis-B.
- ❖ **Cases of miscarriage/stillbirths** are to be treated as fresh cases for providing maternity benefits under the scheme.

9.3   OPEN MARKET SALE SCHEME

- ❖ The **Centre** has **discontinued** the **sale of rice and wheat** from the central pool under the Open Market Sale Scheme (OMSS) to State governments, a move that will hit some States, including Karnataka, offering free grains to the poor.

ABOUT OPEN MARKET SALE SCHEME (OMSS):

- ❖ Under OMSS, the **Food Corporation of India (FCI)** sells surplus stocks of wheat and rice at pre-determined prices through e-auction in the open market.
- ❖ **Objective:** To **enhance** the supply of food grains, especially wheat, during the lean season and thereby moderate the open market prices, especially in the deficit regions.
- ❖ The FCI conducts a weekly auction to conduct this scheme in the open market using the platform of commodity exchange **NCDEX (National Commodity and Derivatives Exchange Limited).**
- ❖ The **State Governments/ Union Territory** Administrations are also **allowed to participate** in the e-auction, if they require wheat and rice outside the **Targeted Public Distribution Scheme (TPDS) and Other Welfare Schemes (OWS).**
- ❖ The **reserve price** is **fixed** by the government. In the tenders floated by the FCI, the bidders cannot quote less than the reserve price.
- ❖ The present form of OMSS comprises **3 schemes** as under:
    - ✓ **Sale of wheat** to bulk consumers/private traders through **e-auction.**
    - ✓ **Sale of wheat** to bulk consumers/private traders through **e-auction by dedicated movement.**
    - ✓ **Sale of Raw Rice Grade 'A'** to bulk consumers/private traders through **e-auction.**

KEY FACTS ABOUT FOOD CORPORATION OF INDIA (FCI):

- ❖ It is a **statutory body** set up in **1965 (under the Food Corporation Act, 1964)** against the backdrop of major shortage of grains, especially wheat, in the country.
- ❖ It comes under the **ownership** of the **Ministry of Consumer Affairs, Food and Public Distribution, Government of India.**
- ❖ **Headquarters**: New Delhi
- ❖ **FCI was mandated with three basic objectives:**
    - ✓ To **provide** effective price support to farmers;
    - ✓ To **procure and supply grains** to pds for distributing subsidized staples to economically vulnerable sections of society;
    - ✓ Keep a **strategic reserve** to stabilize markets for basic foodgrains;

10. POLICY AND PROGRAMME

10.1 NAMO SHETKARI MAHASANMAN YOJANA

- ❖ The Maharashtra government has recently launched a **new financial scheme aimed at providing support to farmers** in the state.
- ❖ The scheme, known as **Namo Shetkari Mahasanman Yojana**, was approved at a Cabinet meeting recently.

ABOUT THE SCHEME

- ❖ Under the Namo Shetkari Mahasanman Yojana, farmers in Maharashtra will receive **an annual payment of Rs 6,000 in addition to the amount of Rs 6,000 that farmers already receive in instalments per year** from the **Centre's Pradhan Mantri Kisan Samman Nidhi Yojana**.
- ❖ **More than 1 crore farmers** in Maharashtra are expected to benefit from the scheme.
- ❖ By providing **direct financial assistance**, the **scheme intends to empower farmers and enable them to overcome challenges and invest in their agricultural activities**.

10.2 PM SVANIDHI

- ❖ The Ministry of Housing and Urban Affairs (MoHUA) celebrated **3 years journey of PM SVANidhi**.
- ❖ The government **also launched a PM SVANidhi mobile app** for street vendors, **to ease the loan application process**.

ABOUT PRIME MINISTER STREET VENDOR'S ATMANIRBHAR NIDHI (PM SVANIDHI) SCHEME

- ❖ The PM SVANidhi is **a micro credit scheme** launched in **2020** to **provide handholding support to street vendors**, to tide over pandemic-induced economic stress.
- ❖ It is a **Central Sector Scheme** i.e., **fully funded** by **Ministry of Housing and Urban Affairs** with the following **objectives**:
  - ✓ **To facilitate working capital loan**;
  - ✓ **To incentivize regular repayment**; and
  - ✓ **To reward digital transactions**
- ❖ The scheme **facilitates a working capital collateral-free one-year loan of ₹10,000**, with **subsequent loans of ₹20,000 and ₹50,000 with 7% interest subsidy** to approximately **50 lakh street vendors**.
- ❖ The scheme **aims to open new opportunities for street vendors to move up the economic ladder**.
- ❖ The Scheme is **available to all street vendors engaged in vending in urban areas**.

10.3 NYAYA VIKAS PORTAL LAUNCHED

- ❖ **Nyaya Vikas Portal** was launched recently by **Ministry of Law and Justice** for monitoring the implementation of **Centrally Sponsored Schemes (CSS) Nyay Vikas.**
- ❖ It provides **four fast methods of logging in**, providing stakeholders with easy access to information **on funding, documentation, project monitoring, and approval.**
- ❖ The portal provides **a dashboard that shows the progress of the scheme on various parameters** such as the **number of court halls and residential units available**, the number of **projects sanctioned**, the number of **projects completed**, the number of projects under construction and the number of projects pending.
- ❖ The portal **also provides a map view that shows the location and status of each project** across **the country**.
- ❖ The portal generates various reports such as state-wise reports, district-wise reports, project-wise reports and progress reports that can be downloaded by the users.

ABOUT NYAYA VIKAS SCHEME

- ❖ The **Department of Justice (under the Ministry of Law & Justice)** has been implementing the Centrally Sponsored Scheme (CSS) **for the Development of Infrastructure Facilities for Districts and Subordinate Judiciary since 1993-94.**

❖ Under the Scheme, **central assistance is provided to the State Government / UT Administrations** for the construction of court halls and residential units for Judicial Officers / Judges of District and Subordinate Courts.

The funds-sharing pattern under the scheme is **60:40 for states other than North Eastern and Himalayan states**, **90:10 for North Eastern and Himalayan states**, and **100% for union territories**.

10.4 LEARN AND EARN SCHEME

❖ The **Madhya Pradesh** Government is set to launch **Mukhyamantri Seekho-Kamao Yojana' (CM Learn and Earn Scheme).**

ABOUT LEARN AND EARN SCHEME

❖ The Scheme will be launched to teach employable skills to the youth.

❖ Under the scheme, unemployed youth will get a stipend **of Rs 8,000 to 10,000 per month** as financial assistance during the period of skill learning in various establishments.

❖ The government plans to offer training in around **703** different types of works across various sectors. These sectors include engineering, hotel management, tourism, travel, hospital services, ITI, software development, banking, insurance, accounting, chartered accountancy, financial services, industries, and MSME industry. The wide range of options allows the youth to choose fields aligned with their interests and aptitudes.

❖ It will also provide industry-oriented training to the trainees, proficiency in latest technology and processes, thereby enhancing their regular employability.

ELIGIBILITY

❖ The local residents of Madhya Pradesh, in the age group of **18 to 29 years**, whose educational qualification is **12th or ITI or higher**, will be eligible in the scheme. The selected youth will be called student trainees.

❖ Stipend

The Trainees will receive a monthly stipend based on their educational qualifications. Those who have passed **Class 12th will be given Rs 8000 per month**, while **ITI pass-outs** will receive **Rs 8,500 per month**. Similarly, individuals with a **diploma or higher degree will receive Rs 9,000 and Rs 10,000 per month, respectively**

10.5 NATIONAL EXIT TEST (NEXT)

❖ Union Health Ministry announced that the **National Exit Test (NExT) will be held in 2024.**

ABOUT NATIONAL EXIT TEST (NEXT)

❖ It will replace the **final-year MBBS examination** and the **National Eligibility-cum-Entrance Test-Postgraduate (NEET-PG),** acting as the test for registration for doctors and admission to medical postgraduate courses.

❖ The combined **NExT exam** will also serve as the mandatory licentiate examination for undergraduate medical students to practice modern medicine in India.

OBJECTIVES

❖ The importance of the NExt lies in the fact that it will be the same for everyone whether trained in India or any part of the world and hence it will solve the problem of **foreign medical graduates (FMGs)** and mutual recognition.

10.6 UNITED NATIONS WORLD FOOD PROGRAMME

❖ Recently, the **United Nations World Food Programme** has said it is temporarily suspending food aid to **Ethiopia** because its supplies are being diverted.

ABOUT WORLD FOOD PROGRAMME

- ❖ **The World Food Programme (WFP)** is the leading humanitarian organization saving lives and changing lives, delivering food assistance in emergencies and working with communities to improve nutrition and build resilience.
- ❖ It was founded in **1961** by the **Food and Agriculture Organization (FAO)** and **United Nations General Assembly (UNGA) with its headquarters in Rome, Italy.**
- ❖ It is also a member of the **United Nations Sustainable Development Group (UNSDG)**, a coalition of UN agencies and organizations aimed at fulfilling the **Sustainable Development Goals (SDGs).**
- ❖ The international community has committed to end hunger, achieve food security and improve nutrition by **2030.**

OBJECTIVES:

- ❖ The **World Food Programme (WFP)** focuses on emergency assistance as well as rehabilitation and development aid.
- ❖ **Two-thirds** of its work is in conflict-affected countries, where people are three times more likely to be undernourished than elsewhere.
- ❖ It works closely with the other two Rome-based UN agencies:
  - ✓ **The Food and Agriculture Organization (FAO)**, which helps countries draw up policy and change legislation to support sustainable agriculture
  - ✓ **The International Fund for Agricultural Development (IFAD)**, which finances projects in poor rural areas.
- ❖ To end hunger by protecting access to food.
- ❖ Improving nutrition and achieving food security.
- ❖ Supporting the SDG implementation and partnering for its results.

10.7	OPERATION "AMANAT"

- ❖ **The Railway Protection Force (RPF)** conducted a successful operation named **"Amanat,"** resulting in the retrieval of lost or left-behind luggage and valuable articles.
- ❖ The operation, carried out in May 2023, saw the RPF recovering belongings belonging to **119 passengers**, with an estimated total value of approximately **Rs 51.13 lakh.**

ABOUT MISSION AMANAT

- ❖ It aims to track **the lost luggage** of the passengers while traveling.
- ❖ Through this operation, Indian Railways wants to develop a sense of trust among the passengers and allow them to travel without worrying about the luggage.
- ❖ Passenger can easily track their **lost luggage** through the mission.
- ❖ The mission is taken up by the Railway Protection Force (RPF) of **Western Railways.**
- ❖ The passengers will be able to check the details of their lost luggage from the images and photos which will be posted under the web link of the **'Mission Amanat-RPF'** website.

ABOUT RAILWAY PROTECTION FORCE (RPF)

- ❖ The contingent of RPF is an **Armed Force** of the Union of India. It is a security force under the ownership of Indian Railways, Ministry of Railways.
- ❖ It entrusted with protecting railway passengers, passenger area and railway property of the Indian Railways.
- ❖ It was established by the Railway Protection Force Act, 1957.
- ❖ This is only **central armed police force** (CAPF, commonly known as Para-Military force) which has power to arrest, investigate and prosecute criminals.

OTHER OPERATIONS BY RPF

- ❖ Operation **Upalabdh**
- ❖ Operation **AAHT**

10.8	DIGIYATRA FACILITY

- ❖ **Indira Gandhi International Airport (IGI)** has introduced a new facility **DigiYatra** to make travel easier.
- ❖ **DigiYatra** allows passengers to enjoy the benefits without having to download the mobile application.
- ❖ The initiative has been launched at Terminal 3 and it simplifies the registration process for the passengers into three steps.
- ❖ Passengers can use this facility by scanning the boarding pass and face along with presenting identification proof to the security staff deployed near the registration desk.
- ❖ Once registered successfully, passengers will be able to experience seamless travel within the terminal, which includes the security check area and the boarding gates.

ABOUT DIGIYATRA

- ❖ DigiYatra is an initiative that uses facial recognition technology to make terminal entry & security clearance at the airport a seamless, hassle-free, and paperless process.
- ❖ The platform uses facial recognition technology to verify the identity of flyers.
- ❖ It is a decentralised mobile-based ID storage platform where air passengers can save their IDs and travel documents.
- ❖ Passengers can use the facility seamlessly, inside the terminal, security check area, and at the boarding gates.
- ❖ DigiYatra is a faster, safer, and smoother way of travel.

10.9	POSHAN TRACKER APP

- ❖ More than 57,000 migrant workers have registered for the special **one nation one Anganwadi programme** by using the **Poshan Tracker App** on mobile phones.

POSHAN TRACKER APP:

- ❖ The Poshan Tracker App provides a comprehensive view of activities at Anganwadi Centers, service deliveries by Anganwadi Workers, and beneficiary management for pregnant women, lactating mothers, and children under six years old.
- ❖ It **digitizes** and **automates** the physical registers used by workers, improving the quality of their work and streamlining processes.
- ❖ Anganwadi workers are provided smartphones through Government e-Market (GeM) to **enhance** their efficiency in service delivery.
- ❖ Each state has appointed a nodal person **to provide technical support and resolve issues** related to downloading and using the Poshan Tracker application.
- ❖ Migrant workers who have registered in their original state can visit the nearest Anganwadi center in their current place of residence and avail the schemes and services offered.
- ❖ The Poshan Tracker App was **launched** by the **Ministry of Women and Child Development (MoWCD).**

POSHAN ABHIYAAN:

- ❖ Poshan Abhiyaan was **launched** by the Prime Minister of India on **8th March 2018.**
- ❖ It **aims** to **improve nutritional outcomes** comprehensively and bring the issue of nutrition to the forefront.
- ❖ The **focus** of the Abhiyaan is on the nutritional status of adolescent girls, pregnant women, lactating mothers, and children aged 0-6 years.
- ❖ The program uses technology, convergence, and community involvement to target specific issues such as stunting, undernutrition, anaemia, and low birth weight in children.
- ❖ The Abhiyaan strives to reduce the prevalence of these issues through a holistic approach.

10.10	KANYA SHIKSHA PRAVESH UTSAV

- ❖ The **Union Ministry of Women and Child Development (WCD)** have brought back 1 lakh girls into the mainstream education system under the `Kanya Shiksha Pravesh Utsav''.

ABOUT KANYA SHIKSHA PRAVESH UTSAV:

❖ The campaign was **launched** on the eve of **International Women's Day (8th March 2022)** by the **Ministry of Women and Child Development** in collaboration with the **Ministry of Education and United Nations Children's Fund (UNICEF).**

❖ The campaign **aims** to increase the enrolment and retention of the number of adolescent girls **(girls aged 11 to 14)** in school. The campaign builds on existing schemes for girls such as **Beti Bachao Beti Padhao (BBBP),** National Education Policy (NEP), **Scheme For Adolescent Girls (SAG),** etc.

❖ The campaign will be **implemented as part** of the Ministry of Women and Child Development's Beti Bachao Beti Padhao (BBBP) project. Government aims to **fund 400 districts** across all states under the BBBP Scheme to sensitize families to enrol adolescent girls in schools.

❖ Funds under **Samagra Shiksha Abhiyan** will also be utilized for the campaign. Also, **Anganwadi workers (AWWs)** will be incentivized for referring out-of-school girls.

❖ Due to the COVID crisis, many girls were pushed out of formal education. It is crucial to bring back such girls into the formal education system to meet the sustainable development goals (SDG).

❖ In the **new scheme**, a **new category** is created in which adolescent **girls between 14 and 18 years are covered.**

10.11   SANKALP PROGRAMME

❖ The **Ministry of Skill Development & Entrepreneurship (MSDE)** certifies **98 Trainers** trained in the cluster-based Training of Trainers project under the SANKALP programme.

ABOUT SANKALP PROGRAMME:

❖ The **Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP)** programme was launched in **2018.**

❖ **Nodal Ministry**: **Ministry of Skill Development and Entrepreneurship (MSDE)**

❖ It is a **World Bank** loan-assisted project and is aligned with the overall objectives of the **National Skill Development Mission (NSDM).**

❖ The project **focuses** on transforming the overall skilling ecosystem of India, covering both central and state-level agencies for improved outcomes.

❖ It also **encourages** innovative best practices at the local level, resulting in enhanced access, quality and capacity in the skilling ecosystem and improved access to and completion of skills training for female trainees and other disadvantaged groups.

❖ **Strategy**: Under SANKALP four key result areas have been identified viz –

❖ **Institutional Strengthening (at National, State & District level)**

❖ **Quality Assurance Quality Assurance of skill development programs**;

❖ **Inclusion of marginalised population in skill development; and**

❖ **Expanding Skills through Public-Private Partnerships (PPPs).**

10.12   FSSAI'S EAT RIGHT INDIA SCHEME

❖ The **Guwahati Railway Station** located in **Assam** has received the prestigious **'Eat Right Station'** certification from the **Food Safety and Standards Authority of India (FSSAI).**

ABOUT THE NEWS

❖ FSSAI has acknowledged Guwahati Railway Station for its commitment to providing high-quality and nutritious food options to passengers.

❖ As the **first railway station** within the **North East Frontier Railway** to receive this certification, Guwahati Railway Station has successfully met the stringent guidelines laid down by FSSAI.

❖ The **'Eat Right Station'** certification is a testament to the station's compliance with FSSAI's established standards for food storage and hygiene practices.

❖ This certification is an acknowledgment of the station's efforts in maintaining the benchmark in serving safe and wholesome food to the passengers.

❖ At present, **66 stations** across the country have been certified while two stations are in the process of obtaining the certification. **Mumbai Central Railway Station** became the **first Eat Right Station** with a rating of **four stars.**

❖ The maximum number of railway stations certified under the program are from **Madhya Pradesh with 18.** MP is followed by Rajasthan and Delhi with **7 Eat Right Stations.**

FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA (FSSAI):

❖ It is a **statutory body.**

❖ It functions under the **Ministry of Health and Family Welfare**, Government of India.

❖ FSSAI was established as per the **Food Safety and Standards Act, 2006.**

❖ The **Food Safety and Standards Act, 2006** is a comprehensive law that governs food safety and regulation in India.

10.13 LAKE VICTORIA

❖ A new scientific report published in the journal Nature shows that **significant precipitation changes and increasing extreme climate events affecting the large human populations** as well as **endemic biodiversity of Lake Victoria Basin.**

❖ Heavy rains, wind storms, and floods threaten the survival and water access of the communities living in the Lake Victoria Basin (LVB), East Africa.

❖ The resultant massive flooding in lake-adjacent areas displaced over 200,000 people in **Kenya, Uganda and Tanzania**.

  ✓ LVB covers, also including **Burundi and Rwanda.**

ABOUT LAKE VICTORIA

❖ It is the **world's second-largest freshwater lake by area** (after L**ake Superior**).

❖ It is **located in East Africa**, bordered by **Tanzania, Uganda, and Kenya**.

❖ It is also **called Victoria Nyanza in Kenya, Nalubaale in Uganda, and Ukerewe in Tanzania**.

❖ It is **a source of the White Nile River** which flows northward and eventually joins the Blue Nile in Sudan to form the Nile River.

❖ Also referred to as **"Darwin's Dreampond",** the lake is known for its high levels of unique biodiversity.

❖ The **lake supports the largest freshwater fishery in the world**, producing 1 million tons

10.14 CANARY ISLANDS

❖ It is an archipelago **located in the Atlantic Ocean**.

❖ It is about **1300 km South of mainland Spain** and 115 km West of the African coast (Morocco).

❖ The **Canaries comprise the Spanish provincias (provinces) of Las Palmas and Santa Cruz de Tenerife**.

❖ These Islands were formed by volcanic eruptions millions of years ago.

10.15 PM KISAN APP

❖ **PM KISAN App** was recently launched with the feature of **face Authentication**.

❖ From this app, **farmers can complete e-KYC remotely, sitting at home easily by scanning their face without OTP or fingerprint.**

❖ It has become the **first scheme of government to do e-KYC through facial authentication** mobile app.

❖ The **app was designed and developed by the National Informatics Centre** in collaboration with the **Ministry of Electronics and Information Technology.**

❖ App also resolves **difficulties related to Aadhaar verification and updating bank account details** on PM Kisan Portal through effective use of digital public goods.

ABOUT PM KISAN SAMMAN NIDHI (PM-KISAN)

❖ It is a **Central Sector scheme** with **100% funding from the Government of India.**

- ❖ It aims to supplement the financial needs of the farmers in procuring various inputs to ensure proper crop health and appropriate yields commensurate with the anticipated farm income.
- ❖ It is **one of the world's largest Direct Benefit Transfer (DBT) schemes**.
- ❖ Under it, **income support of Rs.6000 per year** is provided to **all land holding farmer families across country, irrespective of land size**, in **three equal instalments of Rs.2000** every four months.
  - ✓ The definition of family for the scheme is husband, wife and minor children.
- ❖ **State Government and UT administration** will **identify the farmer families which are eligible** for support as per scheme guidelines.
- ❖ <u>**Excluded categories include**</u>-
  - ✓ All **Institutional Landholders.**
  - ✓ Farmer families which belong to one or more of the following categories:
    - ➢ **Former and present holders of constitutional posts.**
    - ➢ Former and present **Ministers/ State Ministers and former/present Members of Lok Sabha/ Rajya Sabha/ State Legislative Assemblies/ State Legislative Councils, former and present Mayors of Municipal Corporations, former and present Chairpersons of District Panchayats**.
    - ➢ All **superannuated/retired pensioners whose monthly pension is Rs.10,000/-or more** (Excluding Multi-Tasking Staff / Class IV/Group D employees) of the above category
    - ➢ **All Persons who paid Income Tax in the last assessment year.**
- ❖ **Professionals** like Doctors, Engineers, Lawyers, Chartered Accountants, and Architects are registered with Professional bodies and carry out their profession by undertaking practices.

10.16 PM-PRANAM

- ❖ The **Cabinet Committee on Economic Affairs (CCEA)** recently approved the **PM-PRANAM (PM Programme for Restoration, Awareness, Generation, Nourishment and Amelioration of Mother Earth) scheme**, which was a promise made in the last Budget.

ABOUT THE PM-PRANAM SCHEME

- ❖ It **aims to reduce the use of chemical fertilisers by incentivising the state.**
- ❖ Under the scheme, the **states which will adopt alternative fertilisers will be incentivised with the subsidy** that is saved by reducing the use of chemical fertilisers.
- ❖ The **main objective of the scheme** is to **encourage the balanced use of fertilisers in conjunction with bio fertilisers and organic fertilisers.**
- ❖ It **will not have a separate budget.**
- ❖ It **will be financed by the savings of existing fertiliser subsidies under schemes.**
- ❖ **Half of the subsidy savings will be passed on to the state** that saves the money **as a grant**.
- ❖ Out of this grant, **70% can be used to create assets related to the technological adoption of alternate fertilisers and alternate fertiliser production units** at the village block, and district levels.
- ❖ The **remaining 30% of grant money can be used to reward and encourage farmers, panchayats, and other stakeholders** involved in fertiliser reduction and awareness generation.
- ❖ The government will evaluate the utilisation of fertilisers in terms of increase or decrease in overall consumption in a year vis-a-vis consumption over the past three years.
- ❖ The **Integrated Fertilisers Management System (iFMS) is the platform envisaged to track the use of fertilisers**.

11. INDEX AND REPORTS

11.1 WORLD OF WORK REPORT

❖ **The International Labour Organisation** (ILO) has released its 11th edition of the World of Work report.

MAJOR FINDINGS

❖ Uneven impact of the **polycrisis** (simultaneous occurrence of several catastrophic events like the **war in Ukraine** and the **lingering effects of the COVID-19 pandemic**).

❖ According to the ILO, the **projected global unemployment rate for 2023** is expected to **fall below pre-pandemic levels**, reaching **5.3%.**

❖ **Latin America and the Caribbean, northern, southern, and western Europe, and central and Western Asia** have **demonstrated resilience in their labor markets**, with unemployment rates ranging from 6.3% to 6.7%, showing a positive recovery trend.

❖ The ILO has introduced **a new indicator** called the **jobs gap**.

   ✓ This **encompasses all individuals who desire employment but are currently jobless**.

❖ **Developing countries** also face additional challenges **due to rising debt levels**, which constrain their ability to implement effective policy interventions.

❖ The report advocates for **global financial support for job creation and social protection** to ensure a **comprehensive recovery and bridge the employment gap**.

11.2 5TH STATE FOOD SAFETY INDEX

❖ The **5th State Food Safety Index (SFSI)** of the **Food Safety and Standards Authority of India (FSSAI)** was released by Honorable Union Minister of Health & Family Welfare **Mansukh Mandaviya** on the occasion of **World Food Safety Day.**

KEY HIGHLIGHTS:

❖ Among the top three large states are **Kerala, Punjab and Tamil Nadu**, Kerala has replaced Tamil Nadu bagging the top position.

❖ Among the top small states are **Goa, Manipur and Sikkim** bagging the first, second and third positions.

❖ The top Union territories are **Jammu and Kashmir, Delhi and Chandigarh.**

❖ On the occasion, the health minister honored winners of the **Eat Right challenge for Districts Phase II** with most districts located in Tamil Nadu, Madhya Pradesh, West Bengal, Uttar Pradesh and Maharsathra who have showcased outstanding efforts in implementing plans to improve the food environment and raise awareness about food safety.

FOOD SAFETY PARAMETERS

❖ The Food Safety Index evaluates the performance of states and Union territories across different aspects of food safety.

   ✓ **Human Resources and Institutional Data (with 18% weightage)**
   ✓ **Compliance (with 28% weightage)**
   ✓ **Food Testing- Infrastructure and Surveillance (with 17% weightage)**
   ✓ **Training and Capacity Building (with 8% weightage)**
   ✓ **Consumer Empowerment (with 19% weightage)**
   ✓ **Improvement in SFSI Rank (with 10% weightage)**

ABOUT THE INDEX:

❖ **The Food Safety Index** is released by the **Food Safety and Standards Authority of India (FSSAI)** is a statutory body established under the **Food Safety and Standards Act, 2006.**

❖ The Index was **first started in 2018-19** with an aim to create a competitive and positive change in the food safety ecosystem in India. The setup was also taken to galvanize the states and Union territories to work towards ensuring safe food for citizens.

- ❖ The FSSAI aims to train **25 lakh food businesses operators** in the **next three years** to ensure that food quality standards are met across the country and meet the quality benchmark for food safety, hygiene and nutrition.

FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA (FSSAI)

- ❖ It is an autonomous statutory body established under the **Food Safety and Standards Act, 2006 (FSS Act).**
- ❖ **Ministry of Health & Family Welfare**, Government of India is the administrative Ministry of FSSAI.
- ❖ **Headquarters:** Delhi.
- ❖ **FSS Act, 2006** consolidates various acts & orders that had earlier handled food related issues in various Ministries and Departments, such as–
  - ✓ **Prevention of Food Adulteration Act, 1954**
  - ✓ **Fruit Products Order, 1955**
  - ✓ **Meat Food Products Order, 1973**
  - ✓ **Vegetable Oil Products (Control) Order, 1947**
  - ✓ **Edible Oils Packaging (Regulation) Order 1988**
  - ✓ **Milk and Milk Products Order, 1992**

11.3	SIPRI ANNUAL REPORT 2023

- ❖ **Stockholm International Peace Research Institute (SIPRI)** has released its annual assessment of the state of armaments, disarmament and international security of 2023.

FINDINGS OF THE REPORT

NUCLEAR ARSENALS

- ❖ The **nine nuclear-armed states**, the **United States, Russia, the United Kingdom, France, China, India, Pakistan, the Democratic People's Republic of Korea (North Korea) and Israel** continue to modernize their nuclear arsenals. **Russia and the USA** together possess almost 90 percent of all nuclear weapons.
- ❖ **China:** China's nuclear arsenal increased from **350 warheads in January 2022** to 410 in January 2023, and it is expected to keep growing. China could potentially have at least as many intercontinental ballistic missiles (ICBMs) as either the USA or Russia by the turn of the decade.
- ❖ **India and Pakistan**: India and Pakistan appear to be expanding their nuclear arsenals, and both countries introduced and continued to develop new types of nuclear delivery system in 2022. While Pakistan remains the main focus of India's nuclear deterrent, India appears to be placing growing emphasis on longer-range weapons, including those capable of reaching targets across China.
- ❖ **North Korea:** North Korea conducted no nuclear test explosions in 2022, it conducted more than 90 tests of missiles. Some of these missiles, which include new ICBMs, may be capable of carrying nuclear warheads.
- ❖ **Impact of Russia-** Ukraine war on Nuclear diplomacy
- ❖ In the wake of the invasion, the USA suspended its bilateral strategic stability dialogue with Russia. In February 2023 Russia suspended its participation in the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START)—the last remaining nuclear arms control treaty limiting Russian and US strategic nuclear forces. Talks about a follow-on treaty to New START, which expires in 2026, were also suspended.
- ❖ Iran's military support to Russian forces in Ukraine and the political situation in Iran also overshadowed talks on reviving the Joint Comprehensive Plan of Action (JCPOA), the 2015 agreement meant to prevent Iran from developing nuclear weapons. The JCPOA's revival now seems increasingly unlikely.
  Peace agreements
- ❖ Opportunities for **peace-making were limited in 2022.** The UN succeeded in arranging a truce in Yemen that lasted from April until October—apparently leading to a decline in fatality rates and improved access to aid, despite ongoing violence—while a combination of mediators from **African states, Saudi Arabia, the UN and the United States** fitfully nudged the military authorities in Sudan to agree a new framework for civilian government following military– civilian turmoil throughout 2021.

- ❖ A successful military drive by the **Ethiopian military** and its allies forced the **Tigrayan People's Liberation Front** to sue for a truce in November 2022, which was hurriedly worked out in Pretoria, South Africa, and held reasonably well into 2023.
- ❖ In **Colombia,** a new left-wing government worked on a peace initiative with a number of armed groups in late 2022, which had made uncertain progress by December.

PRIVATE MILITARY AND SECURITY COMPANIES (PMSCS)

- ❖ The past 20 years have witnessed the rapid growth of **PMSCs.** There is no universally accepted, legally binding, standard definition of a PMSC and the sector often operates in a legal lacuna: the employees of PMSCs are not soldiers or civilians, nor can they usually be defined as mercenaries.
- ❖ The wars in **Iraq (2003–11) and Afghanistan (2001–21)** reshaped perceptions of the private military and security industry, with the massive deployment of contractors by the United States leading to new market opportunities across the globe.
- ❖ Factors contributing to the **growth of PMSCs** vary by region and state, but they mostly fit with cost-efficiency calculations, where the sector provides skills and services that states do not possess or that would be too costly for states to develop or perform themselves.
- ❖ **The USA, the United Kingdom, China and South Africa** together are estimated to host about **70 percent of the entire sector.**

MILITARY EXPENDITURE AND ARMS PRODUCTION

- ❖ Global military expenditure rose for the eighth consecutive year in **2022** to reach an estimated **$2240 billion,** the highest level ever recorded by SIPRI.
- ❖ Despite the **3.7 per cent** year-on-year increase in spending, world military expenditure as a share of world gross domestic product (GDP)—the military burden—remained at 2.2 percent because the global economy also grew in 2022.
- ❖ Governments around the world spent an average of **6.2 percent** of their budgets on the military, or **$282 per person.**

INTERNATIONAL TRANSFERS OF MAJOR ARMS

- ❖ The volume of international transfers of major arms in **the five-year period 2018–22 was 5.1 percent** lower than in 2013–17 and 3.9 percent higher than in 2008–12.
- ❖ The volume of transfers in **2018–22** was among the highest since the end of the cold war, but was still around 35 percent lower than the totals for **1978–82 and 1983–87,** when arms transfers peaked.
- ❖ The 25 largest suppliers accounted for 98 percent of the total volume of exports, and the 5 largest suppliers in the period—**the United States, Russia, France, China and Germany— accounted for 76 percent of** the total volume of exports.

IMPORTERS OF MAJOR ARMS

- ❖ The five largest arms importers were **India, Saudi Arabia, Qatar, Australia and China**, which together accounted for 36 percent of total arms imports.
- ❖ The region that received the largest volume of imports of major arms in 2018–22 was Asia and Oceania, accounting for 41 percent of the global total, followed by the Middle East (31 percent), Europe (16 percent), the Americas (5.8 percent) and Africa (5.0 percent).

ABOUT SIPRI

- ❖ **SIPRI** is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. It is based in **Stockholm.**
- ❖ It was established in **1966,** SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.
- ❖ **Funding**: It was established on the basis of a decision by the Swedish Parliament and receives a substantial part of its funding in the form of an annual grant from the **Swedish Government**. The Institute also seeks financial support from other organizations in order to carry out its research.

11.4 GENDER SOCIAL NORMS INDEX (GSNI), 2023

❖ A recently released **UNDP** report says Prejudices against women didn't reduce in last decade, 90% people still hold gender bias.

ABOUT INDEX -

❖ It is released by **United Nations Development Programme (UNDP).**
❖ It **quantifies** biases against women, capturing people's attitudes on women's roles along **four key dimensions**— political, educational, economic and physical integrity.

KEY HIGHLIGHTS

❖ The index, covering **85% of the global population**, reveals that close to 9 out of 10 men and women hold fundamental biases against women.
❖ Gender social norms have persisted for centuries and are pronounced in countries with lower and higher Human Development Index (HDI).
❖ The latest GSNI report showed little progress, despite global and local campaigns for women's rights in recent years such as Me Too, Ni Una Menos, Time's Up and Un Violador en Tu Camino.
❖ Biased gender social norms can **contribute to lack of equality** in political participation.
❖ Countries with greater bias in gender social norms also show a **lower presence of women in parliament.**
❖ On average, the share of heads of state or government who are women has remained around 10 % worldwide since 1995, and women hold just over a quarter of parliament seats globally.
❖ Women are underrepresented in leadership in conflict-affected countries, mainly at the negotiation tables in the recent conflicts in Ukraine (0%), Yemen (4%) and Afghanistan (10%).
❖ Globally, **about seven of 10 peace processes** did not include any women mediators or women signatories.
❖ Even in the 59 countries where adult women are more educated than men, the average income gap is 39%.
❖ **Countries with no bias - Germany, Uruguay, New Zealand, Singapore and Japan.**
❖ 25 % of people believe it is justified for a man to beat his wife.

11.5 GLOBAL TRENDS: FORCED DISPLACEMENT IN 2022

❖ People forcefully displaced due to violence, climate crises saw the sharpest rise in 2022.
❖ It is released annually by the **United Nations refugee agency, Office of the High Commissioner for Refugees (UNHCR).**

KEY HIGHLIGHTS

❖ The number of people who were uprooted from their hometowns due to **social and climate crises** in 2022 was 21% higher than in 2021.
❖ More than 108.4 million people were **forcibly displaced** by the end of 2022, 30% of them were children.
❖ Of these, 35.3 million were people who had to move to another country for safety (refugees).
❖ A large share of refugees was from Ukraine, because of **Russia-Ukraine War** and the displacement of Ukrainians also was the global fastest since World War II.
❖ Displacement because of **Climate disasters** - Climate disasters caused 32.6 million internal displacements throughout 2022 and 8.7 million of the people did not manage to return home by the end of the year.
❖ **Disaster related internal displacement** accounted for more than half (54 %) of all new displacements in 2022.
❖ At the end of 2022, an estimated 4.4 million people worldwide were stateless or of undetermined nationality, 2% more than at the end of 2021.
❖ **Stateless people** are those who are not recognised as citizens by any government.

UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR)

❖ It is a **United Nation Refugee Agency.**
❖ It **aimed** to save lives, protecting rights and building a better future for people forced to flee their homes because of conflict and persecution.

- ❖ It serves as the **'guardian'** of the **1951 Convention** and its **1967 Protocol.**
- ❖ So far, 146 countries are party to the 1951 Convention, and 147 to the 1967 Protocol.
- ❖ Countries that have ratified the Refugee Convention are obliged to protect refugees that are on their territory, in accordance with its terms.
- ❖ **India is not a member to this convention nor to the protocol.**

11.6   NATIONAL TIME RELEASE STUDY (NTRS) 2023

- ❖ The **Time Release Study (TRS),** a performance evaluation instrument, calculates how long it takes to release cargo from customs facilities.
- ❖ It calculates the time it takes for cargo to arrive and be free of charge for domestic clearance for imports and for cargo to arrive and be carried away by the carrier for exports.
- ❖ The report **examines** the country's major entrance and shipping points, including seaports, air cargo complexes (ACCs), inland container depots (ICDs) and integrated check posts (ICPs).

KEY CONCLUSIONS:

- ❖ The results underline the **significance** of the **"Path to Promptness"** strategy, which includes rewards for dependable clients, risk-based facilitation, and early filing of import documentation. All port categories for cargoes that include all three criteria meet the National Trade Facilitation Action Plan release time target.
- ❖ The NTRS 2023 focuses more emphasis on assessing export release time in line with the government's focus on export promotion.
- ❖ The report makes a **distinction** between **physical clearance** (the end of the logistics procedures) and **regulatory clearance (customs release)**. When taking regulatory approval into account, the analysis shows that the National Trade Facilitation Action Plan release time objective has been met for the majority of port categories.

11.7   FOOD OUTLOOK BY FAO

- ❖ FAO released **Food outlook** that **contained forecasts of production, trade, utilisation and stock levels** across the world's major basic foodstuffs.
  - ✓ It is a **biannual report**.
  - ✓ It estimates that the **global food bill will rise to $1.98 trillion in 2023, up 1.5 percent from 2022**. It rose by 11 percent in 2022 and 18 percent in 2021.
  - ✓ The **import bill for the group of Least Developed Countries** (LDCs) is **predicted to decline by 1.5 % this year** and **that for net food-importing developing countries (NFIDCs) to decline by 4.9%.**

ABOUT FAO

The three GIAHS in India are- **Koraput Traditional Agriculture**, Odisha **Kuttanad Below Sea Level Farming System**, Kerala **Pampore Saffron Heritage**, Jammu & Kashmir

- ❖ It was **founded in 1945**, a **specialized agency of the United Nations** that leads international efforts to defeat hunger.
- ❖ Members: **194 countries (including India) and European Union**.
- ❖ Objectives-
  - ✓ **Eradication of hunger, food insecurity** and **malnutrition**;
  - ✓ **Elimination of poverty** and **driving forward of economic and social progress** for all; and
  - ✓ **Sustainable management and utilization of natural resources**, including land, water, air, climate and genetic resources.
- ❖ Its sister bodies are the **World Food Programme (WFP)** and the **International Fund for Agricultural Development** (IFAD).
- ❖ Other major reports published by the FAO-
  - ✓ **The State of the World's Forests** (SOFO),
  - ✓ **The State of World Fisheries and Aquaculture** (SOFIA),
  - ✓ **The State of Agricultural Commodity Markets** (SOCO),

✓ **The State of Food Security and Nutrition in the World** (SOFI)

SOME INITIATIVES OF THE FAO

❖ The **Codex Alimentarius Commission** is in charge of overseeing the implementation of the **Joint FAO/WHO Food Standards Programme**.

❖ Monitors the **status of Desert Locusts** all over the world.

❖ The **International Treaty on Plant Genetic Resources for Food and Agriculture** was adopted by the Thirty-First Session of the Conference of the FAO in 2001.

❖ **Agricultural Heritage Systems of Global Importance** (GIAHS).

11.8	GENDER GAP REPORT

❖ **World Economic Forum**(WEF) recently released the **Gender Gap Report- 2023**.

MAJOR FINDINGS

❖ At the current rate of progress, it will take **131 years to reach full parity**.

❖ **Iceland** with 91.2% takes the top spot along with **Norway** (87.9%) and **Finland** (86.3%)

  ✓ **Iceland** is the only one to have closed more than 90% of its gender gap.

❖ Overall, the **Southern Asian region has achieved 63.4% gender parity**, the second-lowest of the eight regions.

❖ As per the latest report, **India has been ranked at 127 out of 146 countries** in terms of gender equality.

❖ According to the report, **India had attained parity in enrolment across all levels of education**.

  ✓ India had closed 64.3% of the overall gender gap.

> It measures **gender parity in 146 countries** and across **four areas**:
>
> ❖ **economic participation and opportunity,**
> ❖ **educational attainment,**
> ❖ **health and survival** and
> ❖ **political empowerment.**

❖ However, it **underlined that India had reached only 36.7 % parity** on economic participation and opportunity.

❖ On **political empowerment**, India has registered **25.3% parity**, with **women representing 15.1% of parliamentarians** — the **highest for the country since the inaugural report in 2006.**

❖ The **index ranked India's neighbours Pakistan at 142**, **Bangladesh at 59, China at 107, Nepal at 116, Sri Lanka at 115** and **Bhutan at 103**.

11.9	GRAI

❖ **Grievance Redressal Assessment and Index** (GRAI) 2022 was launched recently.

❖ GRAI 2022 was **conceptualised and designed by** the **Department of Administrative Reforms and Public Grievances (DARPG), Govt. of India** based on the recommendation of **Parliamentary Standing Committee of Ministry of Personnel, Public Grievances and Pensions**.

❖ **Objective**- to present organisation-wise comparative picture and provide valuable insights about strengths and areas of improvement regarding grievance redressal mechanism.

❖ **89 Central Ministries and Departments** were assessed and ranked based on a comprehensive index in the dimensions of **(1) Efficiency, (2) Feedback, (3) Domain and (4) Organisational Commitment** and **corresponding 12 indicators**.

❖ GRAI has **highlighted** that time **taken in disposing of grievances declined from 32 days in 2021 to 18 days in 2023**.

❖ Data between January and December 2022, was used from the **Centralised Public Grievance Redressal and Management System (CPGRAMS).**

ABOUT CENTRALISED PUBLIC GRIEVANCE REDRESSAL AND MANAGEMENT SYSTEM (CPGRAMS)

❖ It is an online web-enabled system **developed by National Informatics Centre** (Ministry of Electronics & IT [MeitY]), in association with **Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG).**

❖ It aims to **enable submission of grievances by the aggrieved citizens from anywhere and anytime** (24x7).

❖ It is a **single portal** connected to **all the Ministries/Departments of Government of India and States**.
❖ Available in **22 scheduled languages along with English.**

11.10 GLOBAL LIVEABILITY INDEX

❖ It was released by **Economic Intelligence Unit** (EIU). Index ranked 173 cities based on their liveability or living conditions.
❖ It was given considering **five metrics**: **healthcare, culture, environment, education, and stability**.
   ✓ Most **weightage** is given to **culture and environment, and stability.**
❖ The index **quantifies the challenges presented to an individual's lifestyle** in 173 cities worldwide.
❖ **Major highlights:**
   ✓ **Top cities to live**: Vienna (Austria), Copenhagen (Denmark), Melbourne and Sydney (Australia)
   ✓ **Bottom 3 Liveable cities**: Algiers (Algeria), Tripoli (Libya) and Damascus (Syria)
   ✓ From **Asia, Japan's Osaka was ranked number 10** in the rankings.
   ✓ From India, **New Delhi and Mumbai are at 141st position**.

11.11 WORLD COMPETITIVENESS INDEX

❖ **World Competitiveness Index** was recently released by **International Institute for Management Development (IMD).**
   ✓ The institute is **co-headquartered** in **Switzerland and Singapore.**

ABOUT THE WORLD COMPETITIVENESS INDEX

❖ The IMD World Competitiveness Yearbook (WCY) was **first published in 1989**.
❖ It is **a comprehensive annual report and worldwide reference point** on the competitiveness of countries.
❖ It analyses and ranks countries according to how they manage their competencies to achieve long-term value creation.
❖ It is based on **336 competitiveness criteria** and **four factors**, namely **Economic performance, Government efficiency, Business efficiency,** and **Infrastructure.**

MAJOR HIGHLIGHTS

❖ **Top three nations**- **Denmark, Ireland, and Switzerland**
❖ **India** was ranked **40th** among the countries.
❖ Specifically, the **top three measures** that helped India in its score are **exchange rate stability, compensation levels, and improvements in pollution control.**

12. INTERNATIONAL, SUMMITS

12.1 ADB NEW CPS FOR INDIA

❖ The **Asian Development Bank (ADB)** recently **rolled out its 2023-27 Country Partnership Strategy** (CPS) for India that **identifies accelerating structural transformation and job creation**, **promoting climate-resilient growth**, and **deepening social and economic inclusiveness as key focus areas**.

❖ ADB **projects India to grow at 6.4%** in FY24.

❖ As of December 2022, **ADB had committed $52.6 billion in public sector loans**, grants, and technical assistance in India, as well as **$8 billion in private sector investments**.

ABOUT ASIAN DEVELOPMENT BANK

❖ Asian Development Bank (ADB) was **established in the year 1966**.

❖ This bank was **modelled on the lines of the World Bank**.

❖ HQ- **Manila , Philippines**

❖ It **assists its members, and partners**, by **providing loans, technical assistance, grants, and equity investments** to promote social and economic development.

❖ Members: 68 members—of which 49 are from within Asia and the Pacific and 19 outside

❖ **Japan** holds the **largest share** in ADB with 15.677%, **followed by U.S.A** (15.567%), **China** (6.473%), and **India** (5.812%).

12.2 PRESIDENT ELECTIONS

TURKEY

❖ The Turkish President, **Recep Tayyip Erdogan**, has been relected in the recent election following a tense run-off.

❖ Erdogan received 52.14% of votes, beating his rival, **Kemal Kilicdaroglu**, who won 47.86%.

❖ **Erdogan is set to extend his rule by another five years**, joining the likes of Turkey's founder, **Mustafa Kemal Ataturk, who served for 15 years**.

NIGERIA

❖ **Bola Tinubu** was sworn in as the **President of Nigeria** recently, amidst mounting pressure to address the country's persistent economic and security issues.

❖ The inauguration ceremony was held **at Eagles Square in the capital city of Abuja**.

12.3 UNIVERSAL POSTAL UNION

❖ Union Cabinet has approved to establish a Regional Office of the Universal Postal Union (UPU) in **New Delhi.**

❖ The approval enables India to play **active role at multilateral organizations in postal sector with emphasis on South-South** and **Triangular cooperation.**

❖ India **will provide a Field Project Expert, staff and office set up** for UPU's regional office.

ABOUT UNIVERSAL POSTAL UNION

❖ UPU is **one of the oldest international organization** worldwide **established in 1874** by **Treaty of Berne.**

❖ **Members- 192 countries**, including India (**India joined UPU in 1876**).

❖ It is the **primary forum for cooperation between the postal sector entities**.

> It is a **specialized agency of the United Nations.**
> HQs: **Berne, Switzerland**
> The UPU contains four bodies consisting of
> ❖ **The Congress**,
> ❖ **The Council of Administration** (CA),
> ❖ **The Postal Operations Council** (POC) and
> ❖ **The International Bureau** (IB).

❖ It sets the **rules for international mail exchanges** and makes **recommendations to stimulate growth in mail, parcel and financial services** volumes.

12.4 INTERNATIONAL CRIMINAL COURT(ICC)

❖ A meeting of Foreign Ministers from the BRICS countries in South Africa recently was **overshadowed by questions** about whether **Russian President Vladimir Putin would be arrested if he attended a summit** of the **five-nation bloc in August** in **Johannesburg**.

❖ South Africa is thinking about legal options if Russian President, the subject of a war crimes arrest warrant issued by the ICC, did attend the summit.
   ✓ The **ICC accused Mr. Putin in March of the war crime of forcibly deporting children from Russian-occupied territory in Ukraine**. **Moscow denies** the allegations.

❖ South Africa being an ICC membe, would **theoretically be required to arrest Russian President if he attended**.
   ✓ **States Parties to the Rome Statute** have a **legal obligation to cooperate**.

ABOUT ICC

❖ It is an **international court** which **investigates and, where warranted, tries individuals** charged with the **gravest crimes of concern** to the international community: **genocide, war crimes, crimes against humanity and the crime of aggression.**

❖ HQ- **Hague, Netherlands.**

❖ It has **6 official languages**: **English, French, Arabic, Chinese, Russian and Spanish.**
   ✓ Out if this **English and French** are **working languages.**

❖ It was **established by the Rome Statute** of the **International Criminal Court in 1998**.

❖ It has **jurisdiction only over crimes committed after July 1, 2002**, when the **Rome Statute entered into force**.

❖ The Court **does not have its own police force**.
   ✓ It **relies on State cooperation**, **for arrest and surrender of suspects**.

❖ There are **123 countries party to the Rome Statute**.

❖ **India, China, Iraq, North Korea, Saudi Arabia, Turkey** etc. were **never part of Rome statute.**

❖ **Countries that signed but did not ratify the treaty** include **Egypt, Iran, Israel, Russia, the United States**, etc.

> **Four organs of the ICC**
>
> **Presidency** conducts external relations with States, coordinates judicial matters such as assigning judges, situations and cases to divisions, and oversees the Registry's administrative work.
>
> **Judicial Divisions** (18 judges in 3 divisions) Pre-Trial, Trial and Appeals – conduct judicial proceedings.
>
> **Office of the Prosecutor** conducts preliminary examinations, investigations, and prosecutions.
>
> **Registry** conducts non-judicial activities, such as security, interpretation, outreach, support to Defence and victims' lawyers etc.

12.5 SAUDI TO CUT OIL PRODUCTION UNDER OPEC+ DEAL

❖ **Saudi Arabia** will pledge new voluntary **production cuts** as part of a **broader OPEC+ deal to curb output** as the group **faces lower oil prices and a looming supply glut**.

ABOUT ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES(OPEC)-

❖ It is a **permanent intergovernmental organization of oil-exporting countries**.

❖ Headquarters: **Vienna, Austria**

❖ It was **established in 1960** by the **five founding members Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**.
   ✓ Currently, it has **13 members**, including **Algeria, Angola, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, and the United Arab Emirates**

❖ It aims to
   ✓ **coordinate and unify the petroleum policies** of its Member Countries.

- ✓ ensure **stabilization of oil prices in the international oil markets**, with a view to eliminating harmful and unnecessary fluctuations.
- ❖ **OPEC+** is a group of **23 oil-exporting countries** which meets regularly to decide how much crude oil to sell on the world market.
    - ✓ These nations **aim to work together on adjusting crude oil production** to bring stability to the oil market.

    > **OPEC+**, which groups the Organization of the Petroleum Exporting Countries and allies led by Russia, **pumps around 40% of the world's crude.**

    - ✓ The 13 members OPEC group forms the core of this group
    - ✓ Other than 13 OPEC countries listed above, it includes **Azerbaijan, Bahrain, Brunei, Kazakhstan, Russia, Mexico, Malaysia, South Sudan, Sudan,** and **Oman.**

12.6 UKRAINE'S KAKHOVKA DAM

- ❖ The **Soviet-era Kakhovka dam**, which separates **Russian and Ukrainian soldiers**, was breached, causing flooding to spread throughout the conflict area.
- ❖ The attack has been attributed to both **Russia and Ukraine**, which has heightened tensions between the two nations.

ABOUT KAKHOVKA DAM

- ❖ **The Kakhovka Hydroelectric Power Plant** is in the city of **Nova Kakhovka** in the **Kherson** region. The city is currently under **Russian** occupation.
- ❖ The dam is one of six that line the **Dnipro river**, which flows from the country's far north to the **Black Sea**.
- ❖ It was constructed during the **Soviet era**. **Russia** holds the **left, or southern, bank** in the Kherson region, while **Ukraine** has **the right, or northern, bank.**
- ❖ The dam, **30 metres (98 feet) tall** and **3.2 km (2 miles) long**, was built in **1956** on the **Dnipro river** as part of the **Kakhovka hydroelectric power plant.**
- ❖ The reservoir also provides water to the **Zaporizhzhia nuclear reactor**, which is also under Russian control, and the **Crimean peninsula**, which Russia claims to have annexed in 2014.
- ❖ It has a reservoir with a volume of **18 km3,** which is roughly equivalent to the **Great Salt Lake** in the U.S. state of Utah.

ZAPORIZHZHIA NUCLEAR POWER PLANT

- ❖ It is the biggest nuclear power plant in **Europe** and is located in the southeast of Ukraine.
- ❖ One of only four nuclear power plants in operation in the nation, the plant features six nuclear reactors.
- ❖ It produces up to **42 billion kWh of power**, or around **40% of the electricity** produced by all Ukrainian NPPs combined and **one-fifth** of the nation's yearly electrical output.
- ❖ Despite not posing an immediate threat to the **Zaporizhzhia Nuclear Power Plant (NPP),** experts from Ukraine and the UN indicated that the collapse of the Kakhovka dam will have long-term effects on the plant's future.

12.7 "ONE STUDENT ONE TREE CAMPAIGN 2023"

- ❖ All India Council for Technical Education (AICTE) will launch **"One Student One Tree Campaign 2023"** and that UGC too has taken initiatives for creating awareness about **Mission LiFE.**
- ❖ The celebration of World Environment Day across the country envisages involvement of youth in spreading the message of LiFE, along with sensitizing school going children and others about LiFE.
- ❖ The mantra of Mission Life is **'Lifestyle For Environment'** to make the fight against climate change democratic, in which everyone can contribute within their capacity.
- ❖ He also released guidelines and a curriculum framework for environmental education at the undergraduate level.

❖ The guidelines include areas such as climate change, pollution, waste management, and sustainable development.

12.8   INDIA-U.S. STRATEGIC TRADE DIALOGUE (IUSSTD)

❖ **India and the U.S.** pledged to streamline their export control regimes for **critical technologies** at the inaugural **India-U.S. Strategic Trade Dialogue (IUSSTD).**

ABOUT INDIA-U.S. STRATEGIC TRADE DIALOGUE (IUSSTD)

❖ It represents a key institutional innovation to unlock the potential of high-tech trade between the two countries envisaged as a part of the initiative on **critical and emerging technologies (ICET).**

❖ **IUSSTD** focused on ways in which both governments can facilitate the development and trade of technologies in critical domains such as **semiconductors, space, telecom, quantum, AI, defence, bio-tech and others.**

❖ Both sides reviewed the relevant bilateral export control regulations with the objective of building and diversifying resilient supply chains for these strategic technologies.

12.9   TURKMENISTAN, AFGHANISTAN, PAKISTAN, AND INDIA (TAPI) GAS PIPELINE PROJECT

❖ **Pakistan** signed a Joint Implementation Plan (JIP) with **Turkmenistan** to speed up work on **Turkmenistan, Afghanistan, Pakistan, and India (Tapi) gas** pipeline project and finish the feasibility study as soon as possible.

ABOUT TAPI PIPELINE PROJECT ('PEACE PIPELINE')

❖ The **pipeline first proposed in 1995** will transport natural gas from energy rich Caspian Sea (Galkynysh gasfields: fourth largest in the world) in Turkmenistan to India through Afghanistan into Pakistan.

❖ Construction on the project started in Turkmenistan on December 2015. It is expected to be operational by 2019.

❖ It is an **1,814-kilometre pipeline** that aims to transport 33 billion cubic metres of gas from Turkmenistan to Afghanistan, Pakistan and finally, India.

❖ The Pipeline will start from the **Galkynysh gas field in Turkmenistan.**

❖ It will then pass through Afghanistan and Pakistan to finally reach the Indian town of Fazilka(near the Indo-Pak border).

❖ The pipeline will transport 33 billion cubic meters (bcm) of natural gas annually from Turkmenistan to respective buyers in **Afghanistan (5%), Pakistan (47.5%) and India (47.5%)** during the 30-year commercial operations period.

FUNDING

❖ The **TAPI project** is being funded by the **Asian Development Bank (ADB),** which is also acting as transaction adviser for the development.

❖ **Turkmenistan** took a loan of **$700m** from the Islamic Development Bank for financing the project in December 2016.

❖ The remaining three countries made an initial investment of $200m

12.10   INDIA-UAE COMPREHENSIVE ECONOMIC PARTNERSHIP AGREEMENT

❖ The first meeting of the Joint Committee of **India-UAE Comprehensive Economic Partnership Agreement (CEPA)** held successfully. India and the UAE look to more than **double non-oil bilateral trade to USD 100 billion by 2030.**

COMPREHENSIVE ECONOMIC COOPERATION AGREEMENT (CEPA)

❖ **CEPA** is a **comprehensive agreement between India and the United Arab Emirates** that seeks to enhance the economic and commercial ties between the two countries.

❖ The agreement aims to **increase trade and investment, improve market access, and promote economic growth between India and the UAE.**

- ❖ CEPA was signed in **2020** and is seen as a significant milestone in the economic relationship between **India and the UAE.**
- ❖ **Under CEPA,** the two countries have committed to reducing barriers to trade and investment, which will make it easier for businesses from both countries to engage in trade and investment activities.
- ❖ The agreement includes provisions for reducing tariffs **on goods, services, and investment,** as well as for promoting the movement of people, goods, and services between India and the UAE.
- ❖ **CEPA** is expected to provide a major boost to the economic relationship between **India and the UAE**, as it will increase trade and **investment, improve market access,** and provide a more favorable environment for businesses to operate in.
- ❖ The agreement is expected to benefit a range of sectors, including but not limited to **information technology, engineering, pharmaceuticals, and services sectors.**
- ❖ **CEPA** is expected to promote the development of economic and commercial ties between **India and the UAE**, and to provide a foundation for further cooperation between the **two countries** in the future.
- ❖ It is projected to reach **US$100 billion in goods trade and over US$1.5 billion** in trade in services in the next five years. Built on three pillars of trust, transparency, and talent.

BENEFITS

- ❖ **For India:**
  - ✓ Preferential market access provided by the UAE on more than **97 percent** of its tariff lines, accounting for 99 percent of Indian exports to the UAE in value terms
  - ✓ Preferential market access for labour-intensive goods such as **textiles, leather, footwear, sports goods, plastics, furniture, agricultural and wood products, engineering goods, pharmaceuticals, and automobiles.**
  - ✓ Preferential market access for services sector including **computer-related services, health, tourism, travel, engineering, and accountancy.**
  - ✓ Creation of more than **one million jobs** for the Indian workforce through enhanced **trade liberalisation and market access.**
  - ✓ UAE committed to issuing **140,000 employment** visas to skilled Indian professionals by **2030.**
  - ✓ Three-year visa for intra-corporate transfers and a **90-day visa** for business visitors and contractual suppliers from India
- ❖ **Benefits for the UAE:**
  - ✓ Boost to the **UAE's GDP (US$9 billion) by 1.7 percent by 2030.**
  - ✓ Zero-duty market access for **90 percent of exports from the UAE into India, benefiting commodity exporters of petrochemicals, aluminum, and copper.**

12.11	NATIONAL CONFERENCE OF TRIBAL WRITERS

- ❖ **First national conference of tribal writers held in J&K.**
- ❖ The 2-day conference, organised at the **Jammu University's Bhaderwah campus** was attended by **37 Adivasi writers, poets and cultural experts.**
- ❖ **Aim –** To provide a platform for Adivasi writers to foster cultural exchange and address the challenges they face in preserving their unique identities.
- ❖ It is an initiative of **Jharkhandi Bhasha Sahitya Sanskriti Akhara and the Anjuman-e-Taraqqi Gojri Adab.**
- ❖ <u>Representation of Tribals</u> - **Santhali, Gondi, Ho, Bhundhari, Koya, Banjara, Kharia, Kudhuk, Gujjar, Bakerwal, Gaddi and Munda**, attended the conference.
- ❖ <u>States Participated</u> - **Odisha, Madhya Pradesh, Chhattisgarh, Telangana, Rajasthan, Delhi, Bihar, Jharkhand, Assam, Jammu and Kashmir, and Andhra Pradesh.**

12.12	BRICS BANK

- ❖ **Honduras President** recently requested the country's admission to the **BRICS-led New Development Bank (NDB).**

ABOUT NEW DEVELOPMENT BANK (NDB):

- ❖ **The New Development Bank (NDB)** is a multilateral development bank established by **Brazil, Russia, India, China and South Africa (BRICS)** with the purpose of mobilising resources for infrastructure and sustainable development projects in emerging markets and developing countries (EMDCs).
- ❖ The idea of setting up **NDB** was first conceived in 2012 during **BRICS Summit in New Delhi, India.**
- ❖ Agreed by BRICS leaders at the 5th BRICS summit held in **Durban, South Africa in 2013.**
- ❖ It was established in 2014, at the **6th BRICS Summit** at **Fortaleza, Brazil.**
- ❖ The Bank formally came into existence as a legal entity in 2015.
- ❖ It is headquartered at **Shanghai, China.**
- ❖ The Bank has an initial authorized capital of **100 billion dollars** and an initial subscribed capital of **50 billion dollars.**

MEMBERS:

- ❖ The Bank's membership is open to members of the UN.
- ❖ While new members can join the NDB, the **five BRICS countries** will retain a minimum of **55% of total shares**.

CURRENT MEMBERS:

- ❖ Brazil
- ❖ Russia
- ❖ India
- ❖ China
- ❖ South Africa
- ❖ Bangladesh
- ❖ UAE
- ❖ Egypt

OBJECTIVES:

- ❖ Fostering development of member countries.
- ❖ Supporting economic growth.
- ❖ Promoting competitiveness and facilitating job creation.
- ❖ Building a knowledge sharing platform among developing countries.

12.13	US TO REJOIN UNESCO

- ❖ UN cultural and scientific agency **UNESCO** announced that the **United States** plans to rejoin and pay more than **$600 million** in back dues.

US DECIDES TO REJOIN UNESCO

- ❖ The **United States** has announced its plans to rejoin the **UNESCO,** after a decade-long dispute sparked by the inclusion of Palestine as a member.
- ❖ The return of the U.S., along with the payment of over **$600 million in back dues,** is a significant financial boost for UNESCO's initiatives.
- ❖ Before leaving, the US contributed **22 per cent** of the agency's overall funding.

REASONS FOR LEAVING

- ❖ One of the main reasons was concerns over the organization's perceived **anti-Israel bias.**
- ❖ The U.S. government criticized **UNESCO** for its handling of the **Israeli-Palestinian conflict** and its recognition of Palestine as a member state.
- ❖ Another factor was financial concerns.
- ❖ United States had been contributing a significant portion of **UNESCO's budget.**
- ❖ U.S. government had concerns about fiscal management and accountability within **UNESCO.**
- ❖ Furthermore, the decision to withdraw was also influenced by a broader scepticism towards multilateral institutions and a desire to reassess and prioritize U.S. engagement and funding in international organizations.

WHY DID US DECIDED TO REJOIN THE ORGANISATION?

❖ The decision to return was motivated by concern that **China** is filling the gap left by the US in **UNESCO** policymaking, notably in setting standards for artificial intelligence and technology education around the world.

ABOUT UNESCO

❖ **UNESCO stands for United Nations Educational, Scientific and Cultural Organization.**
❖ It is specialized agency of the United Nations (UN).
❖ The constitution, which entered into force in **1946**, called for the promotion of **international collaboration in education, science, and culture.**
❖ The agency's permanent headquarters are in **Paris, France.**
❖ Parent Organisation – **United Nations Economic and Social Council**

12.14	UNITED NATIONS PEACEKEEPERS

❖ India's **Permanent Representative** to the UN Ambassador **Ruchira Kamboj** introduced the draft resolution titled **'Memorial wall for fallen United Nations peacekeepers'** in the UN General Assembly Hall.

MEMORIAL WALL –

❖ The **UN General Assembly** has adopted a draft resolution introduced by India to **establish a memorial wall** in the UN Headquarters **to honour fallen peacekeepers.**
❖ The resolution was **submitted** by 18 countries including Bangladesh, Canada, China, Denmark, Egypt, France, India, Indonesia, Jordan, Nepal, Rwanda and the U.S.
❖ The resolution was **co-sponsored** by nearly 190 UN Member States and was **adopted** by consensus.
❖ In **2015,** the Permanent Mission of India to the UN launched a **virtual memorial wall**, **dedicated to the Indian troops** who made the supreme sacrifice while doing active service as UN peacekeepers.
❖ The **initiative** was a precursor to the eventual construction of the Peacekeepers Memorial Wall.
❖ It is an appropriate way to commemorate all the troops from UN member states who had given their lives while on duty under the **Blue Flag** of the United Nations.

INDIA'S CONTRIBUTION TO UN PEACEKEEPING –

❖ India is currently the **3rd largest contributor** of uniformed personnel to UN Peacekeeping with more than 6,000 military and police personnel.
❖ About **177 Indian peacekeepers** have made the supreme sacrifice, the highest number by far from any troop-contributing country.

12.15	FIRST ROAD SAFETY PROJECT IN SOUTH ASIA

❖ The **World Bank** (WB) launched its **first dedicated road safety project** in South Asia with a **USD 358 million** financing agreement **signed in Dhaka** with the **government of Bangladesh.**

ABOUT THE PROJECT

❖ The Bangladesh Road Safety Project (BRSP) was **inaugurated** at the **Bangabandhu International Conference Center** in **Dhaka, Bangladesh.**
❖ This project **aims** to improve road safety and reduce fatalities and injuries from road crashes in selected cities, high-risk highways, and district roads.
❖ The **two National Highways**, Gazipur-Elenga (N4) and Natore-Nawabganj (N6), passing through the **five divisions** of Bangladesh, Dhaka, Khulna, Rajshahi, Rangpur and Mymensingh, will be taken up for the implementation of this project.
❖ This project will **improve** road safety by providing facilities including improved engineering designs, signage and marking, pedestrian facilities, speed enforcement, and emergency care.

12.16	IIAS ANNUAL CONFERENCE 2025

- ❖ India will **host** the **2025 International Institute of Administrative Sciences (IIAS) Annual Conference at Kochi, Kerala** in **February 2025.**

ABOUT THE CONFERENCE

- ❖ The **Theme** of 2025 Conference will be: **"Next Generation Administrative Reforms – Empowering Citizens and Reaching the Last Mile".**
- ❖ The conference **aims** to explore strategies that enable citizen empowerment and ensure effective governance at all levels.
- ❖ The 2025 conference is set to witness the participation of **30 member countries**, **18 national sections**, and over **50 IIAS universities** and **institutes of public administration.**
- ❖ The Department of Administrative Reforms and Public Grievances is an **institutional member** of the International Institute of Administrative Sciences IIAS since 1998.
- ❖ As an institutional member of IIAS, India has contributed significantly to the deliberative democracy, research publications, fiscal processes of budget/ audit through the institutional mechanisms of the Council of Administration and the Finance Committee.

ABOUT IIAS

- ❖ The **IIAS** (International Institute of Administrative Sciences), established in **1930,** serves as a global federation dedicated to advancing administrative sciences. It comprises member states, national sections, and academic research centres, all collaborating to address contemporary policy challenges related to public administration.
- ❖ It is **headquartered** in **Brussels, Belgium.**

12.17	UN HIGH SEAS TREATY

- ❖ The **world's first international treaty** to protect the high seas was recently adopted by the United Nations.
- ❖ It has been adopted by the **Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction** (BBNJ).
- ❖ It has been adopted under the framework of **United Nations Convention on Laws of the Sea (UNCLOS).**
  - ✓ UNCLOS established an area called the high seas.
- ❖ It is **a legally binding treaty** that aims at protecting, caring for, and ensuring the responsible use of the marine environment, maintaining the integrity of ocean ecosystems, and conserving the inherent value of marine biological diversity.
  - ✓ It **will only enter into force once 60 countries** have ratified it.
- ❖ It is the **first-ever treaty to protect the world's oceans** that lie outside national boundaries.
- ❖ It is also known as the **'Paris Agreement for the Ocean.'**

> **High Seas**
>
> Beyond countries' exclusive economic zones, which extend up to 200 nautical miles from coastlines , **the seas are under the jurisdiction of no country, and all countries have a right to fish, ship, and do research**.
>
> They **make up more than 60% of the world's oceans by surface area**.

MAJOR HIGHLIGHTS

- ❖ It aims **to place 30% of the seas into protected areas by 2030**(a pledge made by countries at the UN biodiversity conference in 2022).
- ❖ It aims to **establish large-scale marine protected areas in international waters**, which protect marine biodiversity in high seas.
- ❖ **Covers environmental assessments** to evaluate the **potential damage of commercial activities**, such as deep-sea mining.
- ❖ **Strengthening resilience** and **contains provisions based on polluter-pays principle** as well as mechanisms for disputes.
- ❖ Offers **guidance**, including through **an integrated approach to ocean management** that builds ecosystem resilience to tackle adverse effects of climate change and ocean acidification.

❖ Treaty provisions also **recognize the rights and traditional knowledge of indigenous peoples and local communities**, the **freedom of scientific research**, and need for the fair and equitable sharing of benefits.

❖ The treaty also **considers the special circumstances facing small-island and landlocked developing nations**.

12.18   PETERI ORPO IS NEW FINLAND PM

❖ **Petteri Orpo**, the leader of the conservative party in **Finland**, has been elected as the **country's prime minister** by the parliament.

❖ He **will lead a coalition government comprising four parties**.

12.19   PM MODI'S VISIT TO USA.

MAJOR OUTCOMES

❖ **India-US Defence Acceleration Ecosystem (INDUS X):**
- ✓ The **U.S. Department of Defense (DoD)** and the **Indian Ministry of Defense (MoD)** launched the **IndiaU.S. Defense Acceleration Ecosystem (INDUS-X).**
- ✓ It **aims to expand the strategic technology partnership and defence industrial cooperation** between the two countries.

❖ **Jet engine tech transfer**
- ✓ Engine manufacturer **GE Aerospace announced signing** a MoU with Hindustan Aeronautics Ltd. (HAL) to **produce fighter jet engines for the indigenous Light combat aircraft** (LCA).
- ✓ It **includes the joint production of F414 engines in India** for the IAF as part of the LCA Mk2 programme.

❖ **Semiconductor testing and assembly facility**
- ✓ U.S. semiconductor and chip maker **Micron Technology Inc's** announced that it **would invest up to $825 million in a new chip assembly and test facility in Gujarat**.

❖ **Easing Visa renewable protocols:**
- ✓ U.S.A is announcing **a pilot programme to renew visas domestically** — which means that **applicants do not have to travel outside the U.S. to get their renewal stamps** — for certain petition-based temporary workers.
- ✓ This programme could expand to cover H1B and L-1 skilled visas by 2024 and to other categories eventually.

❖ **Space cooperation**
- ✓ India signed on to the **Artemis Accords**, a **US-led alliance seeking to facilitate international collaboration** in planetary exploration and research.
- ✓ The **Artemis Accords,** established by the US and seven partner countries in 2020, are a set of 13 principles that seek to promote peaceful and cooperative exploration of space.
- ✓ **ISRO will partner with the NASA** in sending **a joint mission to the International Space Station**, a permanent laboratory in space, in 2024.

❖ **Purchase of Predator UAV**
- ✓ A mega deal on the **purchase of MQ-9 "Reaper" armed drones** by **India was welcomed**.

❖ **Critical Minerals supply chains**
- ✓ India to join **Mineral Security Partnership (MSP), a US-led collaboration of 14 countries** that aims to catalyse public and private investment in critical mineral supply chains globally.

❖ **Cooperation in the Indo-Pacific**
- ✓ US will join the **Indo-Pacific Oceans Initiative (IPOI)**, a regional initiative to promote a safe, secure, and stable maritime domain.
  - ➢ **IPOI** was **launched in 2019** by **India's PM at the East Asia Summit held in Bangkok**.

12.20   MUTUAL LEGAL ASSISTANCE TREATY (MLATS)

- ❖ India and Belgium have signed MLATs in criminal matters to help both countries to execute each other's search warrants and summons against fugitives wanted by individual investigating agencies.
- ❖ **MLATs** is a mechanism whereby **countries cooperate with one another to provide and obtain formal assistance to ensure that the criminals do not escape or sabotage the due process of law**.
- ❖ **Ministry of Home Affairs** is the **nodal ministry** for executing court orders under the MLATs.
- ❖ **Section 105 of Criminal Procedure Code (CrPC)** explains the reciprocal arrangements to be made.

12.21   SOUTHERN AFRICAN CUSTOMS UNION

- ❖ Amid declining merchandise exports due to demand slowdown in the west, India is placing renewed focus on striking a trade deal with **Southern African Customs Union (SACU).**

ABOUT SACU

- ❖ The resource rich Southern African Customs Union (SACU), is a customs union among five countries of Southern Africa: **Botswana, Eswatini, Lesotho, Namibia, and South Africa.**
- ❖ It is **one of the largest suppliers of raw primary or semi-processed commodities**.
- ❖ HQ: **Windhoek (Namibia)**
- ❖ It is the **world's oldest customs union** which was **established in 1910**.
- ❖ The Economic structure of the Union **links the Member states by a single tariff** and **no customs duties between them**.
- ❖ Also there is a **common external tariff** that applies to **nonmembers of SACU**.

13. PLACES IN NEWS

13.1 NGORNO KARABAKH OR ARTSAKH

- ❖ **Nagorno-Karabakh**, known as **Artsakh by Armenians**, is **a landlocked mountainous area in South Caucasus**.
- ❖ It was **claimed by both Azerbaijan and Armenia after the fall of Russian Empire in 1917** and has remained a point of tension ever since.
- ❖ Territory is **internationally recognised as part of oil-rich Azerbaijan**, but its **inhabitants are predominantly ethnic Armenians**.

MAYON VOLCANO

- ❖ Recently, the Mayon volcano began expelling lava recently, forcing nearly 18,000 people to flee to emergency shelters.
- ❖ **Mayon Volcano** is an active volcano located in the **southeastern part of Luzon, Philippines**.
- ❖ It is **known for its picturesque conical shape** and is the **most active of 24 known volcanoes in the Philippines**.

13.2 GULF OF CALIFORNIA

- ❖ An earthquake of magnitude 6.4 was recently recorded in Gulf of California.
- ❖ The Gulf of California, also called the **Sea of Cortez** is a **large inlet of the eastern Pacific Ocean along the northwestern coast of Mexico**.
- ❖ Its another name is **Vermilion Sea.**
- ❖ It **separates the mountainous Lower California Peninsula/Baja California Peninsula** in the west from the **states of Sonora and Sinaloa on the mainland of Mexico in the east**.
- ❖ The Gulf is divided into two portions and is separated by a narrowing that is marked by the **islands of Tiburón and Angel de la Guarda.**
- ❖ The **Colorado River drains into the Gulf**.
- ❖ The long **coastline of the gulf is extremely irregular** and **forms numerous small bays**.

13.3 BELIZE

- ❖ World Health Organization has recently certified **Belize** as **malaria-free**.

ABOUT BELIZE

- ❖ It is located on the northeast coast of Central America and south of the Yucatán Peninsula.
- ❖ It has a land of mountains, swamps, and tropical jungle.
- ❖ It is **bounded by Mexico to the north, Guatemala to the west and south**, and the **Caribbean Sea to the east**.
- ❖ The **Northern half** of country has **limestone lowlands and swamps** less than 200 feet (60 metres) above sea level whereas the **southern half** has **Maya Mountains**, a **plateau of igneous rock cut** by erosion into hills and valleys
- ❖ **Belize Barrier Reef** is the **second-largest barrier reef in the world**.
  - ✓ The **reef reserve system was designated a UNESCO World Heritage site** in 1996.

14. DAYS TO REMEMBER

14.1 WORLD MILK DAY JUNE 1ST

- ❖ **World Milk Day** is observed **every year on 1ˢᵗ June**.
- ❖ It was **created in the year 2001** by **Food and Agriculture Organisation (FAO) of the United Nations (UN)** to **promote the consumption and benefits of milk around the world**.
- ❖ The **theme** of World Milk Day 2023 is **"Showcasing how dairy is reducing its environmental footprint, while also providing nutritious foods and livelihoods."**

14.2 WORLD ENVIRONMENT DAY- JUNE 5

- ❖ **World Environment Day** is celebrated every year on **June 5ᵗʰ** to raise awareness and encourage action for the protection of our planet.
- ❖ It was established by the **United Nations Environment Programme during the Stockholm Conference on the Human Environment in 1972.**
- ❖ The **inaugural World Environment Day**, **themed "Only One Earth"**, took place in **1973**.
- ❖ Over **150 countries participate in various activities to celebrate this day**.
- ❖ The 50th anniversary of World Environment Day will be hosted by **Côte D'Ivoire**, with the **theme** of **"solutions to plastic pollution".**

14.3 WORLD FOOD SAFETY DAY- JUNE 7TH

- ❖ **World Food Safety day is celebrated on June 7ᵗʰ annually** across the globe to **highlight the importance of maintaining food standards**.
- ❖ The **theme** of World Food Safety Day 2023 is **"Food standards save lives."**
- ❖ The **inaugural** World Food Safety Day was observed on June 7, **2019**.

14.4 WORLD OCEANS DAY

- ❖ **World Oceans Day** is celebrated every year on **8 June** to create awareness among people regarding the significance of oceans, and the importance of preserving and conserving oceanic resources.
- ❖ **World Oceans Day** is recognized annually to take actionable measures and initiatives regarding preservation of marine ecosystems, adoption of sustainable fishing practices, reducing pollution of oceans, and other major ocean related problems.
- ❖ The concept of celebrating ocean day on a global level was first proposed in **1992** by the Canadian government at the **Earth Summit** held in **Rio de Janeiro, Brazil.**
- ❖ The theme of World Oceans day 2023 is **"Planet Ocean: The Tides are Changing."**

14.5 WORLD ACCREDITATION DAY

- ❖ **World Accreditation Day** is an annual global observance held on **June 9**. It aims at recognizing and promoting the role of accreditation across various sectors.
- ❖ This day aims to raise awareness about the value and benefits of accreditation in ensuring competence, reliability, and credibility in industries such as **healthcare, laboratories, certification bodies, and conformity assessment services.**
- ❖ The theme for 2023 is **"Accreditation: Supporting the Future of Global Trade."**
- ❖ The central focus is to highlight how accreditation actively contributes to the achievement of several vital United Nations **Sustainable Development Goals (SDGs).**

14.6 WORLD DAY AGAINST CHILD LABOUR 2023

- ❖ **World Day Against Child Labour**, observed on **June 12th,** aims to inspire a global movement against child labour.
- ❖ **Theme for 2023 is: Social Justice for All. End Child Labour!**
- ❖ **The International Labour Organization (ILO)** launched the first World Day Against Child Labour in **2002,** as a way to highlight the plight of children engaged in child labour.

INTERNATIONAL LABOUR ORGANIZATION

- ❖ The ILO was created in **1919** by the **Versailles Peace Treaty.**
- ❖ After the demise of the **League of Nations**, it became the first specialized agency associated with the UN.
- ❖ Its secretariat is in **Geneva, Switzerland.**

14.7	WORLD BLOOD DONOR DAY

- ❖ **World Blood Donor Day** is celebrated annually on June 14 to express gratitude for the selflessness of voluntary blood donors across the world. Blood is an invaluable contribution that one individual can offer to another, a profound gift that sustains life itself.
- ❖ **In 2004, the World Health Organization (WHO)** initially established World Blood Donor Day. During the **58th World Health Assembly in 2005,** it was officially designated as an annual global event to promote awareness about the significance of blood donation.
- ❖ The **WHO** decided to commemorate the birthday of **Karl Landsteiner** as World Blood Donor Day. Landsteiner, an Austrian-American immunologist and pathologist, was awarded the **Nobel Prize in 1930** for his contributions to the study of blood groups and the development of the modern blood transfusion system.
- ❖ The theme for World Blood Donor Day 2023 is **'Give blood, give plasma, share life, share often.'**
- ❖ The host country for the global event of World Blood Donor Day 2023 is **"Algeria"** through its National Blood Transfusion Service.

14.8	WORLD ELDER ABUSE AWARENESS DAY 2023

- ❖ **World Elder Abuse Awareness Day (WEAAD)** is observed on **June 15** every year to raise awareness and combat this problem. This significant day aims to shed light on the abuse, neglect, and exploitation experienced by older individuals. It also emphasizes the importance of promoting their well-being and dignity.
- ❖ The **theme** for 2023 is **"Closing the Circle: Addressing Gender-Based Violence (GBV) in Older Age - Policy, Law and Evidence-based Responses."** The theme underscores the intersection of gender-based violence and elder abuse, specifically focusing on the experiences of older individuals.

14.9	WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT 2023

- ❖ Every year on **June 17th**, the **World Day to battle Desertification and Drought** is marked to raise public awareness of global efforts to battle desertification. The event provides an opportunity to acknowledge that land degradation neutrality is attainable via problem-solving, significant community involvement, and cooperation at all levels.
- ❖ The **theme** of the **International Day Against Desertification, and Drought 2023 is "Her land. Her rights"**
- ❖ The **United Nations General Assembly (UNGA)** first discussed this day in **December 1994** in order to tackle desertification and drought. This day was **observed in 1995** for the first time.

DESERTIFICATION:

- ❖ Desertification is **"the degradation of dry, semi-arid and sub-humid lands resulting from various factors, such as climatic variations and human activities",** as defined by the United Nations Convention to Combat Desertification (UNCCD).

❖ In other words, land is desertified when it can no longer support the same plant growth it had in the past, and the change is permanent on a human time scale.

DROUGHT:

❖ Drought is the deficit of rainfall over a long period, such as a season, a year or several years, related to the statistical average of a region.

❖ The lack of rainfall produces a water deficit for humans, animals, and plants.

CAUSES OF DESERTIFICATION

❖ **'Climatic variations'** and **'Human activities'** can be regarded as the two main causes of desertification.

❖ **Climatic variations:** Climate change, drought, moisture loss on a global level

❖ **Human activities:** These include overgrazing, deforestation and removal of the natural vegetation cover, agricultural activities in the vulnerable ecosystems of arid and semi-arid areas, which are thus strained beyond their capacity.

14.10   WORLD REFUGEE DAY JUNE 20TH

❖ World Refugee Day is an internationally recognized day established by the United Nations to pay tribute to refugees worldwide.

❖ It is observed annually on June 20th.

❖ The **theme** of World Refugee Day is **"Hope away from home,"** emphasizing the significance of mental well-being in the process of refugees rebuilding their lives and striving for a brighter future.

❖ **World Refugee Day** has its origins in the **United Nations General Assembly's Resolution 55/76,** which was passed on December 4, 2000.

14.11   INTERNATIONAL YOGA DAY- JUNE 21ST

❖ International Yoga Day 2023 is **celebrated every year on June 21st** to promote the numerous benefits of practicing yoga.

❖ The **theme** for International Day of Yoga 2023 is **"Yoga for Vasudhaiva Kutumbakam,"** which represents a shared desire for **"One Earth, One Family, One Future."**

BACKGROUND

❖ On December 11, **2014, all 193 member states of the United Nations unanimously agreed** to observe the **International Day of Yoga on June 21.**

❖ The inaugural celebration occurred on **June 21, 2015**.

14.12   INTERNATIONAL DAY OF WOMEN IN DIPLOMACY 2023- JUNE 24TH

❖ The **International Day of Women in Diplomacy (IDWID) is observed annually on June 24** to honor and recognize remarkable women in the fields of diplomacy and decision-making across the globe.

❖ **Diana Abgar**, an **Armenian ambassador**, is **credited as the first female diplomat of the 20th century**.

❖ **Theme** for this year **is "Breaking Barriers, Shaping the Future: Women in Diplomacy for Sustainable Development."**

14.13   INTERNATIONAL DAY AGAINST DRUG ABUSE AND ILLICIT TRAFFICKING

❖ **The International Day against Drug Abuse and Illicit Trafficking**, or **World Drug Day**, is marked on **26th June** every year.

❖ The United Nations General Assembly in **1987**, decided to observe June 26 as International Day against Drug Abuse and Illicit Trafficking.

❖ **Theme** for 2023: **People first: stop stigma and discrimination, strengthen prevention.**

❖ The aim of this year's campaign is to raise awareness about the importance of treating people who use drugs with **respect and empathy; providing evidence-based, voluntary services for all; offering alternatives to p unishment; prioritising prevention; and leading with compassion.**

14.14   WORLD MSME DAY 2023- JUNE 27TH

❖ **International Micro, Small, and Medium Enterprises (MSME) Day or World MSME Day** is observed **every year on 27th June** all over the world to highlight the significance of MSMEs and how they play a crucial role in being the backbone of the country's economy.
❖ The **theme** of this year's celebration is **"Building a Stronger Future Together."**
❖ The **theme for MSME Day 2023 in India** is **"Future-ready MSMEs for India@100."**

14.15   NATIONAL STATISTICS DAY- JUNE 29TH

❖ National Statistics Day is commemorated annually on **June 29** to honor the **significant contributions made by Professor Prasanta Chandra Mahalanobis (celebrated on his birthday)** in the fields of statistics and economic planning.
❖ He is often hailed as the **'father of Indian statistics'.**
❖ The **theme** of National Statistics Day, 2023 is **"Alignment of State Indicator Framework with National Indicator Framework for Monitoring Sustainable Development Goals".**
❖ The **first National Statistics Day** was celebrated on June 29, **2007.**

14.16   WORLD ASTEROID DAY- JUNE 30TH

❖ It is observed on **June 30th every year**.
❖ The day **aims to raise awareness about asteroid impact hazards** and **crisis communication actions** in case of a credible asteroid threat to planet Earth.
❖ The day also aims to educate people about the latest and upcoming asteroid research and technology through numerous events and activities held by organisations across the globe.
❖ World Asteroid Day was **co-founded by astrophysicist and famed musician Brian May, of the rock group Queen, B612 President Danica Remy, Apollo 9 astronaut Rusty Schweickart and filmmaker Grig Richters.**
❖ The United Nations General Assembly (UNGA) passed a resolution in December 2016, designating June 30 as International Asteroid Day.
❖ The date was chosen to **commemorate the anniversary of the Tunguska asteroid's impact over Siberia** on June 30, 1908.

ABOUT TUNGUSKA EVENT

❖ It is considered the **biggest asteroid impact in recorded history when an asteroid exploded a few kilometres above the Tunguska region of central Siberia**.
❖ It **flattened more than 80 million trees in seconds**, over an area spanning nearly 800 square miles (2,000 square kilometres) — but **left no crater.**
❖ The explosion released **energy equivalent to 185 times that was released during the Hiroshima atomic bombing.**

ABOUT ASTEROIDS

❖ Asteroids are **small, rocky objects that orbit the sun**.
❖ Although asteroids orbit the sun like planets, **they are much smaller than planets.**
❖ They are **majorly found in Asteroid belt orbiting the sun between Mars and Jupiter**.
❖ However **many asteroids lie outside the main belt**. For instance, a **number of asteroids called Trojans lie along Jupiter's orbital path.**
❖ They are **leftovers from the formation of our solar system**.
❖ From being as **small as 10 meters across to as huge as 530 km in diameter, asteroids have varied sizes.**

14.17	INTERNATIONAL DAY OF PARLIAMENTARISM- JUNE 30TH

- International Day of Parliamentarism is observed **on June 30th annually**, as the day dedicated to commemorating the formation of the **Inter-Parliamentary Union (IPU).**
- Theme for 2023 is - **'Parliaments for the Planet.'**

ABOUT INTER-PARLIAMENTARY UNION

- IPU is an **international organisation of national parliaments**.
- It was **established in 1889** in **Paris**.
- It was **founded by statesmen Frédéric Passy of France and William Randal Cremer of the United Kingdom.**
- It works with **close co-operation with the United Nation (UN), regional parliamentary organisations, international intergovernmental organisations** and **non-governmental organisations.**
- Headquarters- **Genava, Switzerland**
- Members- **179 countries** including **India.**

14.18	NATIONAL INSURANCE AWARENESS DAY-JUNE 28TH

- **National Insurance Awareness Day is annually** observed on **28th June** to raise awareness about Insurance which offers a layer of protection to guard in various situations and about the benefits of investing in an insurance plan.
- The **current insurance penetration** in India **stands at around only 3.2%.**

15. BOOKS AND AUTHORS

15.1	AJAY TO YOGI ADITYANATH'

- Noted Author, **Shantanu Gupta,** who has written two bestseller titles on Uttar Pradesh Chief Minister Yogi Adityanath, launched his new graphic novel – **"Ajay to Yogi Adityanath"** for the young readers.
- The graphic novel was launched in 51+ schools of Uttar Pradesh on the 51st birthday of Yogi Adityanath.

OTHER BOOKS BY SHANTANU GUPTA

- **Yogi Adityanath- The Monk Who Transformed Uttar Pradesh and**
- **The Monk Who Became Chief Minister.**

16. APPOINTMENTS

16.1 PRAVEEN SRIVASTAVA IS NEW CVC

- **Praveen Kumar Srivastava**, a retired 1988-batch Indian Administrative Service officer of the Assam-Meghalaya cadre, has been officially **sworn in as the Central Vigilance Commissioner**.
- **President Droupadi Murmu administered the oath** of office to Srivastava.
- He had been **serving as the acting Central Vigilance Commissioner since December**, following the **completion of Suresh N Patel's tenure** as the chief of the probity watchdog.

16.2 CELESTE SAULO IS WMO SECRETARY GENERAL

- **Celeste Saulo of Argentina** has been appointed as the **first female Secretary-General of the World Meteorological Organization** (WMO).
  - ✓ She has **served as the director of Argentina's National Meteorological Service since 2014**.
- The leadership election of the World Meteorological Congress **takes place every four years**.

16.3 NEW DG OF BSF

- **Nitin Agarwal** has been appointed as the new director general of the **Border Security Force (BSF).**
- The post of BSF chief has been vacant for more than five months after **Pankaj Kumar Singh** retired on December 31, 2022.
- **CRPF DG Sujoy Lal Thaosen** has been handling the charge of BSF in an additional capacity since then.
- **Nitin Agarwal,** an IPS officer of the **1989 Kerala cadre**, currently holds the position of Additional Director General of Operations at the Central Reserve Police Force (CRPF).
- He attained the rank of ADG in 2014 while serving with the **ITBP.**
- The BSF is India's leading security agency responsible for safeguarding the 4,096-kilometer-long international borders with Pakistan and Bangladesh.
- In addition, it carries out various responsibilities in the realm of internal security. The BSF comprises a workforce of over 2.65 lakh personnel serving in diverse roles.

ABOUT BSF

- **BSF** is primary border guarding organisation of India and termed as **First Line of Defence of Indian Territories.**
- It is the sentinels of Indian borders with **Pakistan and Bangladesh.**
- It came into existence on **1st December, 1965.**
- It was created by merging various State Armed Police Battalions for achieving a better coordinated synergy between the border guarding functions in peace time and fighting the war during the eventuality on both Western and Eastern fronts.
- BSF is deployed on **Indo-Pakistan International Border, Indo-Bangladesh International Border, Line of Control (LoC) along with Indian Army and in Anti-Naxal Operations.**

16.4 UNIQUE IDENTIFICATION AUTHORITY OF INDIA

- Senior IAS officer **Amit Agrawal** has been appointed as **CEO of Unique Identification Authority of India.**
- He is a 1993 Batch **Indian Administrative Service (IAS) officer** of the **Chhattisgarh cadre.**
- Agarwal is currently serving as Additional Secretary in the **Ministry of Electronics and Information Technology.**

ABOUT UIDAI

- ❖ **The Unique Identification Authority of India (UIDAI)** is a statutory authority established on **12 July 2016** by the Government of India under the jurisdiction of the **Ministry of Electronics and Information Technology, following the provisions of the Aadhaar Act 2016.**
- ❖ The UIDAI is mandated to assign a **12-digit unique identification (UID) number (Aadhaar)** to all the residents of India.
- ❖ The UIDAI was initially set up by the Government of India in **January 2009**, as an attached office under the aegis of the Planning Commission.

16.5   NATIONAL TESTING AGENCY

- ❖ **Subodh Kumar Singh**, has been named the **Director General of the National Testing Agency (NTA).**
- ❖ He is a 1997 Batch Indian Administrative Service (IAS) officer of the **Chhattisgarh cadre.**
- ❖ **Subodh Kumar Singh** is at present Additional Secretary in the Department of Food and Public Distribution under the Ministry of Consumer Affairs, Food and Public Distribution.

ABOUT NTA

- ❖ **National Testing Agency (NTA)** was established as a Society registered under the **Indian Societies Registration Act, 1860.**
- ❖ It is an autonomous and self-sustained testing organization to conduct entrance examinations for admission/fellowship in higher educational institutions.

17.   PERSON IN NEWS

17.1   AHILYABAI HOLKAR

- ❖ Marking the **298th birth anniversary of Maratha queen Ahilyabai Holkar** on May 31ST, Maharashtra CM announced that **Ahmednagar city would be renamed 'Ahilyanagar' after her**.
- ❖ **History of city**
    - ✓ In **1486**, **Malik Ahmad Nizam Shah** assumed the position of the Bahmani Sultanate's prime minister. He successfully **defeated the king of the Bahmani kingdom in 1490**. Later, he laid the foundation of a city close to where he had defeated the army, on the left bank of **Sina river**. This city was named after him: **Ahmednagar**.

ABOUT AHILYABAI HOLKAR (1725 – 1795)

- ❖ Ahilyabai was born **in Chondi village of Ahmednagar** to the village head **Mankoji Shinde**, who **ensured that his daughter received an education**, which was quite rare at that time.
- ❖ **Malhar Rao Holkar**, the **army commander to Peshwa Bajirao**, was impressed by devotion and character of young Ahilyabai at a temple service in Chondi and **decided to get his son**, **Khande Rao,** married to her.
- ❖ After her **husband's death in the Battle of Kumbher** against the king of Bharatpur in 1754, **Ahilyabai took control of Malwa**.
- ❖ She **excelled at administrative and military strategies** under the guidance of her father-in-law.
- ❖ After the death of her father-in-law and son a few years later, she **petitioned the Peshwa to become the ruler, backed by the support of her army**.
    - ✓ She **ruled Malwa province for 28 years**.
- ❖ City of **Maheshwar** became a literary, musical, artistic and industrial centre under her rule, and she helped **establish a textile industry there**, which is now home to **famous Maheshwari saris**.
- ❖ **Restoration of various temples including Kashi Vishwanath, Badrinath, Dwarka, Omkareshwari etc**. was done by her.

17.2   VED KUMARI GHAI PASSES AWAY

- ❖ **Renowned Sanskrit scholar Ved Kumari Ghai** passed away recently.

❖ Ghai was awarded the **Padma Shri**, the fourth-highest civilian award in India, **in 2001 for her contributions to Sanskrit literature**.

❖ She was **also a recipient of the Sahitya Akademi Award**, the highest literary award in India**, in 1991** for her **book "The Sanskrit Language".**

17.3   TRIBAL 'GREEN WARRIOR'

❖ **Damodar Kashyap**, a 74-year-old tribal farmer in **Chhattisgarh's Bastar district**, has transformed **400 acres of land** in his village into a flourishing forest through a community-based approach to conservation.

❖ As **the village sarpanch**, he implemented strict rules and **fines for forest destruction** and deployed villagers to patrol and guard the forest. **Kashyap** also utilized local beliefs and practices to emphasize the sacredness of the forest.

❖ He has received recognition for his conservation work, including the **Paul K Feyerabend Foundation Award in 2014** and a chapter in the **Class 9 social sciences textbook of the Chhattisgarh Board.**

17.4   SILVIO BERLUSCONI

❖ **Silvio Berlusconi,** the boastful billionaire media mogul who was **Italy's longest-serving premier** despite scandals over his sex-fueled parties and allegations of corruption, died on Monday. He was 86.

❖ Berlusconi's extensive political career included appointments as Italian prime minister from **1994 to 1995, 2001 to 2006 and 2008 to 2011.**

❖ He worked as a member of the **European Parliament since 2019**, where he also served from 1999 to 2001.

❖ His Forza Italia party is currently a junior partner in Prime Minister Giorgia Meloni's ruling right-wing coalition.

17.5   HARRY MARKOWITZ

❖ Harry Markowitz, **father of modern portfolio theory (MPT)**, passed away recently.
  - ✓ MPT is **a practical method for selecting investments in order to maximize their overall returns** within **an acceptable level of risk**.
  - ✓ Markowitz focused on combinations of assets, rather than individual securities.
  - ✓ He **shared the Nobel Prize in Economic Sciences** (1990) with Merton H. Miller and William F. Sharpe for his ideas on finance.

18.   AWARDS AND HONOURS

18.1   RUSSIAN POET MARIA STEPANOVA WINS LEIPZIG BOOK PRIZE 2023

❖ **Maria Stepanova**, a renowned Russian writer currently residing in Berlin, has been **awarded the Leipzig Book Prize for European Understanding in 2023**.

18.2   GRAND ORDER OF THE CHAIN OF THE YELLOW STAR

❖ **President Droupadi Murmu** was honoured with the **Grand Order of the Chain of the Yellow Star**, the **highest civilian award** in **Suriname**.
  - ✓ She is the **first Indian to receive this award**.

18.3   MICHEL BATISSE AWARD FOR BIOSPHERE RESERVE MANAGEMENT

❖ **Jagdish Bakan,** Wildlife Warden and District Forest Officer (DFO) of **Ramanathapuram district**, has won the 2023 **Michel Batisse Award for Biosphere Reserve Management from the United Nations Educational, Scientific and Cultural Organization (Unesco).**

❖ He has been Selected for the award for his work in the **Gulf of Mannar Biosphere Reserve.**

❖ The 2017 batch officer of the Indian Forest Service is currently the **director of Gulf of Mannar Biosphere Reserve.**

ABOUT THE AWARD

❖ The $12,000 award is given once every two years in memory of **Dr Michel Batisse** for outstanding achievement in management of biosphere reserves across the globe.

❖ The award was instituted in **2004** following a decision of the International Coordinating Council of the **Man and the Biosphere (MAB) Programme of UNESCO.**

18.4 ANTARASHTRIYA YOGA DIWAS MEDIA SAMMAN

❖ Ministry of Information and Broadcasting has announced the second edition of **Antarashtriya Yoga Diwas Media Samman.**

KEY HIGHLIGHTS

❖ Under the **Antarashtriya Yoga Diwas Media Samman 2023**, **33 Sammans** will be given out under **3 categories viz Print, Television and Radio in 22 Indian languages and English.**

❖ Acknowledging the positive role & responsibility of media in disseminating the outreach of Yoga in India and abroad, the Ministry of I&B had instituted the **first Antarashtriya Yoga Diwas Media Samman (AYDMS) in June, 2019.** The first edition of the awards was conferred on 7th January, 2020.

❖ **The International Day of Yoga** has been celebrated annually on 21 June since 2015.

❖ The idea of International Day of Yoga was first proposed by the **Prime Minister of India, Shri Narendra Modi.**

18.5 GOVERNOR OF THE YEAR'

❖ **Reserve Bank of India (RBI) Governor Shaktikanta Das** was awarded the **"Governor of the Year"** at the **Central Banking Awards 2023 in London.**

❖ Central Banking is a **London-based international economic research journal.**

❖ Das is the **second RBI governor** to receive the award after Raghuram Rajan, who was given the title in 2015.

❖ The RBI governor has cemented critical reforms, overseen world-leading payments innovation and steered India through difficult times with a steady hand and well-crafted turn of phrase.

❖ Das is a **retired Indian Administrative Service (IAS)** officer of the Tamil Nadu cadre, who is currently serving as the 25th governor of the RBI.

❖ He has worked for both the central government and the Tamil Nadu government in several capacities, such as the economic affairs secretary, the revenue secretary, and fertilizers secretary.

18.6 ELIZABETH LONGFORD PRIZE 2023

❖ The book **'Rebels Against the Raj: Western Fighters for India's Freedom'**, authored by **Ramachandra Guha** has won the **£5,000 Elizabeth Longford Prize 2023** for Historical Biography.

❖ This book tells the story of seven foreigners (4 British, 2 American, and 1 Iris) who joined India's freedom struggle.

❖ The list includes Annie Besant, B.G. Horniman, Philip Spratt, Richard Ralph Keithahn, Samuel Stokes, Madeline Slade, and Catherine Mary Heilemann.

18.7 2023 IQBAL MASIH AWARD

❖ **City-based lawyer**-activist **Lalitha Natarajan** has been awarded the **2023 Iqbal Masih Award** for the **Elimination of Child Labour**
❖ **US Consul General Judith Ravin presented the award to Natarajan.**
❖ The award commemorates the **World Day Against Child Labour** that is observed on **June 12** every year to raise awareness and activism to prevent child labour.
❖ **Founded:2008**

18.8   INTERNATIONAL GREEN APPLE AWARDS

❖ **Five buildings** and structures from **Telangana** have been selected to receive the **'International Green Apple Awards for Beautiful Buildings'** in the Urban and Real Estate Sector category.
❖ These awards are **presented** by **'The Green Organisation,'** an **independent non-profit organization** based in **London.**
❖ This is the **first time** any building or structure in **India** has **received** these prestigious awards and all five nominated structures from Telangana have been recognised.

SELECTED BUILDINGS AND CONSTRUCTIONS FROM TELANGANA

1. **Mozzam-Jahi Market (Heritage category)**
   o This building has been acknowledged for its exceptional restoration and re-use. The market holds historical significance and has been beautifully preserved and adapted for contemporary use.
2. **Durgam Cheruvu Cable Bridge (Bridge category)**
3. **B R Ambedkar Telangana State Secretariat Building**
4. **Integrated Command Control Centre of Telangana Police (Unique office category)**
5. **Sri Lakshmi Narasimha Swamy Temple** or simply known as **Yadadri or Yadagirigutta temple**, is a Hindu temple

ABOUT GREEN ORGANIZATION

❖ The Green Organization, founded in **1994** in **London,** is an independent non-profit organization that focuses on acknowledging, rewarding, and promoting environmental best practices globally.
❖ Since 2016, they have been organizing the annual **'Green Apple Awards' in London, UK.**

18.9   WHO AWARD FOR INDIAN FILM 'WHEN CLIMATE CHANGE TURNS VIOLENT'

❖ A documentary titled **'When Climate Change Turns Violent'** has won a special prize in the **'Health for All'** category at the **4th Annual Health for All Film Festival** held at the **World Health Organization headquarters in Geneva.**
❖ The documentary has been **directed by Vandita Saharia** of **Rajasthan.** She was the **only Indian** among the winners.

ABOUT THE NEWS

❖ This documentary has been directed by Vandita Saharia from Rajasthan. She was the only Indian in the list of winners.
❖ The **4.32-minute** documentary 'When Climate Change Turns Violent' focuses on the **relationship between domestic violence, climate change and human trafficking.**
❖ The ceremony announced the winning films for seven different categories, while four films received special mentions by the jury.

WORLD HEALTH ORGANIZATION (WHO)

❖ **Establishment:** 7th April, 1948
❖ **Headquarters**: Geneva, Switzerland
❖ **Member**: 194 countries
❖ It is an **intergovernmental organization** that usually works in collaboration with the ministries of health of its member states.

18.10	NATIONAL WATER AWARDS

- ❖ The Vice President of India recently conferred 4th National Water Awards, 2022.
- ❖ Prominent winners are
  - ✓ **Best State** - Madhya Pradesh (1st), Odisha(2nd), and Andhra Pradesh and Bihar (jointly at 3rd)
  - ✓ **Best District**- Ganjam in Odisha, Nammakkal in Tamil Nadu and Adilabad in Telangana secured top three spots.
  - ✓ **Best Urban Body**- Chandigarh Municipal Corporation.
  - ✓ **Best NGO**- Arpan Seva Sansthan, Udaipur, Rajsathan.
  - ✓ **Best Industry for CSR technologies**- HCL Technologies, Noida.

ABOUT NATIONAL WATER AWARDS

- • **First launched in 2018** by Department of Water Resources, River Development & Ganga Rejuvenation.
- • Awards were not given in the year 2021 due to COVID pandemic.
- • Nodal Ministry: **Ministry of Jal Shakti.**
- • **Aim- To encourage various stakeholders towards adopting a holistic approach towards water resources management in the country**
- ❖ These awards have been **instituted to recognize and encourage exemplary work and efforts made by States, Districts, individuals, organizations, etc across the country** in attaining the vision of a **'Jal Samriddh Bharat'.**
- ❖ It **covers 11 categories** Best State', 'Best District', 'Best Village Panchayat', 'Best Urban Local Body' etc.
- ❖ The award winners in different categories are **given a citation, trophy and cash prize**.
  - ✓ The **cash prizes for the 1st, 2nd, and 3rd rank winners are Rs.2 lakhs, Rs.1.5 lakhs, and Rs.1 lakh, respectively.**

18.11	GANDHI PEACE PRIZE

- ❖ **Gita Press, Gorakhpur** has been awarded the Gandhi Peace Prize for 2021 by the Government of India.
- ❖ The prize was announced by the **Ministry of Culture**.

ABOUT GANDHI PEACE PRIZE

- ❖ **Gandhi Peace Prize Awards for Social, Economic and Political transformation through Non-violence** was instituted **in the year 1995**, on the **occasion of the 125th birth anniversary of Mahatma Gandhi**, as a tribute to his ideals and contributions to humanity.
- ❖ Award carries **a cash prize of ₹1 crore, a citation, a plaque and an exquisite traditional handicraft/handloom item**.
- ❖ The award is **conferred by the President of India** at a function in Rashtrapati Bhavan.
- ❖ Consideration
- ❖ This award is given to individuals, associations, institutions or organizations who have worked selflessly for peace, non-violence and amelioration of human sufferings.
- ❖ It is open to all persons regardless of nationality, race, language, caste, creed or gender.
- ❖ The Award may be divided between two persons / institutions.
- ❖ Work by a person since deceased cannot be the subject of an Award.
  - ✓ If, however, his death occurred subsequent to a proposal having been submitted to the Jury(headed by the Prime Minister) in the manner stipulated in the Code of Procedure, then a Posthumous Award may be made.
- ❖ Recent awardees include **Sultan Qaboos Bin Said Al Said, Oman (2019)** and **Bangabandhu Sheikh Mujibur Rahman (2020),** Bangladesh.
  - ✓ **Among Organizations**: Indian Space Research Organisation (ISRO), Ramakrishna Mission, Vivekananda Kendra, Akshaya Patra, Sulabh.

ABOUT GITA PRESS

- ❖ **Jaya Dayal Goyandka** and **Hanuman Prasad Poddar** established the **Gita press in 1923**.
- ❖ **Gita Press is one of the world's largest publishers of Hindu religious texts**, having published **41.7 crore books in 14 languages**, including 16.21 crore copies of Shrimad Bhagvad Gita.
- ❖ Gita Press **also runs a monthly magazine called Kalyan**, which covers topics such as spirituality, culture, history, ethics and morality.
- ❖ It **also runs a charitable hospital called Kalyan Chikitsalaya in Gorakhpur**, which provides free medical services to the poor and needy.

18.12   SAHITYA AKADEMI AWARD

- ❖ The Union Ministry of Culture recently expressed its intent to change the process of nomination for the prestigious Sahitya Akademi Awards.

ABOUT THE AWARDS

- ❖ The award **was established in 1954**.
- ❖ It is a literary honour, **conferred annually on writers of most outstanding books of literary merit** published in any of the major Indian languages.
- ❖ **Besides 22 languages** enumerated in Constitution, **English and Rajasthani language** are also recognised.
- ❖ The Sahitya Akademi award is the **second-highest literary honour by the Government of India, after the Jnanpith award**.
- ❖ Award includes **a casket containing an engraved copper-plaque, a shawl and an amount of Rs. 1,00,000/-**
- ❖ The **Sahitya Akademi** functions as an **autonomous organisation** registered as **a society under Societies Registration Act, 1860.**

ABOUT JNANPITH AWARD

- ❖ It is the **highest literary award in India** and **can only be conferred annually upon an Indian citizen**.
- ❖ English along with other languages in 8th Schedule, is considered for the Award.
- ❖ Award **carries cash award of Rs. 11 lakhs, a citation, and a bronze replica of Vagdevi (Saraswati),** the goddess of learning.
- ❖ It is **sponsored by the cultural organization Bharatiya Jnanpith**.

18.13   NATIONAL FLORENCE NIGHTINGALE AWARDS

- ❖ **President of India** has **presented National Florence Nightingale awards for 2022 and 2023 to 30 nurses** who provided their exemplary services in each state.
- ❖ The National Florence Nightingale Awards **are presented** in **different categories** to recognize various aspects of nursing excellence.
  - o These categories **may include Auxiliary Nurse and Midwife**, **Lady health visitors** and **Nurse**.
- ❖ The award **carries a cash prize of Rs 50000/-**, **a certificate** and **a medal**.
- ❖ **Indian Nursing Council** is a **statutory body under Ministry of Health and Family Welfare**, which **grants Florence Nightingale Award** to recognise the contribution of healthcare workers since 1973.

ABOUT FLORENCE NIGHTINGALE

- ❖ She was known as **"The Lady With the Lamp,"**
- ❖ She was a **British nurse, social reformer and statistician.**
- ❖ She is **best known as founder of modern nursing** as she **established first scientific nursing school in London (1860).**
- ❖ She was the **first woman elected as a Fellow of the Royal Statistical Society** (1858).
- ❖ In her honour, the **annual International Nurses Day** is **celebrated on her birthday on 12th May**.

18.14   'ORDER OF THE NILE'

- ❖ PM Modi was conferred with **'Order of the Nile' award, Egypt's highest state honour**.

- ❖ This is the **13th such highest state honour** that various countries across the world have conferred upon PM Modi.
- ❖ Prime Minister Narendra Modi was honored with the Order of the Nile by Egyptian President Abdel Fattah al-Sisi during his visit.

ABOUT THE AWARD

- ❖ The Order of the Nile was **established in the year 1915 by Sultan Hussein Kamel of Egypt**.
- ❖ Originally intended to **recognize individuals who had rendered valuable service to the country**, the Order of the Nile **became Egypt's highest state honor after the monarchy was abolished in 1953**.
- ❖ The 'Order of the Nile' is now **conferred upon Heads of state, Crown Princes, and Vice-Presidents** who offer **Egypt or humanity invaluable services**.
- ❖ The 'Order of the Nile' is **a pure gold collar** consisting of **three-square gold units** comprising Pharaonic symbols.
- ❖ The **first unit resembles the idea of protecting the state** against evils, the **second one resembles prosperity and happiness** brought by the Nile, and the **third one refers to wealth and endurance**.
- ❖ Its **rich history and symbolism** make **it a coveted accolade**.

18.15   SAHITYA AKADEMI BAL SAHITYA PURASKAR 2023

- ❖ **Priya A S** has been honored with the **prestigious Sahitya Akademi Bal Sahitya Puraskar 2023** in the **Malayalam language** for her **novel "Perumazhayathe Kunjithalukal" (The Children Who Never Withered).**
- ❖ **The Sahitya Akademi Bal Sahitya Puraskar**, awarded by the **Sahitya Akademi**, **carries a cash prize of Rs 50,000** and **an engraved copper plaque.**

19. SPORTS

19.1   INDIA- JUNIOR HOCKEY ASIA CUP CHAMPIONS

- ❖ The **Indian** junior men's hockey team maintained its continental supremacy by **beating arch-rivals Pakistan 2-**1 to become Asia Cup champions **in Salalah, Oman**.
- ❖ This was **India's fourth title** having been crowned champions on three previous occasions **in 2004, 2008 and 2015**.
- ❖ Meanwhile, **Pakistan has won the tournament in 1987, 1992 and 1996.**

19.2   MAX VERSTAPPEN WINS SPANISH GRAND PRIX

- ❖ **Max Verstappen** from **Red Bull team** emerged victorious at the **Spanish Grand Prix**, clinching the pole position.
- ❖ **Lewis Hamilton**, secured the **second spot for Mercedes**. **Hamilton's teammate, George Russell**, won **third spot.**

19.3   FRENCH OPEN 2023

- ❖ **Novak Djokovic** won his men's-record **23rd Grand Slam title** with a victory over **Casper Ruud in French Open Final.**

Title	Winner
Men's Singles	Novak Djokovic
Women's Singles	Iga Świątek

Men's doubles	Ivan Dodig and Austin Krajicek
Women's doubles	Hsieh Su-Wei and Wang Xinyu
Mixed doubles	Miyu Kato and Tim Pütz

19.4 ICC WORLD TEST CHAMPIONSHIP 2023

- ❖ **Australia has won the World Test Championship after a crushing win over India in the final at The Oval, London.**
- ❖ This was **India's second** consecutive defeat in a **WTC final**; they had lost to New Zealand in the title clash of the inaugural edition in 2021.
- ❖ This was India's fourth defeat in the ICC finals after their **Champions Trophy victory in England** in 2013. **India** lost the final of the T20 World Cup to Sri Lanka in 2014, then lost the Champions Trophy final to Pakistan in 2017 before a defeat to New Zealand in the WTC final in 2021.
- ❖ **Australia also became the first men's team** in world cricket to win an International Cricket Council (ICC) world title in all three formats.
- ❖ Australia achieved the feat when they decimated India in the final of the **World Test Championship 2021-23** at The Oval to become the new world champions of the longest format of the game.
- ❖ Australia won the first-ever 50-over **World Cup in 1987** and went on to win 4 more titles, becoming the most successful side in 50-over World Cups.
- ❖ Australia also won the ICC Champions Trophy in 2006, beating the West Indies in the final.
- ❖ **Player of the match – Travis Head**

19.5 WOMEN'S HOCKEY JUNIOR ASIA CUP 2023

- ❖ **The Indian hockey team emerged champions of the Women's Junior Asia Cup in Japan's Kakamigahara by defeating South Korea 2-1 in a captivating final.**
- ❖ Annu (22nd) and Neelam (41st) scored for India and Park Seo-yeon (25th) for Korea.
- ❖ This is India's first title while **South Korea (4) and China (3)** share the honours from the previous editions.
- ❖ Acknowledging the team's unbeaten streak in six matches — it also helped them qualify for the 2023 Women's Junior World Cup in Chile — Hockey India (HI) declared a cash prize of **Rs 2 lakh per player and Rs.1 lakh** each for the support staff.

19.6 YOUNGEST GRAND SLAM WHEELCHAIR CHAMPION 2023

- ❖ **Japan's Tokito Oda** defeated top-ranked Alfie Hewett of Britain in the **French Open wheelchair** final to become the sport's youngest **Grand Slam champion 2023.**
- ❖ The **17-year-old** is also guaranteed to become the youngest ever world number one in the discipline.
- ❖ With this win, he also becomes the **sport's youngest Grand Slam champion.**
- ❖ While **Diede de Groot from Netherlands** has secured the **2023 French Open – Wheelchair women's singles.**

19.7 PARIS DIAMOND LEAGUE 2023

- ❖ Indian long jumper **Murali Sreeshankar** secured **third place** in Paris Diamond League.
- ❖ Murali Sreeshankar registered an impressive 8.09m attempt to finish third in the men's long jump event at the Paris Diamond League 2023 athletics in France on Saturday.
- ❖ The **Diamond League started in 2010;** organized by the **World Athletics body** is a prestigious annual international athletics series consisting of various track and field events held across different cities around the world.

❖ It features the world's top athletes competing in disciplines such as sprints, jumps, throws, and middle-distance races. Neeraj Chopra was the first Indian to win a Diamond League meet.

19.8   JANJATIYA KHEL MAHOTSAV

❖ Recently the **first Janjatiya Khel Mahotsav** was organized at the **Kalinga Institute of Social Sciences, Bhubaneswar.**

ABOUT

❖ It was a **coordinated** effort between the **Ministry of Culture, the Odisha Government, and KIIT University.**
❖ It witnessed the assemblage of 5,000 tribal athletes and 1,000 officials from 26 states.

INDIGENOUS SPORTS

❖ **'Sports'** being a state subject, the responsibility to promote indigenous sports in the country and conduct special training programmes for the development and promotion of traditional sports rests primarily with the respective State/Union Territory Governments. The Union Government supplements their efforts.
❖ **Ministry of Youth Affairs and Sports** runs a **Central Sector Scheme**, namely, the **'Khelo India – National Programme for Development of Sports' Scheme (Khelo India Scheme)**, of which one of the Components, namely, **'Promotion of rural and indigenous/tribal games',** is specifically dedicated to the development and promotion of rural and indigenous/tribal games in the country.
❖ Indigenous games of **Mallakhamb, Kalaripayattu, Gatka, Thang-Ta, Yogasana and Silambam** have been identified for promotion under this Component.
❖ Further, the Ministry has also made documentaries of **various indigenous games** in order to showcase and promote/revive them, namely, Gatka, Roll Ball, Tug of War, Kalaripayattu, Thang-Ta, Kho-Kho, Mallakhamb, Shooting Ball, Sqay, Kabaddi, Gilli Danda, Sikkim Archery, Dhoop Khel and Cowrie Khel, Paika Akhada and Chhau and Akhada Kushti, Hekko, Mizoram Games, Silabam, Lagori and Langadi.

19.9   BHAVANI DEVI

❖ C.A. Bhavani Devi, an Olympian from Chennai, made history by securing **India's first-ever medal at the Asian fencing championships** held in Wuxi, China.
❖ **Bhavani's outstanding performance and determination** earned her a **well-deserved bronze medal** in this prestigious event.

20.   SOCIAL ISSUES, HEALTH, EDUCATION

20.1   FLAVONOLS

❖ A recent research found that **flavanol deficiency** is a **key driver of aging memory loss**.
❖ Researchers have found that **flavanols improved memory by acting selectively on dentate gyrus**- **an area within brain's hippocampus**, which is vital for memory.
❖ **Flavonols** are a **major class of flavonoids, molecules that have interesting biological activity** such as **antioxidant, antimicrobial, hepatoprotective, anti-inflammatory, and vasodilatation effect**.
❖ They have also been considered as potential anticancer agents.
❖ **Foods that contain** a high amount of **flavonols** include **apples, blackberries, peaches, tomatoes, onions and dark chocolate**.
❖ Flavonols can **also lower the chances of frailty**.
   ✓ **Frailty** is a **geriatric syndrome** that can lead to **a greater risk of hospitalization, disability, falls, fractures, and mortality**.

20.2   FIXED DOSAGE COMBINATIONS

- ❖ 14 **fixed-dose combination (FDC) medicines** found to lack therapeutic relevance have been **banned by the Ministry of Health and Family Welfare** recently.
- ❖ The banned FDCs **are part of 344 fixed-dose combinations prohibited** for sale by the Union Health Ministry **in 2016** but the **makers of 15 such drugs challenged the decision in Delhi High Court**.
- ❖ The ban, **under Drugs and Cosmetics Act, 1940**, comes after **an expert committee** recommended that there **is no therapeutic justification for these FDCs** and FDC **may involve risk to human beings**.
- ❖ The banned combinations **include medicines used for cough, fever and infections**, and **are sold over the counter**.

ABOUT FIXED-DOSE COMBINATION (FDC) DRUGS

- ❖ FDC drugs are those which **contain a combination of two or more active pharmaceutical ingredients (APIs)** in **a fixed ratio**.
- ❖ It **may be administered as single entity products** given concurrently or **as a finished pharmaceutical product**.
- ❖ **Benefits**
  - ✓ Patients **benefit from added effects of two medicinal products** given together.
  - ✓ They have been shown to appreciably **reduce the risk of medication non-adherence**, which is particularly important **in patients with chronic diseases**.
  - ✓ The FDCs are **more economic than single ingredient** drugs.
  - ✓ The **manufacturing cost is quite low as compared to** the cost of producing **separate products**.
- ❖ **ISSUES RELATED TO FDCS-**
  - ✓ **Dosage alteration** of one drug as per an individual patient's need, is **not possible**.
  - ✓ The FDCs formulated without due diligence can pose problems namely **pharmacodynamic mismatch** i.e. one drug having **additive/antagonistic effect** leading to reduced efficacy or enhanced toxicity.
  - ✓ FDCs do harm by encouraging **irrational and indiscriminate use by people**.
    - ➢ Irrational use of FDCs of antibiotics is **among the major causes of antibiotic resistance** in India.

20.3 NCDC ALERTS AGAINST 5 DISEASES

- ❖ The **National Centre for Disease Control** (NCDC) has **alerted states** about smaller outbreaks for **five diseases—typhoid, malaria, dengue, scrub typhus and hepatitis A.**
- ❖ These **alerts are part of the regular surveillance** under the **Integrated Disease Surveillance Programme (IDSP)**.

ABOUT NATIONAL CENTRE FOR DISEASE CONTROL (NCDC)-

- ❖ It is **an institute under the Directorate General of Health Services**, **Ministry of Health and Family Welfare**.
- ❖ **The Director**, an officer of the Public Health sub-cadre of Central Health Service, is the **administrative and technical head of the Institute**.
- ❖ The **National Centre for Disease Control** (NCDC), formerly National Institute of Communicable Diseases (NICD), had its **origin as the Central Malaria Bureau, established at Kasauli (Himachal Pradesh) in 1909**.
- ❖ **NICD** was transformed into the **National Centre for Disease Control (NCDC) with a larger mandate** of controlling **emerging and re-emerging diseases in 2009**.
- ❖ Headquarters: **New Delhi**.
- ❖ **Functions:**
  - ✓ It functions as the **nodal agency for disease surveillance** in the country.
  - ✓ In coordination **with the State Governments, NCDC** has the **capacity and capability for disease surveillance, outbreak investigation, and rapid response** to contain and combat outbreaks.
  - ✓ It also **deals with Anti-Microbial Resistance (AMR)**.
  - ✓ It also provides **referral diagnostic support** to individuals, community, medical colleges etc. along with **capacity building and technical support to States/UTs in the country**.

✓ It also focuses on **applied integrated research in various aspects of communicable as well as some aspects of non-communicable diseases**.

20.4	MANUAL SCAVENGING IN INDIA : SOCIAL JUSTICE MINISTRY REPORT

❖ According to the Report released by **Union Ministry of Social Justice and Empowerment**, **only 508 of the 766 districts (66%)** in the nation have officially declared themselves free of **manual scavenging.**

MANUAL SCAVENGING

❖ **The International Labour Organization** describes **3** forms of manual scavenging in India.
   • Removal of human excrement from public streets and dry latrines (meaning simple pit latrines without a water seal, but not dry toilets in general),
   • Cleaning septic tanks,
   • Cleaning gutters and sewers.

PROVISIONS AGAINST MANUAL SCAVENGING IN INDIA

❖ India banned the practice under the **Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (PEMSR).**
❖ The Act bans the use of any individual for manually cleaning, carrying, disposing of or otherwise handling in any manner, human excreta till its disposal.
❖ **In 2013,** the definition of manual scavengers was also broadened to include people employed to clean septic tanks, ditches, or railway tracks.
❖ The Act **recognizes manual scavenging as a dehumanizing practice** and cites a need to correct the historical injustice and indignity suffered by the manual scavengers.

INITIATIVES

SELF-EMPLOYMENT SCHEME FOR REHABILITATION OF MANUAL SCAVENGERS (SRMS)

❖ **The Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)** was introduced in **January, 2007,** with the objective to rehabilitate the remaining manual scavengers and their dependents in alternative occupations by **March, 2009**. However, as this could not be done by the target date, the Scheme was extended up to **March, 2010**, with a provision for the coverage of spill-over of beneficiaries even thereafter, if required.
❖ According to the scheme for rehabilitation of manual scavengers, the **58,000** identified sewer workers have been given a one-time cash pay-out of **₹40,000 each**. In addition, around **22,000** of them (less than half) have been connected to skills training programmes. Subsidies and loans are available to any of them wishing to set up their own business.
❖ The scheme for rehabilitation of manual scavengers has now been merged with the **NAMASTE scheme** for 100% mechanisation of sewer work.

NAMASTE SCHEME

❖ **It was launched in 2022 as a Central Sector Scheme.**
❖ The scheme is being undertaken jointly by the **Ministry of Housing and Urban Affairs and the Ministry of Social Justice & Empowerment (MoSJE)** and aims to eradicate unsafe sewer and septic tank cleaning practices.
❖ Union Budget 2023-2024 has allocated nearly **Rs 100 crore** for the **National Action for Mechanized Sanitation Ecosystem (NAMASTE)** and the government is looking to enable 100% mechanical desludging of septic tanks and sewers in all cities and towns.
❖ The process of extending the Scheme to all the **Urban Local Bodies (ULBs)** of the country has been initiated.
❖ **NAMASTE aims** to achieve the following outcomes:
   ✓ Zero fatalities in sanitation work in India
   ✓ All sanitation work is performed by skilled workers.
   ✓ No sanitation workers come in direct contact with human faecal matter.
   ✓ Sanitation workers are collectivized into SHGs and are empowered to run sanitation enterprises.

✓ All Sewer and Septic tank sanitation workers (SSWs) have access to alternative livelihoods.

20.5 ADDICTION FREE AMRIT KAAL"

❖ The **National Commission for Protection of Child Rights (NCPCR)** has launched the **"Addiction Free Amrit Kaal"** campaign to promote a healthier & addiction-free India.
❖ The campaign is organized by the NCPCR in partnership with **Tobacco Free India**, a citizens group.
❖ The campaign aims to protect children's rights to have a tobacco and drug-free environment through initiatives, and outreach activities.

ABOUT NCPCR:

❖ **National Commission for Protection of Child Rights** (NCPCR was established in March 2007 under an Act of Parliament (December 2005) under the **Commission for Protection of Child Rights Act, 2005.**
❖ The commission's mandate is to ensure that all laws, policies, programs and administrative systems conform to the vision of the rights of the child as enunciated in the Constitution of India as well as the **United Nations Convention on the Rights of the Child.**
❖ A child is defined as a person falling in the age group of **0 to 18 years.**

20.6 CHIKUNGUNYA

❖ **The first chikungunya vaccine** may be on its way with phase **3 trials** of a single-shot jab developed by F**rench biotech company Valneva** showing the vaccine to be generally safe, well tolerated and provoking an immune response.

ABOUT CHIKUNGUNYA:

❖ It is a **viral disease** transmitted to **humans** through the bites of mosquitoes infected with the **chikungunya virus.**
❖ The word comes from the **African Makonde language** and means **"bent over in pain."**
❖ It is most commonly transmitted by **mosquitoes, Aedes (Stegomyia) aegypti and Aedes (Stegomyia) albopictus**, which can also transmit **dengue and Zika viruses.**
❖ It was first described during an outbreak in **southern Tanzania in 1952** and has now been identified in nearly 40 countries in **Asia, Africa, Europe and the Americas.**

SYMPTOMS:

❖ Symptoms usually begin **4 to 8 days** after a mosquito bite but can appear anywhere from **2 to 12 days.**
❖ The most common symptom is an abrupt onset of fever, often accompanied by joint pain.
❖ Other symptoms include **muscle pain, headache, nausea, fatigue, and rash.**
❖ Serious complications are uncommon, but atypical severe cases can cause long-term symptoms and even death, especially in older people.

TREATMENT:

❖ There is currently no approved vaccine or specific treatment for **chikungunya virus infections**.
❖ The goal of treatment for the infection is to relieve symptoms with **rest, fluids and drugs.**

20.7 GENERIC DRUGS AND PMBJP

❖ With the increasing incidence of heart diseases, diabetes and other diseases, **Jan Aushadhi Kendras have reported a 170 fold higher increase in the sales of medicines** over the last nine years.
❖ According to a report, **medicines to treat gastric issues, diabetes, cardiovascular ailments, and pain** have **seen the highest sales at the Jan Aushadhi Kendras**, under the **Pradhan Mantri Bharatiya Jan Aushadhi Pariyojana (PMBJP)scheme**.

ABOUT PMBJP

- ❖ PMBJP was **launched by Department of Pharmaceuticals in 2008** with objective of making quality generic medicines available at affordable prices to people.
- ❖ **Nodal** Ministry- **Ministry of Chemicals and Fertilizers.**
- ❖ **Pharmaceuticals & Medical Devices Bureau of India** (PMBI), erstwhile Bureau of Pharma PSUs of India (BPPI) is **implementing agency of PMBJP**.
- ❖ Medicines available under scheme are priced 50-90% less than branded medicines.
    - ✓ **Generic drug has exactly same active ingredient as the brand name drug** and yields same therapeutic effect.
- ❖ They are **sold at a cheaper price because the manufacturers do not have to work on R&D or conduct clinical trials**.
- ❖ **National Accreditation Board for Testing and Calibration Laboratories** perform **quality assurance testing on all medications** purchased under this programme.
- ❖ Under **Patents Act, 2005**- Generic versions of patented drugs will be permitted to be manufactured and exported under a Compulsory License (CL) to meet **major health needs of underdeveloped countries**.

> Jan Aushadhi Diwas is celebrated every year on **March 7th**.
>
> 2023 theme- **"Jan Aushadhi- Jan Upyogi"**

20.8	DRUGS TECHNICAL ADVISORY BOARD

- ❖ Recently, the **Drugs Technical Advisory Board (DTAB)** recommended **banning the manufacture, sale and distribution of two non-steroid anti-inflammatory drugs** (NSAIDs) **Ketoprofen and Aceclofenac**.
    - ✓ The two drugs are **widely used for livestock treatment**.
    - ✓ These, along with **Nimesulide**, are **toxic to vultures.**
    - ✓ The three drugs—**aceclofenac, ketoprofen and nimesulide—were introduced as alternatives to diclofenac**, that **India banned in 2006 for animal use** because it caused widespread vulture deaths.

ABOUT DRUGS TECHNICAL ADVISORY BOARD

- ❖ It is the **highest statutory decision-making body on technical matters** related to drugs in India.
- ❖ It is **established as per the Drugs and Cosmetics Act, 1940**.
- ❖ It is **part of the Central Drugs Standard Control Organization** (CDSCO) under **Ministry of Health and Family Welfare**.
- ❖ It **advises the Central Government and the State Governments on technical matters arising out of the administration of the Drugs and Cosmetics Act, of 1940** and to carry out the other functions assigned to it by this Act.

ABOUT NON-STEROID ANTI-INFLAMMATORY DRUGS

- ❖ These are **medicines that are widely used to relieve pain, reduce inflammation,** and bring down a high temperature.
- ❖ These drugs **block the production of certain body chemicals that cause inflammation**.
- ❖ Aspirin and Ibuprofen are most popular examples.

20.9	CHILD HELPLINE 1098

- ❖ The child helpline number **1098** will be **merged with the emergency response support system 112**.
- ❖ It is a **24-hour a day, 365 days a year, free, emergency phone service for children** in need of aid and assistance.
- ❖ **CHILDLINE India Foundation** (CIF) is the **nodal agency** for the monitoring and maintenance of the helpline. It functions under union **Ministry of Women and Child Development.**

20.10	LUMPY SKIN DISEASE

- ❖ More than 100 cows have died in **Meghalaya** due to the highly infectious **Lumpy Skin Disease** and over 8000 animals have been infected.

ABOUT LUMPY SKIN DISEASE

- ❖ LSD is **an infectious viral disease** mainly **affecting cattles.**
- ❖ The Food and Agriculture Organization (FAO) estimates that **its mortality rate is less than 10%.**
- ❖ The **first reported outbreak** of LSD occurred in **Zambia in 1929.**
- ❖ LSD is primarily **spread between animals** through the **bite of vectors, such as mosquitoes, ticks and flies**.
- ❖ The **primary symptoms** of LSD include **fever, discharge from the eyes and nose, drooling, and blisters on the skin**.
  - ✓ Also, affected animals may also **lose their appetite and have difficulty in eating**, leading to **reduced milk production**.
- ❖ Currently, in India the **goat pox vaccine and sheep pox virus vaccines** are administered for LSD.
- ❖ It's a **heterologous vaccine** that offers cross-protection for cattle against the disease.
  - ✓ **Goat pox, sheep pox and LSD** belong to the **same capripoxvirus genus**.

20.11	NANDI PORTAL

- ❖ **Department of Husbandry and Dairying (DAHD)** has introduced the **NOC Approval for New Drug and Inoculation System (NANDI) portal** to expedite regulatory process for approval of animal drugs and vaccines.
- ❖ DAHD has developed the NANDI portal **through C-DAC in coordination with Central Drugs Standard Control Organization (CDSCO).**
- ❖ It will streamline the **regulatory approval process for veterinary products**.
- ❖ **It is intended to increase the awareness about livestock diseases and also to increase the usage of veterinary drugs.**
- ❖ **It is to be streamlined with CDSCOs SUGAM portal.**
- ❖ It will bring about **growth and innovation by enabling quick and easy coordination** between various Government departments and institutes.
- ❖ With the launch of NANDI ,DAHD continues to stride towards achieving the interventions laid out as part of its **Animal Pandemic Preparedness Initiative (APPI).**

ABOUT SUGAM PORTAL

- ❖ SUGAM is **an e-Governance system** to discharge various functions performed **by CDSCO under Drugs and Cosmetics Acts, 1940.**
- ❖ It is **an online web portal where applicants can apply for NOCs, licenses, registration certificates, permissions & approvals.**
- ❖ It provides **an online interface for applicants to track their applications, respond to queries and download the permissions** issued by CDSCO.

20.12	SKIN BANK

- ❖ **North India's first skin bank** opens in Safdarjung Hospital in **New Delhi.**
- ❖ The country has **16 skin banks** — a facility where the skin of deceased persons can be donated — with **7 in Maharashtra**, **4 in Chennai**, **3 in Karnataka**, and **1 each in Madhya Pradesh and Odisha.**

ABOUT SKIN BANK

- ❖ A skin bank is a place where c**adaveric skin is processed and preserved under optimal conditions** from where it can be **used for the benefit of Burn victims**.
- ❖ Anyone can **donate Skin irrespective of sex & blood group**; the minimum age of the donor should be 18 years.
  - ✓ There is **no upper age limit**.
- ❖ The skin of a deceased person can be donated **within six hours of death**.
- ❖ The donor's skin is **taken out only from the back of the thighs and legs** and the **thickness is only 3mm**. It means **a total of 1000-3000 sqm**.
- ❖ The skin is **then extracted, harvested, and processed, which takes five to six weeks**.
- ❖ After this, it **can be provided to patients**.

❖ **Unlike a kidney and liver**, which cannot be stored and need to be transplanted within a few hours of donation, **skin can be stored for three to five years by preserving in 85% glycerol solution.**

20.13   NATIONAL SICKLE CELL ANEMIA ELIMINATION MISSION

ABOUT THE MISSION

❖ It was announced as **part of the Union Budget 2023.**
❖ Objective- To eliminate **sickle cell disease (SCD) as a public health problem in India before 2047**.
❖ The overall aim is **to enable access to affordable and quality health care for all SCD patients and to lower the prevalence through awareness, change of practices and screening interventions**.
❖ The mission will **entail awareness creation, universal screening of seven crore people in the 0-40 years age group in affected tribal areas** and counselling through collaborative efforts of central ministries and state governments.
❖ Initially, the **focus shall be on 17 states with higher prevalence of SCD- Gujarat, Maharashtra, Rajasthan, Madhya Pradesh, Jharkhand, Chhattisgarh, West Bengal, Odisha, Tamil Nadu, Telangana, Andhra Pradesh, Karnataka, Assam, Uttar Pradesh, Kerala, Bihar and Uttarakhand.**

SICKLE CELL ANAEMIA

• Sickle cell anaemia is a **genetic disease** that means it **can easily be passed from parents to children.**
• This is **a type of blood disorder in which the shape of red blood cells changes**. They normally look round but, in this disease, they become **crescent or C shaped**.
• Due to this, the red blood cells are not able to do their work properly and there is a lack of blood in the whole body. Because of this **anaemia becomes a disease**.
• These sickle cells **also become rigid and sticky**, which can **slow or block blood flow**.
• It is caused by a **defective gene called a sickle cell gene**.
• A person will be **born with sickle cell disease only if two genes are inherited**—one from the mother and one from the father.
• Symtoms include **extreme tiredness or fussiness from anaemia, painfully swollen hands and feet, and jaundice.**
    ✓ In **advanced** stages it **can lead to severe pain, anaemia, organ damage, and infections.**
• The only cure for this disease is **bone marrow or stem cell transplantation.**
• However, there are treatments that can help relieve symptoms, lessen complications, and prolong life.

21. MISCELLANEOUS

21.1   CHASHMA NUCLEAR PLANT

❖ **China inked an agreement with Pakistan** to set up a **1,200-megawatt nuclear power plant Chashma-V at Chashma** in the **Mianwali district of Punjab**.

21.2   SURAT SETS GUINNESS RECORD

• **Surat** in Gujarat, India, witnessed a historic event on International Yoga Day as it broke the Guinness World Record for the **largest gathering of people participating in a yoga session at a single location**.
• With **over 1.25 lakh attendees**, the event showcased **commitment to promoting health and well-being through yoga**.
• The **International Day of Yoga** has been celebrated across the world annually on June 21 **since 2015**.

21.3   ORGANIC INTELLECTUAL

❖ The term "organic intellectual" was coined by Italian Marxist **Antonio Gramsci**.

- ❖ Gramsci **defined Organic intellectuals are those specific intellectuals who could help build awareness among the masses.**
- ❖ They are **intellectuals who rose to the professional standing from a social class that usually does not produce intellectuals** and yet **remained associated with that class, unlike traditional intellectuals**

22. HIMACHAL NEWS

22.1   HP TO HAVE HELIPORT IN CHANDIGARH LINKING ALL 12 DISTS

- ❖ With the Directorate General of Civil Aviation (DGCA) simplifying the process for grant of heliport licence, the **Himachal Pradesh Government is planning** to set up **one in Chandigarh connecting all heliports in the hill state**.
- ❖ The **Chandigarh heliport**, said sources, would **serve as a base for all heliports in Himachal**.
- ❖ The move is expected to boost tourism, the mainstay of the state's economy.
- ❖ The government would also set up heliports in all 12 districts and upgrade facilities in the districts that already had one, said an official.
- ❖ **Currently** the state has **only three airports at Bhuntar (Kullu), Gaggal (Kangra) and Jubbarhatti (near Shimla).**

22.2   CHANSHAL PASS RECEIVES SNOW

- ❖ The Chanshal Pass, or Chanshal Valley links Dodra Kwar and Rohru in the Shimla district of the Indian state of Himachal Pradesh.
- ❖ The pass **sits atop Chanshal Peak**, which at **4,520 metres (14,830 ft)** is the **highest peak in the Shimla district**.
- ❖ The pass remains open from May to november and is covered with snow for the rest of the year.
- ❖ Chanshal is a mountain range that cuts the Dodra Kawar Valley from the Rohru area. Its peaks reach 17,000 feet (5,200 m) and can be accessed from Chanshal Pass.

22.3   RESIDENTS OPPOSE ROPEWAY TO BIJLI MAHADEV

- ❖ The Bijli Mahadev Ropeway in Kullu is **facing heavy opposition from residents of Kharal and Kashawari valleys**.
- ❖ They demanded that the **project should be shunned altogether.**
- ❖ Villagers said that the deity Bijli Mahadev had orated through his oracle that any tampering with the barren mountain in the territory, from where the ropeway is proposed, will not be tolerated.
- ❖ A **2.7-km-long ropeway at a cost of Rs 240 crore** is proposed **from Pirdi near Kullu to Bijli Mahadev on top of the Kharal hill opposite Kulluk town**.
  - ✓ Eight companies participated in the tenders invited by the National Highways Logistics Management Limited (NHLML), Company of the Government of India, which were opened on April 17 and were being technically examined.

22.4   NIRF RANKINGS OF STATE COLLEGES

- ❖ **IIT-Mandi** among **engineering institutes**, got the 33rd rank this year.
  - ✓ In the engineering category, only three institutions from the state could make it to the top 150.
  - ✓ While IIT-Mandi is ranked 33rd, **Shoolini University and the National Institute of Technology, Hamirpur**, have been placed **in the 101-150 rank band**.
- ❖ **IIM-Sirmaur** got **98th position** among **management institutes**.

- ❖ **Dr YS Parmar University of Horticulture and Forestry, Nauni**, secured the **17th position among agricultural institutes**.
- ❖ **Shoolini University** secured the **73rd rank among all the universities.**
- ❖ In the discipline of **pharmacy**, Shoolini University has achieved the 41st rank
- ❖ **CSK Himachal Pradesh Agriculture University (HPAU)** has been ranked eighth among the State Agricultural Universities (SAU) in the country.

22.5   KAMRUNAG TEMPLE

- ❖ Improved road connectivity has provided easy access to **Kamrunag deity's temple**, a popular tourist destination, in **Mandi district**.
- ❖ **Kamrunag temple** is situated **at a height of 3,334 metres**.
- ❖ In front of the temple, there is **a beautiful view of a lake, the Dhauladhar hills and the Balh valley**.

22.6   HIMACHAL PRADESH SIGNS MOU WITH OIL INDIA LTD FOR GREEN HYDROGEN

- ❖ The **Himachal Pradesh** government has signed an agreement with **Oil India Limited** for promoting green hydrogen production.
- ❖ State Government has imposed **ban on single-use plastic** in Himachal Pradesh **since 2009** and now it was working to find suitable alternatives to plastic.
- ❖ The government is committed to **environmental protection** and has made various provisions in the budget to improve the state's climate.
- ❖ The government is focused on integrating technology with **governance** and is committed to environmental protection.

22.7   SHIVA PROJECT

- ❖ The project and loan agreement of **Himachal Pradesh Subtropical Horticulture, Irrigation and Value Addition (HP SHIVA) project** has been signed between the Government of India, the **Asian Development Bank (ADB)** and the state government.
- ❖ The **Rs 1,292 crore** project aims at boosting the cultivation of sub-tropical fruits like orange, guava, pomegranate, etc., in seven districts (**Bilaspur, Hamirpur, Kangra, Mandi, Solan, Sirmour and Una),** thereby increasing the income of farm households.
- ❖ The project is based on **'Beej Se Bazaar Tak'** concept, linking all activities from pre-production to post harvest management, including value chain development and access to market. The project will expand climate-resilient **sub-tropical horticulture** plantation area along with assured irrigation and market access through value chain development.
- ❖ The project aims at improving the livelihood of at least **15,000 farm** households (around 90,000 direct beneficiaries in these households).

22.8   BAL SATRA'

- ❖ A special session for children **'Bal Satra'** was organized on **'World Day against Child Labour'** at Himachal Pradesh Vidhan Sabha, Shimla.
- ❖ **68 children, 43 of them girls,** selected from seven states including Himachal Pradesh, participated in the special session for **'Bal Vidhan Sabha'.**
- ❖ The students performed the role assigned to them while exhibiting confidence and high level of awareness about issues confronting the state.
- ❖ **Jahnavi, a class 10 student** from a government school, a resident of **Sundernagar in Mandi district,** played the role of the Chief Minister of Himachal Pradesh.
- ❖ There were also protests in the **House as opposition MLAs (students)** entered the well of the House to protest on the issue of drug problem.

- ❖ The **CM, Vidhan Sabha Speaker, several ministers, MLAs and parents of the students** witnessed the two-and-a-half hour proceedings
- ❖ Speaker Kuldeep Pathania said taking part in the **Bal Vidhan Sabha** was a lifetime experience for these 68 children who have been selected from 25,000 entries from nine states.
- ❖ **The Vice-Chairman of Rajya Sabha Harivash Narayan Singh** was the guest of honour.
- ❖ Earlier this session was held in the **Rajasthan Legislative Assembly.**

22.9   COUNCIL FOR DIGITAL TRANSFORMATION

- ❖ The government of Himachal Pradesh has constituted the **Chief Minister Council for Digital Governance.**
- ❖ The council under the chairmanship of Chief Minister Sukhvinder Singh Sukhu will work as an apex body for providing leadership, strategic guidance and oversight to digital policies and programmes to assist in the digital transformation of Himachal Pradesh.
- ❖ The apex body would comprise experts from different fields, **including IT, industries, data management, telecommunication, finance and the IIT.**
- ❖ The council would comprise **the Principal Adviser** (IT and Innovation) to **the Chief Minister**, **Chief Secretary and the Secretary (IT), besides professionals and experts from various fields.**
- ❖ The council would meet at least once every **three months** or even more frequently, as per the requirement.
- ❖ The government will also implement **e-office and Him Parivar** projects efficiently, besides promoting drone use in the state.

22.10   RIGHT TO MATERNITY LEAVE

- ❖ Every woman employee whether appointed on regular, contractual, ad hoc or tenure/ temporary basis has a fundamental right to a reasonable duration of **maternity** leave (paternity leave in case of a male employee), child care leave (CCL) to promote motherhood and child care under **Article 21** of the Constitution of India, read with **Article 42.**
- ❖ The HP High Court held this while dealing with a petition challenging the decision of the state government to decline the benefit of maternity leave and thereafter consequential benefit of conferment of work-charge status on the completion of eight years' service.
- ❖ A Division Bench comprising **Justice Tarlok Singh Chauhan and Justice Virender Singh** rejected the plea of the government and observed, "The right to life **under Article 21** of the Constitution of India includes the **right to mother.** To become a mother is the most natural phenomena in the life of a woman. Therefore, whatever is needed to facilitate the birth of a child to a woman, who is in service, the employer has to be considerate and sympathetic towards her, must realise the physical difficulties that a working woman faces in performing duties at the workplace while carrying a baby in her womb or while rearing up the child after birth."
- ❖ As per the fact, a woman worker delivered a child on May 30, 1996 and after availing of maternity leave with effect from June 1, 1996, to August 31, 1996, (only three months), she resumed duty. It is only on account of pregnancy and subsequent delivery that she could only perform duty for 156 days against the minimum requirement of 240 days in a year.

22.11   SPORTS CENTRE OF EXCELLENCE

- ❖ The Central Government had approved a national centre of excellence for sports **for Himachal** to be set up at a cost **of Rs 100 crore to Rs 150 crore.**
- ❖ The Union Sports Ministry would construct a stadium in every district of Himachal to hone local talent if the state government provides adequate land.

22.12	HP: 66% OF ELDERLY WOMEN FACED PHYSICAL VIOLENCE

- ❖ **About 66 per cent** of the elderly women in Himachal Pradesh have been victims of physical violence with son being the perpetrator in 56 per cent of these cases.
- ❖ The percentage of older women facing physical abuse in the state is more than the national percentage of 50 per cent revealed the report titled **'Women & Ageing: Invisible or Empowered?'** released on the eve of World Elder Abuse Awareness Day.
- ❖ The report claimed that the incidents of physical abuse against elders have been increasing at the rate of **16 per cent at national level and 15 per cent in HP.**
- ❖ There are about 3.66 lakh elderly women in HP, higher in number than elderly male population.
- ❖ According to report, about **17 per cent** of old women reported facing **"disrespect"** while another **17 per cent** went through **"emotional/ psychological abuse.**
- ❖ In 56 per cent cases the main perpetrator was son, followed by the daughter-in-law at 15 per cent, and relatives at 12 per cent, he said, adding that 48 per cent of elderly women reported being "financially insecure."
- ❖ The report, based on a survey conducted by Ipsos, studied trends in 20 states and five Union Territories with a total sample size of more than 7,900. The sample size in HP was 400.

22.13	ONLINE PORTAL OF NURSES COUNCIL

- ❖ **Himachal Pradesh Chief Minister Sukhvinder Singh Sukhu** has **inaugurated** the online portal of the **Himachal Pradesh Nurses Registration Council (HPNRC).**
- ❖ The website **aims** to provide nurses with Primary registration and renewal services, issuance of No Objection Certificates (NOC), additional qualification updates, foreign verification, online migration, transfer of registration.
- ❖ To **boost** the employment generation and streamline tracking processes, the website of Employment department will be combined with HPNRC's website.

ABOUT HIMACHAL PRADESH NURSES REGISTRATION COUNCIL (HPNRC):

- ❖ A **regulatory body** which maintains the registration and licensing of qualified nurses in the state of Himachal Pradesh, India.
- ❖ **Himachal Pradesh Nurses Registration Act**, came into force from **1977.**

22.14	VIBRANT VILLAGE PROGRAMME IN HIMACHAL PRADESH

- ❖ To counter China's strengthening of infrastructure along the border in Kinnaur and Lahaul-Spiti, 75 villages out of total 210 will be developed under the Vibrant Village programme.

ABOUT THE NEWS

- ❖ The 75 identified villages fall in Pooh and Kalpa blocks of Kinnaur and Kaza in Lahaul and Spiti district.
- ❖ District authorities have been asked to prepare plans to promote economic activities in these villages.
- ❖ The focus will be on strengthening road network and ensuring better connectivity under Vibrant Village programme.

ABOUT VIBRANT VILLAGE PROGRAMME

- ❖ It is a Centrally sponsored scheme, announced in the Union Budget 2022-23 (to 2025-26) for development of villages on the northern border, thus improving the quality of life of people living in identified border villages.
- ❖ It will cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh.
- ❖ It will cover 2,963 villages with 663 of them to be covered in the first phase.

22.15	NURPUR: ADVENTURE ACTIVITIES TO BE STARTED IN PONG DAM RESERVOIR

- ❖ The state Tourism Department has initiated steps to launch water-based tourism and adventure activities in the Pong Dam reservoir.
  - ✓ The **Pong Dam** is an **earth-fill embankment dam on the Beas River in Kangra district**.
- ❖ On the request of the Tourism Department, the wildlife wing of the state Forest Department has prepared a proposal to exclude two sites from the wildlife sanctuary.
- ❖ The two sites encompassing a total area of 7.5 sq km have been identified at Nangal Chowk near Dadasiba in Dehra subdivision and Matiyal in Fatehpur subdivision.
- ❖ The state Tourism Department has suggested activities like **shikara rides, solar energy propelled houseboats, floating restaurants and tethered hot air ballooning in the Pong reservoir areas exempted from the wildlife sanctuary**.

22.16 KARERI LAKE

- ❖ In a joint effort, the teams of the Kangra police and the State Disaster Management Authority (SDMA) rescued 26 people, including tourists, who were stranded **near the Kareri Lake**, in Kangra district, due to heavy rain.
- ❖ **Kareri Lake is at elevation 2,934 metres** (9,626 ft) above the sea level.
- ❖ **Snow melting from the Dhauladhar range** serves as the **source** of the lake and **a stream, Nyund is the outflow**.

22.17 ASHADH NAG FESTIVAL

- ❖ A four-day district-level **Ashadh Nag Mela** began at the **ancient Nag temple at Banikhet in Chamba** district recently with a shobha yatra.

22.18 HP PARTNERS WITH NDDB TO SET UP MILK PROCESSING UNIT

- • Himachal Pradesh will establish Rs 250 Crore Milk Processing Plant in collaboration **with National Dairy Development Board in Dagwar in Kangra district.**
- • The **capacity** of Dagwar plant would range **from one lakh to three lakh litres**, in which high-quality products of milk would also be prepared.

22.19 LARJI DAM DESILTING

- ❖ The **Larji Hydropower Project management** will open the gates of the dam de-silting purpose.
- ❖ The district administration has, therefore, advised tourists and local residents to **avoid venturing close to the Beas banks in Mandi district**.
- ❖ **Larji** is a 126MW hydro power project. It is **located on Beas river/basin**.

22.20 HAROLI BULK DRUG PARK

- ❖ Industries Minister Harshwardhan Chauhan while presiding over the second meeting of the High-Powered Committee of the State Implementing Agency for the project directed that all departments concerned should make efforts for the successful implementation of the **bulk drug park project proposed at Haroli in Una district.**

22.21 FOUR HYDRO PROJECTS SET TO BE TRANSFERRED TO HPPCL

- ❖ The state government has decided to transfer four small hydro power projects **from Himachal Pradesh State Electricity Board Limited (HPSEBL)** to **Himachal Pradesh Power Corporation Limited (HPPCL).**
- ❖ The projects that will be transferred are
  - ✓ Sai Kothi -1 (15 MW),
  - ✓ Sai Kothi-11 (18 MW),
  - ✓ Devi Kothi (16 MW) and
  - ✓ Hail (18 MW) in Chamba district.

CivilsTap Himachal

HPAS Offline/Live Batch
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HPAS Online Course
04th July 2023

HPAS Weekend Offline / Live Batch
1st July 2023

Sociology Optional Offline / Live Batch
8th July 2023

NT/Allied Online Batch
5th July 2023

HP TGT Medical Offline / Live Course
10th July 2023

HP TGT Non- Medical Offline / Live Course
10th July 2023

HP TGT Arts & Commerce Offline / Live Course
10th July 2023

HP Patwari Online Course
19th June 2023