Current Affairs

MONTHLY

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For HPAS & Other Competitive Exam in Himachal Pradesh

Prelims

1. POLITY

1.1. STAR CAMPAIGNERS

❖ Election Commission of India (ECI) recently issued **an advisory urging star campaigners to "maintain the dignity of the political discourse".**
❖ ECI has advised all national and state political parties and their star campaigners to exercise caution and restraint in their utterances and remain within the provisions of Model Code of Conduct (MCC) and exercise caution from saying anything that could vitiate the election's atmosphere.

ABOUT STAR CAMPAIGNERS

❖ They are **nominated by the concerned political parties** specifying their constituencies and duration of the status.
❖ There is **no law governing who can or cannot be made a star campaigner**.
❖ List of star campaigners must be communicated to Chief Electoral Officer and ECI **within a week from election notification date** under section 77(1) of Representation of People Act (RPA), 1951.
❖ A **'recognised' National or State party** declared as such by the ECI can nominate a maximum of **40** star campaigners.
❖ An **unrecognised political party** can nominate a maximum of **20 star campaigners**.

ABOUT MODEL CODE OF CONDUCT

❖ MCC is a **set of guidelines laid down by Election Commission** to govern the conduct of political parties and candidates in the run-up to an election.
❖ The MCC is **operational from the date on which the election schedule is announced** until the date of **result announcement**.
❖ MCC ensures that ruling party, either at Centre or in states, does not misuse its official position to gain an unfair advantage in an election.
❖ MCC is **not enforceable by law**.
  ✓ However certain provisions of the MCC may be enforced through invoking corresponding provisions in other statutes such as the Indian Penal Code 1860, Code of Criminal Procedure 1973, and Representation of the People Act 1951.

1.2. LEGISLATIVE COUNCILS

❖ Recently Bye Elections to the **Uttar Pradesh Legislative Council** held by the members of Legislative Assembly (MLAs).

ABOUT LEGISLATIVE COUNCILS

❖ India has a bicameral system of legislature.
  ✓ However, **bicameralism at state level is optional**.
  ✓ Currently, only **6 out of 28 states have a Legislative Council**- **Andhra Pradesh, Karnataka, Telangana, Maharashtra, Bihar**, and **Uttar Pradesh**.
❖ At the **state level**, the equivalent of the **Lok Sabha is the Vidhan Sabha or Legislative Assembly**; that of **the Rajya Sabha is the Vidhan Parishad or Legislative Council**.
❖ **Creation/abolition of legislative council**:
  ✓ **Under Article 168**, states can have either one or two Houses of legislature.
  ✓ Article **169 leaves the choice of having a Vidhan Parishad to individual states**.
  ✓ **Art 169** of the Constitution **provides for the abolition or creation of Legislative Councils in States.**

PROCESS

❖ To set up the council, the **legislative assembly of state must pass a resolution by a majority of total membership** & **not less than 2/3rd of the members of the assembly present & voting**.
❖ However, **such a resolution** passed by legislative assembly of state is **not binding on the Parliament**.
  ✓ It may or may not **approve the resolution with simple majority**.

❖ It is **not be deemed to be an amendment of this Constitution** for the **purposes of Article 368**.

MEMBERSHIP:

❖ Under **Article 171 of the Constitution**, the Legislative Council of a state **shall not have more than one-third of the total number of MLAs of the state**, and **not less than 40 members**.

❖ All the members of the Legislative Council are **either indirectly elected** or **nominated by the Governor**.

❖ **One-third** of the MLCs are **elected by the state's MLAs**.

❖ **Another 1/3rd by a special electorate** comprising **sitting members of local governments** such as municipalities and district boards,

❖ **1/12th by an electorate of teachers** and another **1/12th by registered graduates**.

❖ The **remaining 1/6th members** are **appointed by the Governor** for distinguished services in various fields namely, **literature, science, art, cooperative movement and social service.**

1.3. ELECTORAL BONDS

❖ As per ECI, 5 big metro cities -**Mumbai, Kolkata, Hyderabad, New Delhi, and Chennai** in descending order accounted **for nearly 90% of all EBs sold so far.**

About Electoral Bonds

❖ EBs are **interest-free bearer instruments** to cleanse the system of political funding in the country.

❖ These were **introduced in 2017-18**

❖ **Objective**
   ✓ limit use of cash in political funding,
   ✓ Eliminate fraudulent political parties,
   ✓ Protecting donor from political victimization, curb black money etc.

❖ EBs **can be purchased by a citizen of India or entities incorporated or established in India**.

❖ EBs are **valid for 15 calendar days** from the **date of issue** and **no payment shall be made to any payee Political Party** if the Electoral Bond is deposited after expiry of the validity period.

❖ EBs are **sold** in multiples of **Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore.**

❖ **State Bank of India** is the **only bank authorised** to sell them.

❖ **Registered political parties** that secured **at least one percent of votes polled in the most recent General or Assembly elections** are eligible.

❖ **Buyers** of bonds **submit full KYC details** at the time of buying.

❖ But **beneficiary political party is not required to reveal the identity of the entity** that has given it the bond(s).

1.4. SC RULING ON POWERS OF DELHI GOVT

❖ A constitution bench ruled that the **elected government of the National Capital Territory of Delhi (NCTD)** has **legislative and executive power** over "**Services**" under **Entry 41, List II of the 7th** schedule **except for public order, police and land**.

❖ The Delhi government **had challenged the constitutional validity of the Government of National Capital Territory of Delhi (Amendment) Act 2021**, which provided that the term **"government"** referred to in any law made by the LEGISLATIVE ASSEMBLY OF DELHI WILL IMPLY THE LIEUTENANT GOVERNOR (L-G).

SUPREME COURT VERDICT

❖ The Lieutenant Governor is **bound by the aid and advice of the Council of Ministers** of **NCTD** in relation to matters within the legislative scope of NCTD.

❖ SC **affirmed** that the **Centre had exclusive legislative and executive control over 'services' relating to public order, land and police** as envisaged **under Article 239AA**.

❖ A constitutionally entrenched and democratically elected government needs to have control over its administration.

❖ The SC stated **that Article 239AA establishes a legislative assembly for NCT of Delhi. Members of the legislative assembly are elected by the Delhi electorate**.

❖ If a **democratically elected government is not given the power to control the officers**, the **principle of triple chain of accountability will be redundant**.

  ✓ This **three-cornered command** included **civil service officers being accountable to Ministers**, who are **in turn accountable to the Parliament/Legislature**, which is **ultimately answerable to the electorate**.

ARTICLE 239AA OF THE CONSTITUTION

❖ The **69th Amendment of Constitution in 1991** inserted **Article 239AA** to give National Capital of Delhi **special status** with its own democratically elected government and legislative assembly.

❖ Legislative Assembly shall have **power to enumerate anything in State List or in Concurrent List** in so far as any such matter is applicable to Union territories **except on the subject of police, public order, and land**.

❖ **Article 239AA**, empowers the L-G to refer **a difference of opinion on 'any matter'** with the Council of Ministers **to the President**.

1.5. COMMITTEE OF PRIVILEGES IN PARLIAMENT

❖ A **breach of privilege notice** against **Rajya Sabha MP Sanjay Raut** was referred to the **Committee of Privileges** for investigation by **Rajya Sabha Chairman** for his alleged remarks calling the Maharashtra Legislative Assembly a "house of thieves".

ABOUT PARLIAMENTARY PRIVILEGE

❖ Parliamentary privilege refers to **rights and immunities enjoyed by Parliament as an institution and MPs in their individual capacity**, without which they cannot discharge their functions as entrusted upon them by the Constitution.

❖ These are **defined under article 105 of the constitution**.

❖ Under these privileges, the members of Parliament **are exempted from any civil liability (but not criminal liability)** for any statement made or act done in the course of their duties.

❖ **No special law has been enacted** to exhaustively codify all the privileges. They are rather based on **five sources**:

  ✓ **Constitutional provisions**
  ✓ **Various laws made by Parliament**
  ✓ **Rules of both the Houses**
  ✓ **Parliamentary conventions**
  ✓ **Judicial interpretations**

❖ These **privileges do not extend to the president** who is also an integral part of the Parliament.

❖ **A breach of privilege** is a violation of any of the privileges of MPs/Parliament.

  ✓ Among other things, **any action 'casting reflections' on MPs, parliament or its committees**; could be considered breach of privilege.

  ✓ This **may include publishing of news items, editorials or statements** made in newspaper/magazine/TV interviews or in public speeches.

ABOUT COMMITTEE OF PRIVILEGES

❖ The Committee in

  ✓ **Lok sabha consists of 15 members** nominated by **the Speaker**. The **Speaker nominates** the **head** of the committee of privileges.

  ✓ **Rajya Sabha consists of 10 members** nominated by **Chairman**. The **deputy chairperson heads the committee of privileges**.

❖ The committee **examines every question involving a breach of privilege** of the House or of the members or of any Committee thereof **referred to it by the House or by the Speaker/Chairman**.

❖ It **also determines with reference to the facts of each case whether a breach of privilege is involved** and **makes suitable recommendations** in its report.

❖ It **states the procedure to be followed by the House in giving effect to its recommendations**.

1.6. ORDINANCES- WHY AND HOW?

❖ The central government recently **promulgated an Ordinance** that **undid the unanimous verdict of a five-judge Constitution Bench of the Supreme Court**, which **gave the elected government of Delhi control over the transfer and posting of officials** in the National Capital Territory (NCT), **except** with regard to **public order, police,** and **land**.

❖ The ordinance gave the **Lieutenant Governor of Delhi** (appointed by the Centre) **power over services.**

❖ It established a **"National Capital Civil Service Authority"** comprising the **Chief Minister** and **two senior IAS officials**.

❖ The authority would **decide matters "by majority of votes** of the members present and voting".

ABOUT ORDINANCE

❖ Ordinances are **promulgated by President of India**.

❖ An ordinance is a law, and **could introduce legislative changes**.

❖ **Article 123** of the Constitution deals with the **"Power of President to promulgate Ordinances during recess of Parliament"**.

❖ **President** acts on the **advice of the Council of Ministers to promulgate ordinances.**

❖ The **President can only promulgate an Ordinance when both houses or either of the house is not in session.**

> **Article 213** gives similar powers to Governor of state.
>
> However, the **Governor cannot issue an Ordinance without instructions from the President** in cases **where the assent of the President** would have been required **to pass a similar Bill**.

❖ An ordinance **can be retrospective in nature.**

❖ **Lapse**

  ✓ The **Parliament has to approve the ordinance within six weeks (42 days)** of its reassembly.

  ✓ The Ordinance may lapse earlier **if the President withdraws it**.

  ✓ Ordinance will **also cease to operate in case resolutions disapproving the Ordinance are passed by both the Houses**.

❖ **Associated cases**

  ✓ **DC Wadhwa vs. State of Bihar (1986)** - "**an Ordinance promulgated by the Governor** to meet an emergent situation shall **cease to be in operation at the expiration of six weeks from the reassembly** of the Legislature."

  ✓ **AK Roy vs. Union of India (1982)**- The Supreme Court argued that the **President's Ordinance making power** is **not beyond the scope of judicial review**.

  ✓ **Krishna Kumar Singh and Another v. State of Bihar (2017)**- **SC held** that legislation should normally be done by the legislature, and the **Governor's power to issue an Ordinance is in the nature of an emergency power**.

1.7. 1ST FULLY 'E-GOVERNED STATE'

❖ **Kerala** has become the **first full 'e-governed state'** in India.

❖ It has **digitized a range of government services**, ensuring **prompt and transparent delivery** to its citizens.

❖ Kerala's **total e-governance initiative** emphasizes the inclusion of all sections of society, including the less privileged and marginalized.

❖ Initiatives of Kerala:

  ✓ **Kerala Fibre Optic Network** (KFON) project, which has made internet access a citizen's right.

  ✓ **e-Sevanam**, a single portal for 900 public services to taluk-level offices.

  ✓ **e-Office File Flow system** has been introduced, enabling seamless digital workflows even at the village office level.

1.8. FORUM SHOPPING

- RECENTLY, Chief Justice of India condemned the practice of forum shopping.
- **When litigants or lawyers attempt to deliberately move their case to a particular judge or Court where they think the judgment could be more favourable**, they are said to be "forum shopping."
- The **Supreme Court in 1988 in Chetak Construction Ltd**. vs. **Om Prakash** held that a litigant cannot be permitted choice of the forum.

1.9. GOA STATEHOOD DAY- MAY 30TH

- ❖ Goa got its statehood on **May 30th, 1987**.
- ❖ On this day Goa was **declared a state separate from Daman and Diu**.
- ❖ 2023 marks the **36th anniversary of statehood of Goa**.
- ❖ After it received its statehood, **Panaji** was given the **status of the capital of Goa** and **Konkani language became the official language**.

2. ECONOMY

2.1. WINDFALL TAX

❖ Centre recently slashed windfall tax on crude oil **to ₹4,100 per tonne** from **₹6,400 per tonne**.

ABOUT WINDFALL TAX

❖ A windfall is **defined as** an **"unearned, unanticipated gain in income through no additional effort or expense".**

❖ It is a **higher tax levied** by the **government on specific industries** when they experience **unexpected and above-average profits.**

❖ **It is imposed w**hen the **government notices a sudden increase in an industry's revenue**.
   ✓ However, **these revenues cannot be linked to anything the company actively pursued**, such as its business strategy or expansion.

❖ Therefore, Windfall Tax is imposed on an industry's profits when it experiences a sharp increase in revenue **due to unrelated external events**.

❖ There have been varying rationales for governments worldwide to introduce windfall taxes- from redistribution of unexpected gains when high prices benefit producers at the expense of consumers, to funding social welfare schemes, and as a supplementary revenue stream for the government.

2.2. STARTUP INDIA SEED FUND SCHEME

❖ Department for Promotion of Industry and Internal Trade (DPIIT) is undertaking a third-party impact assessment of SISFS.

❖ SISFS was created by **DPIIT, Ministry of Commerce and Industry** in **2021**.

❖ **Funding**
   ✓ An **Experts Advisory Committee** (EAC) has been created by DPIIT to execute and monitor the SISFS.
   ✓ **Up to Rs. 20 Lakhs** as grant for validation of **Proof of Concept, or prototype development, or product trials**. The grant shall be disbursed in **milestone-based installments**.
   ✓ **Up to Rs. 50 Lakhs** of investment for **market entry, commercialization, or scaling up through convertible debentures** or debt or debt-linked instruments

ELIGIBILITY

❖ A **startup, recognized by DPIIT**, incorporated **not more than 2 years ago** at the time of application can apply for scheme.

❖ **Individual entrepreneurs** are **not eligible** to apply for support under the scheme.

❖ There is **no minimum education qualification required** for founders to apply for SISFS.

❖ Startups **should not have received more than Rs. 10 lakhs** of monetary support under any other Central or State Government scheme.

❖ Shareholding by **Indian promoters** in the startup **should be at least 51%** at the time of application to the incubator for the scheme.

2.3. RBI'S GOLD RESERVES

❖ **Reserve Bank of India's total gold reserves** has reached **a new high to around 800 tonnes**.
   ✓ RBI has consistently increased its gold holdings for past five fiscal years through February 2023.

❖ **Objective**-to bolster and diversify its reserves amid rising global economic uncertainty and geopolitical tensions, which **threaten to diminish the value of world's reserve currency, the dollar**.

❖ **Global forex reserves** held by Central Banks comprise currencies like **dollar, euro, pound**, other currencies, **gold** and **IMF's currency quotas called Special Drawing Rights** (SDR).

2.4. AJAY BANGA IS WORLD BANK PRESIDENT

❖ Indian-American **Ajay Banga** was appointed as **World bank President**.
  ✓ He is the **first ever Indian-American** to be selected for this post.

SELECTION PROCESS

❖ Selection is done through an **open, merit-based and transparent process**.
❖ Candidates must be **nationals of the Bank's member countries**.
❖ Candidates should **meet several conditions** including a proven track record of accomplishment, Experience of managing large organizations etc
❖ **Candidate nominations must be made by Executive Directors**, or by Governors through their Executive Directors.
❖ **Traditionally**, the **President of the Bank** has **always been a U.S. citizen nominated by the US**, the largest shareholder in the bank.
❖ The **nominee** is subject to confirmation by the board of executive directors **to serve a five-year**, **renewable term**.
❖ **President of World Bank** is **ex officio chair of Board of Executive Directors** of **International Bank for Reconstruction and Development** (IBRD) and **International Development Association** (IDA).

ABOUT WORLD BANK

❖ It is an **international financial institution** that **provides loans and grants to the governments of low and middle-income/developing countries** for the purpose of pursuing capital projects.
❖ It was **established along with the IMF at the 1944 Bretton Woods Conference**.
❖ The WB Group, which is the parent organisation of the WB, includes –
  ✓ **IBRD**: It provides loans, credits and grants.
  ✓ **IDA**: It provides low or no-interest loans to low-income countries.
  ✓ **International Finance Corporation (IFC)**: It provides investment, advice and asset management to private companies and governments.
  ✓ **Multilateral Guarantee Agency (MIGA)**: It insures lenders and investors against political risk such as war.
  ✓ **International Centre for the Settlement of Investment Disputes (ICSID)**: It settles investment-disputes between investors and countries.
    ➢ **Note**- India is a member of all except ICSID.
❖ These **all serve the dual objectives of the WB Group**, which are to **end extreme poverty by 2030** and **increase shared prosperity for the bottom 40% of the population worldwide**.

2.5. PORTS IN NEWS

JAWAHARLAL NEHRU PORT AUTHORITY

❖ According to **World Bank's Logistics Performance Index, 2023**, **Jawaharlal Nehru Port Authority has a turnaround time (TAT) of just 22 hours**, putting India amongst the top performers.
❖ TAT of a ship refers to the **time vessel reports at the anchorage of a port to the time it sails out from the berth**.
❖ JNP at Navi Mumbai **accounts for around 50% of the total containerized cargo volume**, across the major ports of India.
❖ In 2022, **JNP has become the first major port of the country to become 100% Landlord port** having all berths being

SYAMA PRASAD MOOKERJEE PORT

❖ Minister of State for Ports, Shipping and Waterways recently flagged off an inaugural shipment from **Syama Prasad Mookerjee Port in Kolkata** to operationalise **the Sittwe Port in Myanmar**.

- ❖ **Port of Kolkata or Kolkata Port**, officially known as Syama Prasad Mookerjee Port Trust (Formerly Kolkata Port Trust), is the **only riverine major port of India**, located in Kolkata, around **203 kilometres from the sea**.
- ❖ It is the **oldest operating port in India** constructed by the British East India Company **in 1870**.
- ❖ Kolkata is **a freshwater port with no variation in salinity**.
- ❖ The port has **two distinct dock systems** — **Kolkata Docks at Kolkata** and a **deep water dock at Haldia Dock Complex**, Haldia.

2.6. BANK FOR INTERNATIONAL SETTLEMENTS

- ❖ Reserve Bank of India and BIS have **launched G20 TechSprint, a global technology competition.**

ABOUT BANK FOR INTERNATIONAL SETTLEMENTS

- ❖ BIS was created **in 1930 at Hague Conference**.
- ❖ HQ: **Basel**, Switzerland.
- ❖ Aim- **Support central banks' pursuit of monetary and financial stability** through international cooperation, and to **act as a bank for central banks.**
- ❖ **BIS Governance** is exercised at **three levels** –
  - ✓ **Board of Directors**,
  - ✓ **General Meetings of member central banks** and
  - ✓ **BIS Management** - as determined by its Statutes.
- ❖ BIS is **owned by 63 central banks including Indian Central Bank(RBI)**, representing countries from around world that together **account for about 95% of world GDP.**
- ❖ It has two representative offices- in **Hong Kong SAR and in Mexico City.**

2.7. INDIA'S FIRST INTERNATIONAL MULTIMODAL LOGISTICS PARK

- ❖ The construction of **India's first International Multimodal Logistics Park in Jogighopa, Assam**, is underway.
- ❖ The park will provide **direct connectivity to waterways, road, rail, and air**, and is expected to be completed in 2023.
- ❖ The project aims to revamp the transportation network in the **Northeastern region of India**, including neighbouring countries **like Bhutan and Bangladesh**.
- ❖ The International Multimodal Logistics Park is being developed **under the ambitious Bharatmala Pariyojana of the Government**, and is the first such project of its kind.
- ❖ The park **is being constructed by National Highways & Infrastructure Development Corporation Limited (NHIDCL)**
- ❖ The park will have all the **necessary facilities** such as **a warehouse, railway siding, cold storage, custom clearance house, yard facility, workshops, petrol pumps, truck parking, administrative building, boarding lodging, eating joints, and water treatment plant**.

2.8. TRANSITION BONDS

- ❖ To facilitate **transparency and informed decision-making among the investors**, markets regulator **SEBI** recently **mandated additional requirements for the issuance and listing of transition bonds**.
  - ✓ The issuer of transition bonds will have to **use a denotation 'GB-T'**.
  - ✓ The **transition plan should contain the details of interim targets**, along **with an indicative timeline** for achieving the targets.
  - ✓ The **interim targets should also reflect the indicative figure** regarding how much emissions the issuer is envisaging to reduce.

ABOUT TRANSITION BONDS

❖ **Transition bond** is a class of **debt instruments**, the **proceeds of which are used to fund a firm's transition towards a reduced environmental impact** or **to reduce their carbon emissions**.

❖ Unlike green bonds that are earmarked to raise money for climate and environmental projects solely , **transition bonds** can be **issued by firms aspiring to reduce their GHG emissions**.

❖ The money can be used **for activities that reduce the environmental impact of the business**, such as **carbon capture and storage**, **decommissioning coal plants, waste-to-energy,** or **exclusively financing new and/or existing eligible transition projects**.

2.9. PROJECT-SMART

The **Ministry of Housing & Urban Affairs (MoHUA)** has signed a MoU with the **Japan International Cooperation Agency (JICA)** and the **Ministry of Railways** for the Project-SMART.

ABOUT PROJECT-SMART

❖ It stands for **Station Area Development along Mumbai-Ahmedabad High-Speed Rail**(SMART).

❖ It is an initiative **towards modernizing railway infrastructure in India**, with the potential to transform the areas around the high-speed rail stations into bustling economic centers.

❖ The MoU was **inked for four high-speed stations** — **Sabarmati, Surat in Gujarat**, and **Virar and Thane in Maharashtra**, out of the 12 stations in the route.
   ✓ **Surat, Virar and Thane are green field projects** while **Sabarmati is a brown field development**.

❖ The project — SMART to enhance **accessibility and convenience of commuters** and to **promote economic activities in the vicinity of** Mumbai - Ahmedabad High Speed Railway (MAHSR) stations.

❖ It would **enhance institutional capacity** of State Governments, Municipal Corporations and Urban Development Authorities.

2.10. FINANCIAL STABILITY AND DEVELOPMENT COUNCIL

❖ Finance Minister chairs the 27th Meeting of Financial Stability and Development Council (FSDC).

ABOUT FSDC

❖ A **non-statutory apex council** under the **Ministry of Finance** constituted by the Executive Order in 2010.

❖ The **Raghuram Rajan committee (2008) on financial sector reforms** first **proposed** the creation of FSDC.

❖ Chairman: **Finance Minister**

❖ **Members**: **Minister of State**, in charge of Department of Economic Affairs, **Heads of all Financial Sector Regulators (RBI, SEBI, PFRDA, IRDAI, IBBI)**; **Secretaries** to various departments.
   ✓ **FSDC sub-committee** is headed by the RBI Governor.

❖ **Functions:**
   ✓ To strengthen and institutionalize the mechanism for **maintaining financial stability**, enhancing **inter-regulatory coordination** and promoting **financial sector development**.
   ✓ To **monitor macro-prudential supervision** of the economy. It assesses the functioning of the large financial conglomerates.

2.11. DEEP OCEAN MISSION

❖ Union Minister recently said that **Blue Economy** will be a major contributor to India's overall economy in the years to come and the **Deep Ocean Mission** will be the core component of it.

❖ He chairing the **first-ever high-level Steering Committee Meeting of Deep Ocean Mission** in New Delhi.

❖ The Committee consisted of **Union Ministers of State for Environment, External Affairs, Defence, and Finance** in addition to **Vice Chairman NITI Aayog**.

ABOUT DEEP OCEAN MISSION:

❖ Deep Ocean Mission was **first proposed by the Ministry of Earth Sciences in 2017**.

- ❖ **Aim**- To **explore deep ocean for resources and develop deep sea technologies** for sustainable use of ocean resources.
- ❖ The estimated cost of the Mission will be Rs. 4077 crore for a period of 5 years to be implemented in a phase-wise manner.
- ❖ **Ministry of Earth Sciences** is the **nodal Ministry** implementing this multi-institutional ambitious mission.
- ❖ **Six major components**:
  - ✓ Development of technologies for manned submersible and integrated mining system
  - ✓ Development of ocean climate change advisory services
  - ✓ Technological innovations for exploration and conservation of deep-sea flora and fauna
  - ✓ Deep ocean survey and exploration for hydrothermal minerals
  - ✓ Energy and freshwater from the ocean- OTEC powered Desalinisation plants
  - ✓ Advanced marine station for ocean biology

2.12. HARIT SAGAR GUIDELINES

- ❖ The **Ministry of Ports, Shipping & Waterways** recently launched **'Harit Sagar'**, the Green Port Guidelines.

ABOUT HARIT SAGAR GUIDELINES

- ❖ Aim: To **minimize waste through Reduce, Reuse, Repurpose and Recycle** to attain **zero waste discharge from port operations** and promote monitoring based on Environmental Performance Indicators.
- ❖ It envisages **ecosystem dynamics in port development, operation and maintenance**
- ❖ It aims at minimizing the impact on biotic components of the harbour ecosystem.
- ❖ **Some benchmarks**
  - ✓ Ports must meet **at least 60% of electricity needs via renewables by 2030** and **90% by 2047**.
  - ✓ Ports Must have at least one LNG bunkering station by 2030.
  - ✓ Setting up electric vehicle charging stations in and around port areas by 2025.
  - ✓ Provisions for adopting **global Green Reporting Initiative (GRI) standard**.
  - ✓ It **also covers aspects of the National Green Hydrogen Mission** pertaining to ports.

ABOUT GLOBAL REPORTING INITIATIVE

- ❖ The **Global Reporting Initiative** (GRI) is an **international not-for-profit organisation**, with a network-based structure.
  - ✓ To enable all companies and organisations to report their economic, environmental, social and governance performance, **GRI produces free Sustainability Reporting Guidelines.**
- ❖ The guidelines are currently in their fourth generation ("G4").
- ❖ GRI was founded in the US in **1997 by CERES (a United States non-profit organisation)** and the **United Nations Environment Program (UNEP)** and was originally based in Boston, Massachusetts. I
- ❖ In 2002, GRI moved **its secretariat to Amsterdam**.
  - ✓ GRI also has **regional 'Focal Points'** in **Australia, Brazil, China, India and the USA**.

2.13. CHHELIGADA IRRIGATION PROJECT

- ❖ **Odisha CM office** recently directed officials to begin construction of the multipurpose irrigation project at Chheligada.

ABOUT CHHELIGADA IRRIGATION PROJECT

- ❖ It is a multipurpose medium project being undertaken across river **Badjhore**, a tributary of river **Vansadhara** in the Gajapati District of Odisha.
- ❖ The Project envisages the **construction of a 250m long & 30m high dam** across the river Badjhore with **a central spillway**.
- ❖ This Project will also provide **drinking water to Brahampur City**.

2.14. RBI TO JOIN GFIN TECHSPRINT

❖ RBI has opened the application window for all India based firms and innovators to participate in **GFIN's first ever Greenwashing TechSprint**.

❖ The **TechSprint** will bring together **13 international regulators (including RBI)** alongside **firms and innovators** to address **GFIN's priority on Environmental, Social and Governance** (ESG) and **mitigate risks of greenwashing in financial services**.

❖ The **objective of the Greenwashing TechSprint** is to **develop a tool** that can **help regulators and the market more effectively tackle or mitigate** the risks of **greenwashing** in financial services.

❖ India is **gradually moving towards ESG regulations** with introduction of **Business Responsibility and Sustainability Reporting (BRSR) framework** by **SEBI**.
  - ✓ **BRSR** aims to **establish links between financial results of a business with its ESG performance**.
  - ✓ It was **made mandatory for top 1,000 listed entities** (by market capitalisation) from 2022–23.

> **DEFINITIONS**
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> **Greenwashing** is an act by a country or a company **projecting its efforts or its products as climate-friendly without any verifiable and justifiable data** to support its claim.
>
> ESG is a framework that **helps stakeholders understand how an organization is managing risks and opportunities** related to **environmental, social, and governance criteria**.

ABOUT GLOBAL FINANCIAL INNOVATION NETWORK (GFIN)

❖ It was **formally launched in 2019** by an international group of financial regulators and related organisations.

❖ It seeks to provide **a more efficient way for innovative firms to interact with regulators**, helping them **navigate between countries** as they look to scale new ideas.

❖ This **includes the ability to apply to join a pilot for firms** wishing to test **innovative products, services, or business models** across more than one jurisdiction.

2.15. BHOPAL TO TRACK SDG PROGRESS

❖ **Bhopal** recently became first Indian city to track progress in attaining SDGs.

❖ The launch of **'Agenda for Action: Sustainable Urban Transformation in Bhopal'** has marked the **India's first city-level Voluntary Local Review (VLR)** of Sustainable Development Goals (SDGs).
  - ✓ **New York City** became the **first city to present its VLR to UN's High Level Political Forum** (HLPF) in 2018.
  - ✓ VLR enables cities and regions **to localize SDGs and report their progress**. It also helps cities in **identifying challenges, opportunities and needs** and **offers a practical way** towards sustainable development.
  - ✓ **Localisation of SDGs** (LSDGs) refers to the **process of defining, implementing, and monitoring strategies at local level to achieve global, national, and subnational SDGs** and targets.
  - ✓ It focuses on **achievement of SDGs through action from a bottom-up approach**.

ABOUT UN-HABITAT OR UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME

❖ It was **established in 1978** as an outcome of **First UN Conference on Human Settlements and Sustainable Urban Development (Habitat I) held in Vancouver, Canada**, in 1976.
  - ✓ Further conferences include
    - ➢ **UN Habitat II- 1996** in **Istanbul, Turkey**
    - ➢ **UN Habitat III- 2016** in **Quito, Ecuador**

❖ HQ- **Nairobi, Kenya**

❖ It is **mandated by UN General Assembly to promote socially and environmentally sustainable towns and cities** with the goal of providing adequate shelter for all.

> **Reports** released by **UN-Habitat** are:
> ❖ The State of the World's Cities
> ❖ The Global Report on Human Settlements
> ❖ New Urban Agenda
> ❖ Sustainable Development Goals and Urban Local Bodies – The Future We Want

2.16. CCPA

- ❖ **Central Consumer Protection Authority (CCPA)** has issued orders against the **top five e-commerce platforms- Amazon, Flipkart, Snapdeal, Shopclues and Meesho** for selling **car seat belt alarm stopper** clips.
- ❖ Selling of such items **is in violation of Consumer Protection Act (CPA), 2019** that provides for **protection of interests of consumers**.

ABOUT CENTRAL CONSUMER PROTECTION AUTHORITY (CCPA)

- ❖ It is a **regulatory authority** set up under Section 10(1) of the **Consumer Protection Act, 2019**.
- ❖ It functions under the guidelines of **Ministry of Consumer Affairs, Food and Public Distribution.**
- ❖ It **regulates matters linked to** the violation of **consumer rights, unfair trade practices**, and **misleading advertisements**.

2.17. REGIONAL RURAL BANKS

- ❖ Department of Financial Services (DFS), Ministry of Finance has conducted a review meeting of financial performance of RRBs.
- ❖ RRBs were **formed under RRB Act, 1976** to provide **credit and other facilities to small farmers, agricultural labourers and artisans in rural areas**.
- ❖ These were established as per the **recommendations of the Narasimham Committee** to cater to the rural credit needs of the farming and other rural communities.
- ❖ The **Prathama Grameen Bank, sponsored** by **The Syndicate Bank,** was the **first bank to be established** on 2nd October 1975.
- ❖ **RRBs** are **regulated by RBI** and **supervised by NABARD**.
- ❖ **RRBs' capital** is contributed by **Government of India, State Government and Sponsor Bank** in proportion of **50:35:15**.

2.18. LIBOR

- ❖ RBI has asked **banks & RBI-regulated entities to take steps** to ensure **a complete transition away from the London Interbank Offered Rate (LIBOR) from July 01, 2023**.
  - ✓ LIBOR stands for **London Interbank Offered Rate**.
  - ✓ **An interest rate average submitted by leading UK banks**, it is a **benchmark rate against which global lenders currently mark their transactions**.
- ❖ It acts as **a benchmark for short-term interest rates**.
- ❖ LIBOR is **administered by the Intercontinental Exchange or ICE**.
- ❖ It is published **daily across five currencies** including **US dollar, Euro, British pound, Japanese yen and Swiss franc.**

2.19. CENTRE FOR PROCESSING ACCELERATED CORPORATE EXIT (C-PACE)

- ❖ The **Ministry of Corporate Affairs** (MCA) has established the **Centre for Processing Accelerated Corporate Exit (C-PACE)** to streamline the **process of removing companies from the MCA Register**.
- ❖ The **purpose** of C-PACE is to **reduce the burden on the registry and provide a convenient process for stakeholders to remove their company's** name from the register.
  - ✓ This initiative is **part of MCA's effort to make doing business and exiting easier** for companies.
- ❖ C-PACE **will operate under the Registrar of Companies (RoC)** and will handle applications for processing and disposal.
- ❖ **Harihara Sahoo**, ICLS, has been appointed as the **first registrar of C-PACE**, which will be **supervised by** the **Director General of Corporate Affairs (DGCoA), New Delhi**.
- ❖ **Centre** is situated at the **Indian Institute of Corporate Affairs (IICA) in Manesar, Haryana**.

2.20.   FARMERS RAISE CONCERNS OVER FERTILIZER BAN

❖ **T P Rajendran committee** has said that **of the 1,135 responses it received from various stakeholders**, around **55 per cent were from the farming community and they expressed concern over the possible loss to their crops** if the pesticides are withdrawn from the market.
   ✓ The **farmer groups** with which the panel and its members interacted emphasised the **cost-effective protection these 27 pesticide-based formulations gave over several decades**.
❖ The **T.P. Rajendran Committee**, was constituted by the Centre **to study all aspects related to safety, toxicity, efficacy etc. of the 27 pesticides** which include **insecticides, fungicides and herbicides**.
   ✓ List of these 27 pesticides was carved out of a **more extensive list of 66 pesticides reviewed by Anupam Varma committee**.
❖ However, government has recently proposed to **ban only 3 of the** earlier listed **27 pesticides**.

2.21.   WELFARE FUND FOR MGNREGA WORKERS

❖ For the **first time** in the country, **Kerala government has launched a welfare fund board** for the **workers registered for the MGNREGS** and the **state's urban job guarantee scheme — Ayyankali Urban Employment Guarantee Scheme**.
❖ It has been **formed as per the Kerala Employment Guarantee Workers' Welfare Fund Act**, 2021.
❖ **Eligibility**
   ✓ Any worker **between the age of 18 and 55** can take the **membership** in the fund board.
   ✓ They have to **pay an amount as premium (Rs 50 tentatively fixed) every month until the age of 55** and the **government will also contribute an equal amount**.
   ✓ The **government can revise the contribution once every three years**.
   ✓ A member who has **paid the contribution for at least 10 years** will be **eligible for pension**.
❖ Apart from that, the **fund mobilised by the board will be utilised for meeting various welfare and relief requirements** of the workers such as educational and marriage expenses.

2.22.   UP AT SECOND POSITION IN GI TAGS

❖ The 3 newly GI tagged **One District One Product (ODOP) crafts** in Uttar Pradesh - **Mainpuri tarkashi, Mahoba Gaura stone craft**, and **Sambhal horn craft** have taken the **total number of GI-tagged products in the state to 48**.
❖ Uttar Pradesh now **holds the second position** in the country in terms of **having the maximum number** of Geographical Indication **(GI)-tagged goods.**
   ✓ **Tamil Nadu** with **55** products **leads the charts** while **Karnataka** with **46** is on **third position.**
   ✓ However, **UP is first** in terms of **GI-tagged handicrafts** with **36 crafts.**

2.23.   SANCHAR SAATHI PORTAL

❖ **Ministry of Communications** launched a **Citizen Centric Portal named Sanchar Saathi Portal** to fulfill vision of **safe and secure communication** under Digital India programme.
❖ Through this portal, people will be **able to block, track and check genuineness of a used device** before buying them.
❖ The portal has been **developed by C-DoT** under the **Department of Tele-communications (DoT).**
❖ It will **enable citizen with following 3 modules**-
   ✓ **CEIR (Central Equipment Identity Register)**: It enables the tracking and blocking of lost or stolen phones anywhere in the country.
   ✓ **Know your mobile connections**: It allows users to check the number of mobile connections issued in their name by logging in using their mobile number.
   ✓ **ASTR** (Artificial Intelligence and Facial Recognition) **powered Solution for Telecom SIM Subscriber Verification)** - to **identify fraudulent subscribers**.

❖ The portal and its reforms **aim to enhance transparency, security, and accountability** in the telecom sector.

2.24. COMPETITION COMMISSION OF INDIA (CCI)

❖ **IAS Ravneet Kaur** has become the **first woman chairperson of CCI**.

ABOUT COMPETITION COMMISSION OF INDIA

❖ CCI was **established by Central Government in 2003** as a statutory body **under Competition Act, 2002**.
❖ The **Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act)** was **repealed and replaced** by the **Competition Act, 2002**, on the **recommendations of the Raghavan committee**.
❖ HQ -**New Delhi**
❖ It **aims to eliminate practices having adverse effects on competition, promote and sustain competition**, **protect interests of consumers** and **ensure freedom of trade in markets** of India.
❖ CCI consists of **a Chairperson** and **6 Members** appointed by **Central Government**.
❖ It is **an affiliated office** with **Ministry of Corporate Affairs**.

2.25. NATIONAL PRODUCTIVITY COUNCIL

❖ For giving fresh impetus to deliverables under the **flagship Pradhan Mantri MatsyaSampada Yojana(PMMSY) seven major field studies** are being carried out by **National Productivity Council (NPC)**.
❖ The **seven areas** include
  ✓ **Best practices in fish marketing system of Andhra Pradesh** and dissemination through workshop;
  ✓ **Agro-climatic zone-specific mapping** of innovative fishing Practices for enhancing Production and Productivity **in Upper Gangetic Plain Region**;
  ✓ Design improvement in storage containers used in supply chain for inland and marine fishes by vendors;
  ✓ Improvement in **fish marketing infrastructure** of **Ghazipur and Howrah fish markets**;
  ✓ Evaluation of RAS and Biofloc technologies and their dissemination through workshop;
  ✓ Strengthen monitoring **mechanism of implementation of PMMSY** and
  ✓ **Assessment of post-harvest losses** in inland and marine fisheries and to suggest measures to minimize these losses.
❖ It will help strengthen the mechanism of **delivery of the central scheme 'Pradhan Mantri Matsya Sampada Yojana (PMMSY).**

NATIONAL PRODUCTIVITY COUNCIL

❖ It is **an autonomous organization** set up in **1958.**
❖ It works under the **Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry**.

> NPC is a **constituent of the Tokyo-based Asian Productivity Organisation (APO)**, an Intergovernmental Body, of which the **GoI is a founder member**.

ABOUT PRADHAN MANTRI MATSYA SAMPADA YOJANA (PMMSY)

❖ PMMSY is being **implemented by the Department of Fisheries** (DoF), **Ministry of Fisheries, Animal Husbandry and Dairying**.
❖ PMMSY was introduced by the Government of India, as part of the **'Atma Nirbhar Bharat' package to bring about Blue Revolution** with the **investment of Rs. 20,050 crores**, the highest ever investment in the Fishery sector.
❖ It is designed **to address critical gaps in the fisheries value chain from fish production, productivity and quality to technology, post-harvest infrastructure and marketing.**
❖ The main motto of PMMSY is **'Reform, Perform and Transform'** in the fisheries sector.

2.26. SAPRE COMMITTEE

❖ The Supreme Court made public the report of the court-appointed expert panel in the Hindenburg-Adani row case.

ABOUT JUSTICE A.M. SAPRE COMMITTEE

❖ It is a **six-member expert committee constituted by the Supreme Court** in the Hindenburg-Adani allegations case and **headed by former Supreme Court judge, Justice A.M. Sapre**.
   ✓ The other 5 members include veteran bankers **K.V. Kamath** and **O.P. Bhat**, Infosys co-founder **Nandan Nilekani**, retired **Justice J.P. Devdhar** and advocate **Somasekhar Sundaresan.**
❖ The committee gave the Supreme Court **a detailed assessment of the situation** which could have led to volatility in the securities market due to the Hindenburg-Adani row.
❖ It found that **there was no evidence of a "regulatory failure" on the part of SEBI**.
   ✓ But, it acknowledged that there is a **need for an effective enforcement policy**.

2.27. ONDC

❖ The Union government is looking to formally launch the **Open Network for Digital Commerce** (ONDC) this year to **"democratise e-commerce"** and **"to provide alternatives to proprietary e-commerce sites"**.

ABOUT ONDC

❖ **Background-** The government wants to change the fundamental structure of the e-commerce market from the **current "platform-centric model to an open-network model".**

> An **open-source project,** software or process means that the process or project is made available freely for others to use, study, modify and distribute it.

❖ The **ONDC is an open source network set up** modelled **after the Unified Payments Interface (UPI) project** that is seen as a success by many.
   ✓ The **UPI project allows people to send or receive money irrespective of the payments platforms** on which they are registered.
   ✓ Similarly, the **government wants to ensure that buyers and sellers of goods in the e-commerce market can transact regardless of the platforms** on which they are registered.
❖ It will **enable local commerce across segments**, such as mobility, grocery, food order and delivery, hotel booking and travel, among others, **to be discovered and engaged by any network-enabled application**.
❖ It is **an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT)** under the **Ministry of Commerce and Industry**.
❖ It consists of-
   ✓ **buyer-side apps** where consumers can place orders,
   ✓ **seller-side apps** that onboard merchants and display their listings, and
   ✓ **logistics platforms** that handle deliveries.
❖ Thus project ONDC is mainly aimed at **curbing "digital monopolies".**
❖ ONDC could give a huge **booster shot to smaller online retailers and new entrants**.

2.28. NDB AT GIFT CITY

❖ The **New Development Bank** (NDB) has announced the **launch of its Indian Regional Office** (IRO) in **Gujarat International Finance Tec-City (GIFT City)**.
❖ The launch of the Bank's IRO **aims to cater to infrastructure and sustainable development needs in India and Bangladesh, contributing to economic growth and sustainable development in South Asia**, in line with the NDB's mandate.
❖ Working in close coordination with the **NDB Headquarters at Shanghai** (China), the Indian Regional Office will **focus on project origination**, **pipeline development**, **project implementation and monitoring** as well as regional portfolio management
❖ Other regional centres

- ✓ **Africa Regional Center** (ARC) in **Johannesburg** in **2017**
- ✓ **Americas Regional Office** (ARO) in **São Paulo** with a **sub-office in Brasília** in **2019**
- ✓ **Eurasian Regional Centre** (ERC) in **Moscow in 2020**

ABOUT NDB

- ❖ It is a **Multilateral development bank** established by **Brazil, Russia, India, China and South Africa (BRICS)** in **2015** to **mobilise resources** for **infrastructure and sustainable development projects** in emerging markets and developing countries.
- ❖ It became fully operational in February 2016.
- ❖ Members: **BRICS**, **Bangladesh**, **UAE**, **Uruguay, Egypt**
- ❖ HQ: **Shanghai, China**
- ❖ India is **2ⁿᵈ largest recipient of NDB's financial support after China**.

ABOUT GIFT CITY

- ❖ GIFT (Gujarat International Finance Tec-City) City is located in **Gandhinagar, Gujarat**.
- ❖ It **consists of a multi-service Special Economic Zone** (SEZ), which houses **India's first International Financial Services Centre** (IFSC) and **an exclusive Domestic Tariff Area** (DTA).
- ❖ GIFT city is **envisaged as an integrated hub** for **financial and technology services** for **India and the world**.

2.29.   INSURANCE INFORMATION BUREAU OF INDIA

- ❖ Russian hackers have **encrypted IIB data** through a **ransomware attack** and **demanded $250,000 in bitcoins** to undo the damage.
- ❖ The hackers claimed to have stolen sensitive data such as **policy details, claims history, and personal information of millions of customers.**

ABOUT INSURANCE INFORMATION BUREAU OF INDIA

- ❖ IIB is an autonomous body **established by Insurance Regulatory and Development Authority of India (IRDAI)** in 2009 and formally inaugurated in 2010.
- ❖ It is **registered as an independent society** under the **Andhra Pradesh Societies Registration Act** in 2012.
- ❖ HQ: **Hyderabad, Telangana**
- ❖ The main objective of IIB is to act as a single platform maintaining a repository and analytics of insurance-sector related information in India.
- ❖ **Functions**
    - ✓ **Providing analytical insights and reports to IRDAI and other stakeholders** on various aspects like **trends, patterns, performance, risks, frauds**, etc.
    - ✓ **Developing and maintaining databases and repositories** of insurance data
    - ✓ **Facilitating data sharing and exchange** among different stakeholders
    - ✓ **Developing and implementing standards and best practices** for data quality, security and governance in the insurance sector.
    - ✓ Undertaking **research and development activities**
- ❖ **Furthermore**
    - ✓ It provides a **bundle of services** related to motor insurance to multiple stakeholders **Spearheads Mortality and Morbidity Investigation Centre (MMIC) Operations**.
    - ✓ It handles **Central Index Server** which acts as a nodal point between different Insurance Repositories.
    - ✓ Maintains a **Registry of all Hospitals in the Network of Insurance (ROHINI)**

2.30.   GERMAN ECONOMY SLIPS INTO RECESSION

- ❖ The German economy has suffered an unforeseen setback, **plunging the country into a formal recession**, according to newly released data.

- The Federal Statistical Office's report of Germany revealed **a 0.3% decline in Germany's gross domestic product (GDP)** during the first quarter of 2023.
- This follows a **0.5% contraction** in the **previous quarter of 2022.**
- These **two consecutive quarters of decline fulfil the criteria** for technical **definition of a recession**.
- This is **significant** because **Germany** is **Europe's largest** and **World's 4th largest economy**.

WHAT IS A RECESSION?

- A **recession** is defined as **a time when economic activity experiences a downturn**.
- **A recession is identified by two consecutive quarters of decline in a country's real** (inflation-adjusted) **GDP**, which **takes inflation into account**.
- Note- **brief declines are not classified as recessions**.

2.31.   COMMEMORATIVE COIN FOR NEW PARLIAMENT

- The Ministry of Finance has announced the launch of **a special ₹75 coin to commemorate the inauguration of India's new parliament building**.
- The **circular coin** will have a **diameter of 44 millimeters** and **200 serrations along its edges**.
- It will **weigh 35 grams** and be **composed of a four-part alloy, consisting of 50% silver, 40% copper, 5% nickel, and 5% zinc**.
- The newly minted ₹75 coin will feature the **iconic Lion Capital of the Ashoka Pillar** on one side, with the words **"Satyamev Jayate"** below it.
- The coin will bear the inscription **"Bharat"** in Devanagari script on the left side and **"India"** in English on the right.
- It will also **display the rupee symbol and** the **denomination value of 75** in international numerals beneath the Lion Capital.
- On the reverse side, an image of the parliament complex will be depicted, with **"Sansad Sankul"** written in Devanagari script on the upper periphery and **"Parliament Complex"** in English on the lower periphery.

2.32.   M-SAND

- The **Rajasthan government** has decided to promote the use of manufactured sand (M-Sand) as an **inexpensive and easy alternative to river sand**.
- The state government in its **M-Sand policy- 2020** has made it compulsory to **use at least 25 % of it in government constructions**.
  - ✓ The policy, 2020 aims to redress the problem of waste from mines along with generating employment at local level.
- Also the **Sand Mining Framework, 2018**, prepared by **Ministry of Mines**, envisages **alternative sources of sand** in the form of **M-Sand from crushed rock fines (crusher dust), etc.**

ABOUT M–SAND

- It is **produced by crushing rocks**, and **quarry stones** to a **stipulated size of 150 microns**.
- **Properties**
  - ✓ **High concrete strength** compared to river sand.
  - ✓ The sand particles of M sand are in cubic form **making the bond stronger**.
  - ✓ **Zero silt content**.
  - ✓ **Better quality control from being manufactured** in a controlled environment.
- **Benefits of M- Sand**
  - ✓ **More cost-effective** than using natural sand.
  - ✓ **consistent grain size** and shape.
  - ✓ it **reduces the need for mining natural sand**, thus prevents its **negative environmental impacts**.

> **SAND MINING IN INDIA**
>
> Sand is **classified as a 'minor mineral'** under Mines and Minerals (Development and Regulations) Act, 1957, and administrative control vests with **State Governments**.

- ✓ **it does not require washing before use**. Hence, reduces the amount of water required for construction projects.
- ✓ Helps **maintaining water table**.

2.33. SAMARTH campaign

- ❖ SAMARTH campaign is an initiative launched by the **Ministry of Rural Development**.
- ❖ Its aim is to **promote digital transactions** at the **Gram Panchayat level** in rural areas.
- ❖ It seeks to **empower rural communities participation** in the **digital economy** and access the **benefits of digital transactions**.

2.34. GONGADI SHAWLS

- ❖ The **resilient fabric of gongadi shawls** of has been **repurposed into all-weather shoes** for farmers by three alumni of the National Institute of Design, Ahmedabad.

ABOUT GONGADI SHAWLS

- ❖ Gongadi is a **tough**, **traditional**, **all weather shawl/woolen blanket** woven by the **indigenous Kuruma and Kuruba pastoralist communities** in **Telangana**.
- ❖ The wool of the **indigenous Deccani sheep** (known locally as **Nalla gorrae**) is used.
- ❖ The coarse woolen blanket is known for its **durability and versatility** and it **does not fade but grows darker in time**.
- ❖ It is produced organically, **without using any dyes either natural or synthetic**.

2.35. DIRECT SEEDING OF RICE

- ❖ Amid challenges like **delayed rainfall** and **shortage of labour,** farmers in several leading rice-growing States are shifting to **direct-seeding method**.
- ❖ **Methods of planting rice**
    - ✓ **Transplanting Paddy**: In transplanting paddy, farmers prepare **nurseries** where the paddy seeds are first sown and raised into young plants.
    - ✓ The **nursery seed bed is 5-10% of the area** to be transplanted.
    - ✓ These seedlings are then **uprooted and replanted 25-35 days later** in the field with standing water.
    - ✓ The **standing water acts as herbicide** and prevents growth of weeds by denying them oxygen in submerged stage.
    - ✓ **Direct Seeding of Rice (DSR)**: In DSR, the **pre-germinated seeds are directly drilled into the field** by a tractor-powered machine.
    - ✓ There is **no nursery preparation or transplantation** involved in this method.
    - ✓ Farmers have to **only level their land** and give **one pre-sowing irrigation**.
    - ✓ In DSR as flooding of fields is not done during sowing, **chemical herbicides are used to kill weeds**.
- ❖ **Advantages of DSR**
    - ✓ **Efficient, sustainable, and economically-viable** rice production systems.
    - ✓ **No significant reduction of yield** under optimal conditions.
    - ✓ **Conservation of water**.
    - ✓ Saving on **labour costs**.
    - ✓ **Reduce methane emissions** due to a shorter flooding period and decreased soil disturbance compared to transplanting rice seedlings.
- ❖ **Challenges**
    - ✓ The **seed requirement for DSR is also high, 8-10 kg/acre**, compared to 4-5 kg/acre in transplanting.
    - ✓ The sowing needs to be done timely so that the plants have come out properly before the monsoon rains arrive.
    - ✓ Seeds **exposed to birds and pests**;
    - ✓ **weed management**;
    - ✓ **higher risk of lodging**, risk of poor or non-uniform crop establishment etc.

3. GEOGRAPHY

3.1. BLUE HOLE

- ❖ **World's second-deepest blue hole,** around 900 ft deep, was discovered in **Chetumal Bay**, off the coast of **Yucatan Peninsula in Mexico**.
- ❖ It has been named **Taam Ja'**, which **means 'deep water' in Mayan**.
- ❖ The **world's deepest known deep hole** was discovered in the **South China Sea in 2016**, and is known as the **Dragon Hole or Longdong**.
  - ✓ As per the records, it's **987 ft deep**.

ABOUT BLUE HOLES

- ❖ Blue holes are **large, undersea vertical caves or sinkholes** found in coastal regions.
- ❖ Many **contain a high diversity of plant and marine life**, including corals, sea turtles and sharks.
- ❖ Blue Holes are **found on coastal karst platforms** around the world.
- ❖ They are **believed to have been formed in the Ice Age around 11,000 years ago**, when the sea level was as low as 100–120 m lower than current levels.
- ❖ Blue holes typically contain **tidally influenced water of fresh, marine, or mixed chemistry**.
- ❖ Their **water circulation is poor**, and they are **commonly anoxic(oxygen deficient)** below a certain depth.

3.2. SUN HALO

- ❖ **Sun halo**, a rare celestial event was seen around the Sun in the skies in Northern part of India.

ABOUT SUN HALO

- ❖ It is an **optical phenomenon**, which happens when **sunlight passes through unique hexagonal ice crystals** in the atmosphere.
- ❖ This is also called **Kaleidoscopic Effect.**
- ❖ Hexagonal ice crystals are **found in cirrus clouds**.
  - ✓ These are **thin and wispy clouds** and are formed very **high up in the atmosphere**, at a **height of over 20,000 feet**.
- ❖ It **results in a bright ring or halo encircling the sun**, which has a radius of around 22 degrees.
- ❖ It **is multi-coloured** and looked **like a rainbow enveloping** the sun.
- ❖ The halo is the **brightest at the inner edge of the circular disk**, with **no light inside the disk as no light is refracted at smaller angles**.
- ❖ **Red light is refracted less** than other colours of light, so the **halo's inner edge is reddish**.
  - ✓ Other shades typically tend to overlap and wash out.

3.3. GUM ARABIC

- ❖ Companies like Coca Cola and Pepsico, have stockpiled gum arabic due to **Sudan conflict**.

ABOUT GUM ARABIC

- ❖ Gum arabic is **a natural gum** originally consisting of the **hardened sap of two species of the Acacia tree**.
- ❖ The term "gum arabic" **does not legally indicate a particular botanical source**.
- ❖ The gum is **harvested commercially from wild trees**, mostly **in Sudan (80%)** and **throughout the Sahel region**, from Senegal to Somalia.
- ❖ Uses
  - ✓ It is **soluble in water, edible, and used primarily in the food industry** and soft-drink industry as a stabilizer (which helps bind together food and drink ingredients)
- ❖ It is a **key ingredient in traditional lithography** and is used in printing, paints, glues, cosmetics, and various industrial applications, including viscosity control in inks and in textile industries.

3.4. NORTHERN LIGHTS IN INDIA

❖ The **Indian Astronomical Observatory (IAO)** above **Mount Saraswati** captured a rare phenomenon as a geomagnetic storm struck Earth's magnetic field, creating **unique auroras**.
   ✓ This was the **first time that the aurora was captured on camera in India** by the Indian Astronomical Observatory.
❖ The 360-degree camera atop the **IAO in Hanle ,Ladakh** captured the mysterious phenomenon, which is triggered by an interaction between the plasma particles hurled by the Sun and Earth's magnetic field.
❖ The **auroras are normally seen at higher latitudes** in parts of **Alaska, Norway, and other countries.**

ABOUT AURORAS

❖ **Charged particles** ejected from Sun's corona create **solar wind**.
   ✓ When that wind slams into **Earth's ionosphere**, the aurora is born.
❖ 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 **hemispheric asymmetry** of the aurora is due in part to **the sun's magnetic field interfering with Earth's magnetic field**.

3.5. YANOMAMI TERRITORY

❖ Following reports of two separate violent attacks in which five people were reportedly killed, the Brazilian government has pledged to expedite the removal of illegal miners from **Yanomami, Brazil's largest indigenous territory.**

ABOUT YANOMAMI TERRITORY

❖ The Yanomami territory is the **largest Indigenous land in Brazil**, covering an area of **about 96,000 square kilometres in the Amazon rainforest**.
❖ It is **home to about 30,000 Yanomami people**, who live in hundreds of villages scattered across the region.
❖ The Yanomami are **one of the most isolated and culturally diverse indigenous groups** in the world, with their languages, customs and beliefs.
❖ They live in **large, circular houses called yanos or shabonos**, some of which can hold up to 400 people.
❖ The Yanomami consider **all people to be equal**, and **do not have a chief**. Instead, all decisions are based on consensus after long discussions and debates.
❖ They speak **Xirianá** language.

3.6. CYCLONE MOCHA

❖ **Cyclone Mocha**, a tropical cyclone, has developed due to storm in **southeast Bay of Bengal**.
❖ Mocha (Mokha) name was **suggested by Yemen** after **Red Sea port city**, which is known to have introduced coffee to the world over 500 years ago.

ABOUT TROPICAL CYCLONES

❖ Tropical cyclones **are violent storms** that **originate over warm ocean waters near the equator**.
❖ **Conditions** for **formation of tropical cyclone**:
   ✓ Large sea surface with **temperature higher than 27° C**.
   ✓ Presence of the **Coriolis force**.
   ✓ Small variations in the **vertical wind speed**.
   ✓ A **pre-existing weak low-pressure** area or low-level-cyclonic circulation.
   ✓ **Upper divergence** above the sea level system.
❖ Cyclones are **named by the regional specialised meteorological centres (RSMCs)** and **Tropical Cyclone Warning Centres** (TCWCs).
   ✓ There are **six RSMCs** in the world, including IMD, and **five TCWCs.**

❖ As an RSMC, **IMD names the cyclones developing over north Indian Ocean**, including **Bay of Bengal** and **Arabian Sea**.

❖ IMD is also **mandated to issue advisories to 12 other countries** in the region on the development of cyclones and storms

❖ In 2000, a group of nations called **WMO/ESCAP (World Meteorological Organisation/United Nations Economic and Social Commission for Asia and the Pacific)**, which comprised **Bangladesh, India, the Maldives, Myanmar, Oman, Pakistan, Sri Lanka and Thailand**, decided to start naming cyclones in the region. After each country sent in suggestions, the WMO/ESCAP Panel on Tropical Cyclones (PTC) finalised the list.

❖ **Name** is taken from this list which contains **suggestions categorised alphabetically and country-wise and are neutral gender wise**.

3.7. GALAPAGOS ISLANDS

❖ Recently, **Ecuador** has committed **to spending millions of dollars annually for 20 year**s to protect one of the world's most precious ecosystems, after the **Swiss bank Credit Suisse** announced **buying Ecuadorian bonds worth $1.6 billion** in a **debt-for-nature swap** that cost the Swiss bank just $644 million.

ABOUT GALAPAGOS ISLANDS

❖ The Galapagos Islands are an **archipelago of volcanic islands,** spread over almost 60,000 sq km , belonging to **Ecuador**.

❖ The archipelago is located in the **Eastern Pacific around the Equator** with island chain stretching in **both northern and southern hemispheres.**

❖ The archipelago is **located on the Nazca Plate** (a tectonic plate), which is **moving east/southeast, diving under the South American Plate**.

❖ Ecuador made a part of the **Galapagos a wildlife sanctuary in 1935**, and the sanctuary became the Galapagos National Park in 1959.
   ✓ In **1978**, the **islands became UNESCO's first World Heritage Site**.

❖ It contains **aquatic species** such as **manta rays and sharks** which have been endangered by commercial fishing.

❖ It also hosts a **wide array of aquatic wildlife, including marine iguanas, and waved albatrosses.**

❖ Galápagos is **home to the critically endangered — Galápagos penguin, Galápagos fur seal and Galápagos sea lion**.

❖ Also, the **giant tortoises** found here – 'Galápagos' in old Spanish – give the islands its name.

❖ The **British naturalist Charles Darwin** made key observations in 1835 that shaped his 'theory of evolution'.
   ✓ He described the islands as **a "world in itself".**

3.8. GSI FINDS LITHIUM RESERVES IN RAJASTHAN

❖ Lithium reserves were discovered on **Revant hill in Degana in Rajasthan's Nagaur district** during a survey conducted by the Geological Survey of India (GSI).

❖ It is believed that **these reserves can meet 80% of the country's demand**.

❖ These reserves **contain significantly more lithium than 5.9 million tonnes found in J&K earlier**.

❖ India has discovered **first lithium reserves in igneous rocks** located in **Marlagalla- Allapatna region of Karnataka's** Mandya district.

ABOUT LITHIUM

❖ Lithium, first of alkalis in periodic table, is a **non-ferrous metal.**

❖ It is **used to make mobile-laptop, electric vehicle and other chargeable batteries**.

❖ It is **extracted from either brines** or **mined rocks**.

❖ Due to tremendous demand for Lithium around world, it is also called **White Gold**.
   ✓ According to World Bank, by year 2050, **global demand for Lithium metal will increase by 500%.**

❖ **Distribution**

- ✓ 50% of **global lithium resources** are located in **Bolivia (maximum), Chile**, and **Argentina**, which forms **Lithium Triangle** in South America.
- ✓ **Australia** is **global leader in lithium production**.

3.9. SAHEL

❖ The **ongoing fighting in Sudan is forcing thousands** to flee. The humanitarian emergency is spreading, creating a dangerous security situation in the **Sahel region**.

About:

❖ The Sahel is the **ecoclimatic and biogeographic realm of transition in Africa** between the **Sahara to the north and the Sudanian savanna to the south**.

❖ Having a semi-arid climate, **it stretches across the south-central latitudes of Northern Africa between the Atlantic Ocean and the Red Sea**.

❖ The name is derived from the Arabic term for **"coast, shore";** this is explained as being used in a **figurative sense** in reference to the **southern edge of the vast Sahara**.

❖ The Sahel part includes from **west to east parts of northern Senegal, southern Mauritania, central Mali, northern Burkina Faso, the extreme south of Algeria, Niger, the extreme north of Nigeria**, the extreme **north of Cameroon and the Central African Republic, central Chad, central and southern Sudan**, the extreme north of **South Sudan, Eritrea and the extreme north of Ethiopia**.

3.10. PALGHAT GAP

❖ Often called as a **significant discontinuity in the Western Ghats**, the **Palghat Gap** is about 40 km wide, with the **steep Nilgiris and Anamalai hills**, both rising above 2,000 msl, on either side.

❖ The Gap is a **geological shear zone** that runs **from east to west**.
  - ✓ **Shear zones are weak regions in the earth's crust.**
  - ✓ The **origin** of the Palghat Gap also stems from the **drift of continental shelves after Australia and Africa broke off from the Gondwana landmass**.

❖ It is **a corridor** for both roads and railways that **connects Coimbatore with Palakkad**.

❖ The **Bharathappuzha river** flows through it.

❖ The **Western Ghats in north of the Palghat Gap receive more rain annually**, but the **south gets rain more evenly** throughout the year.

❖ In contrast to the tropical rainforests of the Western Ghats, the **vegetation in the Palghat Gap is classified as dry evergreen forest**.

❖ It **also marks a divide in the flora and fauna of the region**.

❖ **Species richness and phylogenetic diversity** are **abundant** in Western Ghats **south of Palghat Gap**.

3.11. SON RIVER

❖ The **National Green Tribunal** (NGT) has recently directed that **no further mining** in the Son river bed in **district Sonbhadra, Uttar Pradesh is to be allowed** until further action to protect the river and the animals in the area.

❖ The directive addresses illegal mining, imposing environmental compensation on mining companies.

❖ **Local authorities of Sonbhadra** and the **UP Pollution Control Board (UPPCB)** have been instructed to ensure compliance of directive.

ABOUT SON RIVER

> The Son River is the **2nd largest southern (right bank) tributary of the Ganga** after Yamuna.
>
> Its **source** is close to the origin of the **Narmada**.

❖ The Son River, also spelled as the Sone River, is **a perennial river** that flows through central India.

❖ It **originates near Amarkantak Hill** in the Gaurela-Pendra-Marwahi district of **Chhattisgarh**.

❖ It flows through four states: **Chhattisgarh, Madhya Pradesh, Uttar Pradesh, and Bihar.**

- It **joins the Ganga near Danapur in Patna district of Bihar**.
- **Total length**- 784 kms
- **Tributaries**- Rihand, North Koel, Ghaghar, Johilla, Chhoti Mahanadi, Banas, Gopad, , Kanhar
- **Dams**- Bansagar Dam, Rihand Dam, Indrapuri Barrage etc .

3.12.   MOUNT ETNA

- **Mount Etna volcano** has erupted recently.
- It is located on the **east coast of Sicily, Italy**, in the Metropolitan City of **Catania**, **between the cities of Messina and Catania**.
- Mount Etna is the **highest Mediterranean island mountain.**
- It is the **most active stratovolcano in world**.
- It is the **tallest active volcano in Europe** and **a UNESCO World Heritage Site**.
- It lies above the **convergent plate margin** between **African plate** and **Eurasian plate**.
- The volcano has been **erupting for the past 500,000 years** and is **one of the most studied volcanos** in the world.

3.13.   SHABELLE RIVER

- More than 2 lac people have been displaced due to flash flooding in **Shabelle River** in **Somalia**.
- The Shebelle River **originates in the highlands of Ethiopia**, and then flows southeast into Somalia towards Mogadishu.
- Major tributaries- **Erer, Galetti, Wabe**.

3.14.   INDIA'S POLAR RESEARCH STATIONS

Union Minister for Earth Sciences engaged virtually with scientists stationed at Bharati Station in Antarctica.

ABOUT INDIA'S RESEARCH STATIONS IN-

ANTARCTIC

- **Dakshin Gangotri**, **1st permanent research station** established **in 1983** over Ice shelf in Central **Dronning Maud Land region**. (abandoned in 1990)
- **Maitri**, located in **Schirmacher Oasis**, was opened in **1989**.
- **Bharati**, located between Thala Fjord & Quilty bay, east of Stornes Peninsula, is **operational since 2012**.
  - ✓ **Maitri and Bharati** are **currently operational**.

ARCTIC

- **Himadri**: India launched its **first scientific expedition to the Arctic Ocean in 2007** and **opened a research base named "Himadri"** at the **International Arctic Research Base at Ny-Alesund, Svalbard, Norway in July 2008.**
- Its aim is to carry out **studies in disciplines like Glaciology, Atmospheric sciences & Biological sciences.**
- **Management and upkeep** of the Indian Antarctic Research Bases "Maitri" and "Bharati", and the Indian Arctic base "Himadri" is responsibility of **National Centre for Polar and Ocean Research**.

3.15.   TRIBES OF MANIPUR

- Amid ongoing clashes in Manipur, hundreds of **women representing** the **Hmar, Kuki, Mizo, and Zomi tribes gathered at Delhi's Jantar Mantar** and demanded **fair and decisive action from the central government to resolve the ongoing ethnic tensions** in Manipur.

BACKGROUND

- Tribal **clashes first broke out** in Manipur after a **'Tribal Solidarity March' was organised in the hill districts** on May 3 to **protest against the Meitei community's demand for Scheduled Tribe** (ST) status.
- Demographically, **Meiteis made up around 53% of Manipur's population** and live **mostly in the Imphal Valley**.
- Tribals **Nagas and Kukis** make up around **40%** of the population and **live in the hill districts**.

4. ART AND CULTURE

4.1. JANTAR MANTAR

- **Archaeological Survey of India** (ASI) has informed Delhi High Court that an **expert committee has been formed for conservation and preservation** of the Jantar Mantar observatory.

ABOUT JANTAR MANTAR

- Jantar Mantar was **built by Maharaja Jai Singh of Jaipur** in 1724.
- He also built **Jantar Mantar at Jaipur, Ujjain, Mathura and Varanasi**.
- The one in **Jaipur** is the **largest sundial in the world**.
- It **consists of multiple buildings of unique form**, each with a specialized function for astronomical measurement.
- It was **built to compile astronomical tables,** and to **predict the times and movements of sun, moon and planets**.

4.2. BIHAN MELA

- The members of the Kondh tribe in Odisha's Nayagarh district have added Bihan Mela as their festival.

ABOUT BIHAN MELA

- It is known as the **seed festival** and the event **is celebrated by the farmers.**
- Preparations begin as soon as farmers have harvested Kharif crops, which include both hybrid and **indigenous varieties of paddy, millets, maize and sorghum**.
- **Women** are at the helm of this festival and **carefully collect seeds of the indigenous varieties and store them in earthen pots**.
- On a designated day in **December**, they **decorate the pots with red and white motifs**, place them in a bamboo basket and carry it on their head to the village where the fair is being organised.
- The seed festival was **initiated by Nirman, a non-profit organization** working with the tribe on forest rights and agro-ecological farming.
- This was introduced to **help farmers return to their traditional ways of farming like mixed cropping**.

4.3. MEITEI COMMUNITY

- Clashes were reported in Manipur, over grant of ST status to the Meitei Community.

ABOUT MEITEI COMMUNITY

- The Meitei people, also known as the Manipuri people, are the predominant ethnic group of Manipur State representing **53% of Manipur's population**.
- The Meiteis primarily settled in the **Imphal Valley region** in modern-day Manipur, though a sizable population has settled in the **other Indian states of Assam, Tripura, Nagaland, Meghalaya, and Mizoram.**
- There is also a notable presence of Meitei in the neighbouring countries **of Myanmar and Bangladesh**.
- They speak the **Meitei language (officially called Manipuri)**, one of the 22 official languages of India and the sole official language of Manipur State.
- They are **divided into clans**, the members of which do not intermarry.
- **Rice cultivation on irrigated fields** is the basis of their economy.
- A **majority follow Hinduism**, while more than 8% are Muslims.

❖ **Yaoshang Festival** is celebrated by the Meitei people at the same time as Holi and is known as **'Manipur's version of Holi'.**

4.4. CHANNAPATNA TOYS

❖ Toy manufacturers in **Channapatna, Karnataka**, applauded the Government's decision to prohibit the import of toys from China and said that the government's action is contributing to augmenting their profitability.

ABOUT CHANNAPATNA TOYS

❖ Channapatna toys are **a particular form of wooden toys and dolls** that are manufactured in the town of Channapatna in the **Ramanagara district of Karnataka**.
❖ Channapatna is **also known as Gombegala Ooru (toy-town)**.
❖ **Tipu Sultan**, is the one attributed to introducing these wooden toys to the current town of Channapatna.
❖ He **invited artists from Persia to train the local artists in wooden toy making**, which then helped this industry thrive locally.
❖ Most of these toys **are handmade**.
❖ They are also **painted in organic colours extracted from vegetables and plants** and natural dyes, making the **Channapatna Toys 100% chemical free.**
❖ Traditionally, the work involved lacquering the wood of the Wrightia tinctoria tree, colloquially called **Aale mara (ivory-wood)**. However, nowadays, **sandalwood and mango wood are also used**.
❖ Their **shapes are mostly round and cubes with blunt edges**, so they are **completely safe for kids**.
❖ They **received the geographical indication (GI) tag in 2005**.

4.5. VAISHAKH BUDDHA PURNIMA

❖ Vaishakh Buddha Purnima is being celebrated on **5th May**.
❖ It is sacred day for Buddhists as it **marks the three main events of Lord Buddha's life – Birth, Enlightenment**, and **Mahaparinirvana**.
❖ Lord Buddha was **born as Prince Siddhartha Gautama** on the **full moon day in 563 BC at Lumbini** in Nepal.
❖ In Hinduism, Buddha is **considered as the ninth avatar of Lord Vishnu**.
❖ **His birth anniversary** is also known as **Vaisakhi Buddha Purnima or Vesak**.
❖ This day is **commemorated by Buddhists and Hindus** all over the world and is a major festival in countries like **India, Nepal, Bhutan, Burma, Thailand, Tibet, China, Korea, Laos, Vietnam, Mongolia, Cambodia, Singapore, Indonesia and Sri Lanka**.
❖ **Since 1999** it has also been **recognized by United Nations (UN) as 'UN Day of Vesak'**.

4.6. TECHNICAL DICTIONARIES FOR 10 LANGUAGES

❖ The Commission for Scientific and Technical Terminology (CSTT) is under process to **create technical and scientific terminology in 10 Indian languages** underrepresented in the learning landscape. These include-
   ✓ **Bodo, Santhali, Dogri, Kashmiri, Konkani, Nepali, Manipuri, Sindhi, Maithili, and Sanskrit**
   ✓ **All** 10 languages are a part of the **22 official languages of India's Eighth Schedule**.
❖ The CSTT will **bring out what it calls fundamental (basic) dictionaries with 5,000 words per language**, in three to four months.
❖ These will be in **digital, searchable format**, and **free of cost**.
❖ About **1,000-2,000 copies will be printed** in each language.
❖ The immediate focus is to **cover 15 disciplines: journalism, public administration, chemistry, botany, zoology, psychology, physics, economics, Ayurveda, mathematics, computer science, political science, agriculture, civil** and **electrical engineering**.

ABOUT COMMISSION FOR SCIENTIFIC AND TECHNICAL TERMINOLOGY (CSTT)

- ❖ CSTT was **established on October 01, 1961** in pursuance of a **Presidential Order** dated April 27, 1960 with the objective to evolve technical terminology in all Indian Languages.
- ❖ It was established **under clause (4) of Article 344 of the Constitution of India**.
- ❖ It is **functioning under Department of Higher Education, Ministry of Education**, with **headquarters at New Delhi**.
- ❖ **Primary Function**: Evolve standard terminology, propagate its use and distribute it widely.
- ❖ Other functions:
    - ✓ Preparation and Publication of **Bilingual** and **Trilingual Glossaries** involving English/Hindi and other Indian Languages.
    - ✓ **Preparation and Publication of National terminology**.
    - ✓ Identification of **Pan Indian Terms**.
    - ✓ Preparation of **Definitional Dictionaries and Encyclopaedias**.
    - ✓ Preparation of **University level textbooks,monographs and journals**.
    - ✓ Providing necessary terminology to the **National Translation Mission** etc.

4.7. TUNGNATH TEMPLE

- ❖ Tungnath Temple in the district of Rudraprayag, Uttarakhand, has **now been declared as a national monument.**

ABOUT TUNGNATH TEMPLE

- ❖ It is the **highest Shiva temple in the world** nestled at an altitude of 3680 meters.
- ❖ It is **one of the Panch Kedars** and is **believed to have belonged to an ancient era almost 1000 years old**.
- ❖ It was **built in the North Indian style of architecture** and has a dozen shrines of other Gods surrounding the temple.

About Panch Kedar

- ❖ **Panch Kedar** is a group of five sacred shrines of Lord Shiva located in the **Garhwal Himalayas, Uttarakhand.**
- ❖ The five temples are the **Kedarnath Temple, the Tungnath Temple, the Rudranath Temple**, the **Madhyamaheshwar Temple or Madmaheshwar** and **Kalpeshwar Temple.**

4.8. SAINT SAMARTH RAMDAS

- ❖ Recently a controversy erupted regarding **Saint Samarth Ramdas**.

ABOUT SAMARTH RAMDAS

- ❖ Samarth Ramdas **(1608 – 1681)**, also known as **Sant Ramdas or Ramdas Swami**, was a **Hindu saint, philosopher, poet, writer and spiritual master**.
- ❖ He was **a devotee of Lord Ram and Hanuman**.
- ❖ He **toured the entire Indian subcontinent for 12 years**, during which he came across various spiritual teachers and diverse religious traditions.
- ❖ His **paean to Lord Hanuman, Maruti Stotra,** is still commonly recited by school children as well as wrestlers akhadas across Maharashtra.
- ❖ He **built a temple of Rama and Maruti** (Hanuman) and founded a math or monastery which exists to the present day.
- ❖ Swami Ramdas was an **exponent of Bhakti Yoga or the path of devotion**. According to him, total **devotion to Rama brings about spiritual evolution.**
- ❖ He was of the opinion that **saints must not withdraw from society** but instead actively engage towards social and moral transformation.
- ❖ He **encouraged the participation of women** in religious work and offered them positions of authority.
- ❖ He published **two books** based on his experiences, **"Asmani Sultani"** and **"Para chakra niroopan."**
- ❖ Ramdas founded the **Samarth sect to reintroduce spirituality into society**. He established several matha.
- ❖ Ramdas **died in 1681 at Sajjangad**. For five days previously, he had ceased drinking food and water. This practice of fasting unto death is known as **Prayopavesa**.

4.9. MALCHA MAHAL

❖ The Delhi Tourism Department has launched its much awaited **'haunted walks'**, for which the **Malcha Mahal** was chosen as the **first destination of the journey**.
❖ The **Malcha Mahal or Wilahat Mahal** is a **Tughlaq-era hunting lodge**, built by **Feroz Shah Tughlaq** in the 14th century.
❖ It is situated deep **inside a forest in Chanakyapuri, Delhi**.

OTHER INFO

❖ **Feroz Shah Tughlaq** was Delhi Sultan from the **Tughlaq dynasty** and **ruled from 1351 to 1388**.
❖ He was also **considered the father of the irrigation system in India** by the British.

4.10. MAHARANA PRATAP JAYANTI

❖ Maharana Pratap, one of the greatest warriors and rulers in medieval India.
❖ Maharana Pratap was **born on May 9, 1540, in Kumbhalgarh, Rajasthan**, and his bravery and valour are still celebrated today.
❖ He was a Rajput King who belonged to **Sisodiya clan of Rajputs**.
❖ He was the **ruler of Mewar**, a province in modern day Rajasthan.
❖ He was the eldest **son of Uday Singh II, founder of Udaipur**.
❖ The **Battle of Haldighati** was fought between the forces of Maharana Pratap and Akbar's army on June 18, 1576, which he lost.
❖ **Chetak** was the loyal horse of Rana Pratap with whom he shared a deep bond.

4.11. CHAM DANCE

❖ It is a masked dance unique to **Tibetan Buddhism**.
❖ In this **Buddhist monks with colourful costumes dance** to the sounds of traditional instruments.
❖ The dance in itself is seen **as a form of meditation** and mostly practised **during festivals like Losar in Buddhist monastries**.
❖ It is considered an **act of cleansing evil forces**.
❖ The dance ritual of Cham is practiced till date in Himalayas, especially **in places where Tibetan Buddhism prospered** in India- **Ladakh, Dharamshala, Lahaul Valley, Spiti Valley & Sikkim, and Bhutan and Tibet**.
❖ **Padma Sambhava (Guru Rinpoche)** the **founder of Nyingmapa** is believed to have started the Cham Dance tradition to subjugate the local demons that were obstructing the building of the first monastery in Tibet, Samye.
  ✓ He also introduced **Tantric Buddhism to Tibet**.
❖ The dance often depicts scenes of **Padmasambhava's life** and his **8 manifestations**.

4.12. MAHA UPANISHAD

❖ **India Pavilion at Cannes film festival** is **inspired by Saraswati Yantra**, abstract representation of goddess Saraswati, drawn from the ancient text of Maha Upanishad.
❖ The pavilion has been designed by the **National Institute of Design, Ahmedabad**, with the **theme "Showcasing India's Creative Economy"** to the global community.
  ✓ **Goddess Saraswati** is believed to be the **keeper of knowledge, music, art, speech, wisdom and learning**.
❖ **Maha Upanishad is a Sanskrit text** and is **one of the minor Upanishads**.
❖ **Text exists in two versions**, one attached to the **Atharvaveda** in some anthologies, and another attached to the **Samveda**.

- ✓ The **Atharvaveda version** is **shorter**, and in **prose**. The **Samaveda version is partly in poetic** verses.
- ❖ **Vasudhaiva Kutumbakam** finds its origin in the Maha Upanishad, essentially meaning **"the world is family".**

> **ABOUT UPANISHADS**
> - ❖ The Upanishads were written **over a time period ranging from 700 to 400 B.C**
> - ❖ Upanishad is derived from the words **upa (near)** and **shad (to sit).** It is derived from the concept of **sitting near the feet of the teacher**.
> - ❖ Upanishads are in the **last section of any Vedas**.
> - ❖ Upanishads **deals with the philosophical aspects** of life.
> - ❖ There are **13 Upanishads** which are most wellknown– **Katha, Kena, Isa, Mundaka, Prasna, Taittiriya, Chhandogya, Brihadaranyaka, Mandukya, Aitareya, Kaushitaki, Svetasvatara and Maitrayani.**

4.13. SIT TO PROBE TRIMBAKESHWAR TEMPLE INCIDENT

- ❖ Maharashtra govt has constituted **SIT to probe Trimbakeshwar temple incident**.
- ❖ SIT will probe a recent incident in which **a group of people from minority community allegedly attempted to 'forcibly' enter Trimbakeshwar temple** in **Nashik.**

ABOUT TRIMBAKESHWAR TEMPLE

- ❖ **Trimbakeshwar temple** is the abode of **one of the 12 Jyotirlingas of Lord Shiva**.
  - ✓ A **Jyotirlinga** is a representation of **Lord Shiva in Hinduism**.
- ❖ Temple is **located at foothills of mountain Bramhagiri**, from which river Godavari flows.

> **12 JYOTIRLINGAS IN INDIA**
> - ❖ Somnath Jyotirlinga in Gir, Gujarat
> - ❖ Mallikarjuna Jyotirlinga in Srisailam, Andhra Pradesh
> - ❖ Mahakaleshwar Jyotirlinga in Ujjain, MP
> - ❖ Omkareshwar Jyotirlinga in Khandwa, MP
> - ❖ Baidyanath Jyotirlinga in Deoghar, Jharkhand
> - ❖ Bhimashankar Jyotirlinga in Maharashtra
> - ❖ Ramanathaswamy Jyotirlinga in Rameshwaram, Tamil Nadu
> - ❖ Nageshwar Jyotirlinga in Dwarka, Gujarat
> - ❖ Kashi Vishwanath Jyotirlinga in Varanasi, UP
> - ❖ Trimbakeshwar Jyotirlinga in Nasik, Maharashtra
> - ❖ Kedarnath Jyotirlinga in Rudraprayag, Uttarakhand
> - ❖ Ghrishneshwar Jyotirlinga in Aurangabad, Maharashtra

- ❖ It was **constructed by third Peshwa Balaji Bajirao** (1740-1760) on the site of an old temple.
- ❖ The sanctum, **internally a square** and **externally a stellar structure**, houses **a small Shivaling – Tryambaka**.
- ❖ The temple is **built of black stone** in the **Nagara style of architecture** is enclosed in a spacious courtyard.

ABOUT NAGARA STYLE OF TEMPLE ARCHITECTURE

- ❖ It became popular in **northern India**.
- ❖ An entire temple is **built on a stone platform called "Jagati"** with steps leading up to it.
- ❖ The **temple does not usually have elaborate boundary walls or gateways**.
- ❖ The **garbhagriha is always located directly** under the **tallest tower**.
- ❖ **Amalaka** or **Kalash** is installed on Shikhara.
- ❖ The **'latina' or rekha-prasada, Phamsana and valabhi** are **important types of Nagara style** of architecture.
- ❖ **Prominent examples**- **Kandariya Mahadev Temple** in **Madhya Pradesh**, **Sun temple at Konark**, and **Ossian temple, Gujarat**.

4.14. KHASI TRIBE

- ❖ **Khasi Hills Autonomous District Council (KHADC)** order not to issue a Scheduled Tribe (ST) certificate to any Khasi person who adopts the surname of her or his father has triggered a war of words in matrilineal Meghalaya.

ABOUT KHASI TRIBE

❖ The **Khasis**, numbering about 1.39 lakh, are **one of the three** indigenous matrilineal communities in the **Meghalaya**.
  ✓ The other two are **Garos** and **Jaintias**.
❖ **Khasi traditions-**
  ✓ Khasis follow a **matrilineal system of inheritance** and youngest daughter or **"Ka Khadduh" inherits the property**.
  ✓ After marriage, **husbands live in the mother-in-law's home**.
  ✓ The **mother's surname is taken by children**.
  ✓ The **birth of a girl is celebrated** while the **birth of a son is simply accepted**.
  ✓ There is **no social stigma attributed to a woman remarrying or giving birth out of wedlock** as the **"Khasi Social Custom Lineage Act"** gives security to them.
  ✓ **Child care** is the **responsibility of mothers** or **mothers-in-law**.
❖ Khasis are **now mostly Christians** but before that, they **believed in a Supreme Being, The Creator – U Blei Nongthaw**.

4.15. JUNA KHATIYA SITE

❖ Since 2018, archaeologists have discovered 500 graves at the site of Juna Khatiya.

ABOUT JUNA KHATIYA

❖ Juna Khatiya is **an Early Harappan burial site** located about 30 km from Lakhpat in **Kutch district, Gujarat**.
❖ The burial site, **spread over 16 hectares** in a Kutch village, is **considered to be the largest pre-urban Harappan cemetery**.
❖ The burials discovered at this site **date from 3,200 BCE to 2,600 BCE, predating Dholavira**—a UNESCO World Heritage Site—and several other Harappan sites in the state.
❖ The site is important **because others like Dholavira have a cemetery in and around the town**, but **no major habitation has been discovered near Juna Khatiya**.
❖ The site demonstrates the **transition from earth-mound burials** to **stone graves**.
❖ **Significant Findings**
  ✓ Burial structures are **made of dressed sandstone** and most of them are **rectangular in plan** followed by oval or circular ones.
  ✓ **Painting on Reserved Slip Ware jar** is peculiar feature noticed.

Another distinctive feature includes **beakers and other smaller vessels**, found within large vessels

> Other Harappan sites in **Gujarat- Lothal, Surkotada, Dholavira** etc.
>
> A **necropolis** is a large, designed cemetery with **elaborate tomb monuments**. The name stems from the Ancient Greek word which literally meaning **"city of the dead".**

4.16. ICOMOS RECOMMENDS SANTINIKETAN FOR WHS

❖ International Council on Monuments and Sites (ICOMOS) has recommended the inclusion of Santiniketan in UNESCO's World Heritage List.

ABOUT SANTINIKETAN

❖ Santiniketan is a renowned cultural and heritage place **located in Birbhum District, West Bengal**.
❖ It was the **home of Rabindranath Tagore**, where **he lived and composed many of his literary works**, including **songs, poems**, and **novels**.
❖ The Santiniketan campus **is adorned with splendid sculptures, frescoes, murals, and** paintings created by renowned artists such as **Rabindranath Tagore, Nandalal Bose, Ramkinkar, Binodbehari Mukhopadhyay**, and others.
❖ The region of Birbhum District, where Santiniketan is located, is also famous for its fairs and festivals.

❖ Santiniketan celebrates unique festivals like **Briksharopan** (festival of Planting Saplings) and **Halakarshan** (festival of Plowing the Fields) on the 22nd and 23rd days of Sravana (August), respectively.

❖ **Poush Mela** is an **annual fair and festival held in Santiniketan**, starting on the 7th day of the month of Poush. The fair lasts for three days.
  ✓ It is **known for live performances of Bengali folk music**, particularly by **bauls** (traditional wandering minstrels), and **also features tribal dances**.

> There are **40 UNESCO World Heritage Sites** in India (32- cultural, 7-natural, and 1 mixed).
>
> **Dholavira in Gujarat and Ramappa Temple in Telangana** are the latest addition to the list under the 'Cultural' category.

ABOUT INTERNATIONAL COUNCIL ON MONUMENTS AND SITES (ICOMOS)

❖ **Established in 1965** as an outcome of **2ⁿᵈ Congress of Architects and Specialists of Historic Buildings**, held in **Venice in 1964**.

❖ It is **a global non-governmental organization** associated with **UNESCO**.

❖ **Mission**- to promote the conservation, protection, use and enhancement of monuments, building complexes and sites.

❖ **HQ: Paris, France**

❖ It comprises professionals, experts, representatives from local authorities, companies and heritage organizations from around 151 countries including India.

❖ It is **also an Advisory Body of World Heritage Committee** for the **implementation of the World Heritage Convention of UNESCO**.

4.17. SENGOL

❖ PM will install **a historic golden sceptre**, called **Sengol**, near the **Speaker's seat in new parliament**.

❖ **Background**
  ✓ Before independence in **1947**, the then **Viceroy - Lord Mountbatten** asked the to-be Prime Minister Jawaharlal Nehru about **any ceremony symbolise the transfer of power from British to Indian hands**.
  ✓ PM Nehru **consulted C. Rajagopalachari**, commonly known as **Rajaji** who suggested **that the Chola model of handing over the Sengol sceptre could be adopted as a suitable ceremony for India's independence.** He said that it would reflect India's ancient civilisation and culture, as well as its unity in diversity.
    ➤ **Rajaji** went on to become the **last Governor-General of India**.

ABOUT SENGOL

❖ **Sengol** gets its name from **Tamil word 'semmai'**, meaning **righteousness**.
  ✓ It was inspired by **ceremony (for transfer of power) performed** during **Chola dynasty**.

❖ It is **believed to be in practice since Sangam Age** and finds **mention in texts** like **Purananooru, Kurunthogai, Perumpaanatrupadai** and **Kalithogai**.

❖ The **Sengol sceptre was presented to PM Nehru** by **Thiruvavaduthurai Adheenam** (a **500-year-old Saivaite monastery in Tanjore, Tamil Nadu**) on **August 14ᵗʰ, 1947**.

❖ It was **crafted** by **Vummidi Bangaru Chetty, a famous jeweller** in **Madras.**

❖ It is a **5 feet long, stick-like item made** of **silver** and **covered in gold**. The sceptre has a **carving of a bull, called a Nandi**, at the top which signifies '**Nyaya**'.

4.18. MAHAKALESHWAR TEMPLE

❖ The **Mahakal Lok corridor**, located at **Ujjain's Mahakaleshwar temple**, experienced massive destruction caused by strong winds.

ABOUT MAHAKALESHWAR TEMPLE

❖ It is located in the ancient city of **Ujjain** in the state of Madhya Pradesh.

❖ As per Hindu mythology, the **temple was constructed by Lord Brahma** and **is presently located alongside river Kshipra and Rudra Sagar lake**.

❖ It is **one of the twelve Jyotirlingams of Lord Shiva**.

❖ The shrine is **also revered as one the 18 Maha Shaktia Peeth** in India.

❖ It is the **only jyotirlinga facing the south**, while all the others face east.

> ✓ This is because the **direction of death is believed to be the south**.

❖ It is complete with **impressive lingam sculptures of Mahakaleshwar**.

About Jyotirlingas
A Jyotirlinga is a shrine where **Lord Shiva is worshipped** in the form of a Jyotirlingam. There are **currently 12 main Jyotirlingas** in India that take the name of the presiding deity. Each considered a different manifestation of Lord Shiva.

❖ The temple complex comes with a **spacious courtyard** that is adorned with finest **sculptures** that are believed to be **influenced by Chalukya, Maratha, and Bhumija styles** of structural design.

❖ The **images of Ganesh, Parvati and Karttikeya** are installed in the west, north and east of the sanctum sanctorum.

❖ The temple also houses **a tank constructed in the sarvatobhadra style**.

❖ The temple, which is spread over five levels, **sees a huge throng of devotees during the Maha Shivaratri festival**.

4.19. KHEER BHAWANI MELA

❖ Kashmiri Pandits have embarked on the **annual pilgrimage to Mata Kheer Bhawani or Ragnya Devi temple in Ganderbal, Jammu Kashmir**.

❖ The history of **Mela Kheer Bhawani dates back centuries**, symbolizing the reverence and devotion of the people towards the divine Mother Ragnya Devi.

❖ It is **observed on the Ashtami day during Shukla Paksha or waxing phase of moon in Jyeshta month** (June – July).

❖ The **temple gets its name from kheer, or milk and rice pudding**, that pilgrims **pour into the spring inside the temple complex** as an offering to the goddess.

> ✓ Legend has it that the **water of the temple's spring changes colour from white to red and black**.

❖ It is the **largest gathering of Hindus in Kashmir** after the **annual Amarnath Yatra**.

5. SCIENCE AND TECHNOLOGY

5.1. OPTICAL TWEEZERS

❖ Using optical tweezers, researchers at **Raman Research Institute** (RRI), attempted to study structural details of **Laponite**, a synthetic clay.
  ✓ RRI is an **autonomous institute funded by Department of Science and Technology**.
  ✓ **Laponite** is a widely used raw material in the **pharmaceutical and cosmetics industries**.
❖ Optical tweezers **grab particles, atoms, molecules, and living cells** with their **laser beam fingers**.
❖ They **use laser light to push small particles** towards center of the beam and to hold them there.
❖ **Optical tweezers are now widely used to investigate biological systems**.
❖ Other Applications include: Š
  ✓ confinement and organization (e.g. for cell sorting).
  ✓ tracking of movement (e.g. of bacteria).
  ✓ application and measurement of small forces.
  ✓ altering of larger structures (such as cell membranes).
❖ **Limitation**- optical tweezers are only able **to manipulate very small objects** and **only at very short distances**.
❖ **Arthur Ashkin** — who, at 96, becomes the **oldest scientist ever to be awarded a Nobel Prize** — is credited with having invented "optical tweezers".

5.2. FLUHORSE

❖ New **Android malware known as 'FluHorse'** has been discovered, which targeted **users in Eastern Asia** with malicious apps that look like legitimate versions.
❖ It is being **deployed using targeted phishing techniques through emails**.
❖ It is **designed to extract sensitive information**, including user credentials and Two-Factor Authentication (2FA) codes.
❖ It **can remain undetected for long periods of time**, making it a persistent and dangerous threat

5.3. NATIONAL TECHNOLOGY DAY

❖ PM laid the foundation stone and dedicated to the nation, **multiple scientific projects worth over 5800 crore rupees** on the occasion of National Technology Day in New Delhi.
❖ The projects for which the foundation stone would be laid include
  ✓ **Laser Interferometer Gravitational-Wave Observatory-India (LIGO-India), Hingoli Maharashtra**;
  ✓ **Homi Bhabha Cancer Hospital and Research Centre, Jatni, Odisha**; and
  ✓ **Platinum Jubilee Block of Tata Memorial Hospital, Mumbai**.

ABOUT THE DAY

❖ The Technology Development Board (TDB) a statutory body of the Department of Science & Technology (DST) **celebrates May 11 every year** as National Technology Day to commemorate achievements of innovations and technological excellence in the country.
❖ **Triple historical perspective**:
  ✓ On May 11, **1998**, India **successfully carried out nuclear tests at Pokhran**.
  ✓ The **first indigenous aircraft "Hansa-3" was test flown** at Bangalore on this day; and
  ✓ India also performed **successful test firing of the Trishul missile** on the same day.
❖ **Since 1999**, the day is being celebrated as National Technology Day.
❖ This year's **theme** is **'School to Startups- Igniting Young Minds to Innovate'**.
❖ The program and celebrations marking the National Technology Day **2023** has a special focus on **Atal Innovation Mission (AIM).**

5.4. MOLECULAR MOTOR

❖ An international team of researchers, including from the **National Centre for Biological Sciences (NCBS), Bengaluru**, has reported a new kind of molecular motor.

ABOUT MOLECULAR MOTOR

❖ Molecular motors are **a class of proteins** that **drive intracellular movement by converting chemical energy to mechanical work** along cytoskeletal filaments.
   ✓ The cytoskeleton of a **cell is made up of microtubules**, **actin filaments**, and **intermediate filaments**.
   ✓ These **structures give the cell its shape** and **help organize the cell's parts**.
❖ They are **very important as cells need to move things**, such as **pull two organelles together**, move cargo towards and away from the nucleus, and power the movement of molecules inside cells.
❖ **Disruption or deregulation** in these processes can lead to different **diseases**.

5.5. WATSONX

❖ Watsonx, **launched by IBM**, is **a new artificial intelligence (AI)** and **data platform** to help companies integrate AI in their business.
❖ It provides self-service access to high-quality, trustworthy data, enabling users to collaborate on a single platform.
❖ It helps facilitate the entire data and AI lifecycle, from data preparation to model development, deployment and monitoring.

5.6. TELANGANA'S ROBOTICS POLICY

❖ **Telangana** has become the **first state in the country to launch a state robotics framework** with a vision to create a sustainable robotics ecosystem.
❖ It has been **developed by the Emerging Technologies Wing** in collaboration with the **All-India Robotics Association** and inputs from academia, industry experts and stakeholders.
❖ It focuses on **leveraging robotics technology to drive growth and development** across identified four key domains – agriculture, healthcare, industrial automation and consumer robotics

5.7. LIGO- INDIA

❖ PM recently laid down the foundation stone of **Laser Interferometer Gravitational-Wave Observatory – India (LIGO-India).**
❖ The LIGO-India facility is being constructed **in Hingoli district in Maharashtra**.
❖ LIGO - India is **a planned advanced gravitational- wave observatory** to be located in India as part of the **worldwide network**.
❖ The project was given **"in principle" approval in 2016 to be completed by 2030**.
❖ **Funding** by **Department of Atomic Energy** (DAE) and **the Department of Science and Technology** (DST).
❖ It will be the **fifth node of the planned network** and will bring India into a prestigious international scientific experiment.

> **OPERATIONAL LIGOS**
> Besides the United States (in **Hanford** and **Livingston),** such gravitational wave observatories are currently operational in **Italy (Virgo)** and **Japan (Kagra).**

WORKING MECHANISM OF LIGO

❖ The **observatory comprises two 4-km-long vacuum chambers**, built **perpendicular to each other** with **highly reflective mirrors at the ends.**
❖ **Light rays are released simultaneously in both vacuum chambers**.
❖ In **normal circumstances**, the **light rays in both chambers would return simultaneously**.

❖ However, **if a gravitational wave arrives**, **one chamber gets elongated** while the **other gets squished**, causing **a phase difference** in the returning light rays.
❖ **Detecting this phase difference confirms the presence of a gravitational wave**.

SCIENTIFIC BENEFITS OF LIGO INDIA

❖ The LIGO-India project would have **several spin-off benefits** to Indian science.
❖ The observatory is expected to enable **dramatic returns in astronomy and astrophysics**, as well as **leapfrog Indian science and technology in cutting-edge frontiers** of great national relevance.

5.8. FISSION MOLYBDENUM PRODUCTION FACILITY

❖ PM dedicated the **Molybdenum-99 production facility** located in **Trombay Campus** of **Bhabha Atomic Research Centre** to nation.

ABOUT MOLYBDENUM-99

❖ **Molybdenum-99** is the **parent isotope of technetium-99m** (Tc-99m), a **short-lived, gamma-emitting isotope**.
❖ Tc-99m is used in more than **85% of imaging procedures for the early detection of cancer, heart disease** etc and for the **study of organ structure and function**.
❖ Tc-99m is **especially useful for nuclear medicine procedures** because it can be **chemically incorporated into small molecule ligands and proteins**.
❖ Tc-99m is **currently produced through a multistep process** that begins with the **neutron irradiation of fissile U-235 contained in highly enriched uranium**.

5.9. HADRON BEAM THERAPY

❖ PM inaugurated **National Hadron Beam Therapy Facility** in **Navi Mumbai**.
❖ **Hadron Beam Therapy** is an **advanced and highly precise radiation treatment for tumors**.
❖ In this, the **irradiating beams are made of charged particles (protons and other ions, such as carbon)**.
❖ Charged particles **can penetrate the tissues with little diffusion** and **deposit the maximum energy** just before stopping allowing specific regions to be irradiated.

> The idea of **using protons for cancer treatment** was **first proposed in 1946** by the physicist **Robert Wilson**

❖ With the use of hadrons, the **tumor can be irradiated while the damage to healthy tissues is less than** X-rays.
❖ The **peaked shape of the hadron energy deposition** is called **Bragg peak.**

5.10. CARBON DATING

❖ Allahabad HC ordered **carbon dating of a structure** at **Gyanvapi mosque complex in Varanasi**.
❖ **Carbon dating** is a **widely-used method** to **establish the age of organic materials**, things that were once living.
❖ **Carbon-14** (C-14), **an isotope of carbon, is radioactive**, and **decays at a well-known rate (Half-life of 5,730 years)**.
❖ **Most abundant isotope of carbon in atmosphere is C-12**.
❖ **Ratio of C-12 to C-14 in atmosphere is almost static**, and is known.
❖ Also, **age of things that are more than 40,000-50,000 years cannot be arrived** at through carbon dating.
❖ This is **because after 8-10 cycles of half-lives**, the **amount of C-14 becomes very small** and is **almost undetectable**.

OTHER RADIOMETRIC DATING METHODS

❖ Two commonly employed **methods for dating rocks** are **potassium-argon dating** and **uranium-thorium-lead dating**.

❖ The radioactive isotope of **potassium decays into argon**, and their ratios can give a clue about the age of rocks.

❖ **Uranium and thorium** have several radioactive isotopes, and all of them **decay into the stable lead** atom.

❖ The ratios of these elements present in the material can be measured and used to make estimates about age.

5.11. ISO COMMITTEE ON CONSUMER POLICY (COPOLCO)

❖ India is **hosting the 44th edition** of the coveted annual ISO COPOLCO Plenary from 23-26 May 2023 in New Delhi.

❖ The event is **being organized by the Bureau of Indian Standards** (BIS), the national standards body of India.

ABOUT COMMITTEE ON CONSUMER POLICY

❖ **ISO COPOLCO**, or the **Committee on Consumer Policy**, is a committee **of the International Organization for Standardization (ISO)** responsible for promoting consumer interests in the standardization process and for ensuring that standards are developed with the needs of consumers in mind.

❖ COPOLCO members are **ISO members**.

❖ Objectives:
  ✓ helping **consumers to benefit from standardization**,
  ✓ **improving consumer participation** in national and international standardization.
  ✓ **exchange of information on the experience of consumer participation** in the development

❖ COPOLCO offers a range of training and events including an annual workshop for consumers, public authorities, manufacturers and standardization experts.

❖ ISO COPOLCO is **reckoned as the major international event** that brings together representatives from ISO member countries to discuss and develop strategies for accelerating the development of standards for the world.

ABOUT INTERNATIONAL STANDARDS ORGANISATION (ISO)

❖ ISO is **an independent, non-governmental international organization** made up of members from the national standards bodies of 168 countries.

❖ Central Secretariat- **Geneva, Switzerland**.

❖ Members – 168 countries (**India** is one of the **founding members** of ISO).

5.12. SUPERCOMPUTER AIRAWAT

❖ The **AI Supercomputer 'AIRAWAT'**, installed at **C-DAC, Pune has been ranked 75th in the world**.

❖ It was **declared so in the 61st edition of Top 500 Global Supercomputing List** at the **International Supercomputing Conference (ISC 2023) in Germany**.

❖ The system is **installed under National Program on AI by Government of India.**

❖ AIRAWATis manufactured by **Netweb Technologies**.

❖ It is **India's largest and fastest AI supercomputing system**, with a remarkable **speed of 13170 teraflops**.

❖ The supercomputer runs on **AMD EPYC 7742 64C 2.25GHz processor** with **81334 cores.**

OTHER INDIAN SUPERCOMPUTERS IN THE TOP 500 LIST

❖ **PARAM Siddhi-AI supercomputer** ranked at No.131
  ✓ Also installed at **C-DAC, Pune**.

❖ **Pratyush supercomputer** ranked at No.169
  ✓ It is installed at the **Indian Institute of Tropical Meteorology**.

❖ **Mihir supercomputer** at No. 316:
  ✓ It is installed at the **National Centre for Medium Range Weather Forecasting**.

5.13. JUGALBANDI- MULTILINGUAL AI CHATBOT

❖ **Microsoft** has launched **Jugalbandi**, a **generative AI-driven multilingual chatbot** accessible via popular **messaging platform, WhatsApp.**

- ❖ The chatbot has been developed by **AI4Bharat** in collaboration with **IIT Madras**.
- ❖ The bot has been **especially made to cover areas of rural India.**

5.14. NARCO TESTS

- ❖ The **protesting wrestlers at Jantar Mantar** have expressed their willingness to undergo narco analysis tests, provided that it is monitored by the Supreme Court and broadcasted live for the entire country to witness.

ABOUT NARCO TESTS

- ❖ In a **narco analysis test**, a **drug called sodium pentothal** is injected into the body of the accused, which transports them to **a hypnotic or sedated state** in which their **imagination is neutralised**.
- ❖ In such state, the **accused is understood as being incapable of lying** and is expected to **divulge the truth**.
  - ✓ In India, **Narco analysis tests** were notably **used in the 2002 Gujarat riots** case, and the **26/11 Mumbai terror** attack case.

ABOUT SODIUM PENTOTHAL-

- ❖ Sodium pentothal, or sodium thiopental, is a **fast-acting**, **short-duration anaesthetic used** in larger **doses** to **sedate patients during surgery**.
- ❖ It is also referred to as a **"truth serum"** sometimes.

ABOUT POLYGRAPH OR LIE DETECTOR TEST-

- ❖ It **measures and records several physiological indicators**- **blood pressure, pulse, respiration, and skin conductivity** while **a person is asked and answers a series of questions**.
- ❖ This test is based on the assumption that **physiological responses** that are **triggered** when **a person is lying** are **different from what they would be otherwise**.
- ❖ A numerical value is assigned to each response to conclude whether the person is telling the truth, is deceiving, or is uncertain.

6. DEFENCE

6.1. BLUEBUGGING

❖ Concerned over an increase in instances of cybercrime, police in Andhra Pradesh has asked the people to be wary of "**bluebugging.**"

ABOUT BLUEBUGGING

❖ It is a form of hacking that lets attackers access a device **through its discoverable Bluetooth connection**.
❖ Once a device or phone is bluebugged, a **hacker can listen to the calls, read and send messages and steal and modify contacts**.
❖ It **started out as a threat for laptops with Bluetooth capability**.
  ✓ Later hackers used the technique to target mobile phones and other devices.
❖ Once a connection is established through Bluetooth , hackers can use brute force attacks to bypass authentication. They can install malware in the compromised device to gain unauthorised access to it.
❖ This **attack is often limited due to the range of Bluetooth connections**, which goes up to only **10 meters**.

ABOUT MALWARE

❖ Malware, or malicious software, is any program or file that is intentionally harmful to a computer, network or server.
❖ **Types** of malware include **computer viruses, worms, Trojan horses, ransomware and spyware**.

6.2. ASEAN-INDIA MARITIME EXERCISE (AIME-2023)

❖ India sent **INS Satpura** and **INS Delhi** to participate in the **first ever ASEAN-India Maritime Exercise (AIME 2023)** scheduled in May 2023.

ABOUT ASEAN-INDIA MARITIME EXERCISE (AIME-2023)

❖ AIME-2023 is the first time India has been involved in exercises with the ASEAN though there have been exercises with ASEAN nations separately.
❖ The maiden exercise will be conducted **off the coast of Singapore.**
❖ The **Republic of Singapore Navy (RSN)** and **the Indian Navy (IN)** are **co-hosting** the ASEAN-India Maritime Exercise.
❖ With AIME-2023 **India becomes the 4th ASEAN dialogue partner**, after Russia, China and the US to hold the ASEAN+1 maritime exercise.
❖ Aim: Enhancing interoperability and exchange of best practices among participating navies.

ABOUT ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN):

❖ It is a regional intergovernmental organization comprising **ten Southeast Asian countries**.
❖ It was **established in 1967** with the signing of the **Bangkok declaration**.
❖ **Aim**: To promote intergovernmental cooperation and facilitate economic, political, security, military, educational, and socio-cultural integration among its members and other Asian states.
❖ **Members**:
  ✓ **Indonesia, Malaysia, Philippines, Singapore, Thailand**- original 5 members
  ✓ Brunei, Laos, Myanmar, Cambodia and Vietnam- joined later.
❖ **ASEAN Plus Three**: It is a forum that functions as a coordinator of co-operation between the ASEAN and the **three East Asian nations** of **China, South Korea, and Japan.**
❖ **ASEAN Plus Six**: includes **ASEAN Plus Three** and **India, Australia, and New Zealand**.

6.3. BULAND BHARAT EXERCISE

❖ An integrated **surveillance and firepower training exercise 'Buland Bharat'** was conducted in the recently operationalised longest high-altitude Artillery Ranges of the **eastern theatre**.

❖ The exercise involved the **synergised application of surveillance and firepower capabilities** of the **Artillery** and the **Infantry** in close **coordination with Special Forces, Aviation and Central Armed Police Forces (CAPF)** deployed in **West Kameng** and **Tawang districts** of **Arunachal Pradesh**.

❖ **Uninterrupted communication** on multiple media was also tested at long distances.

6.4. BATTLEFIELD SURVEILLANCE SYSTEM

❖ A new BSS under **Project Sanjay** is in the process of being deployed.

❖ Under BSS, the **aim is to have surveillance centres for all field formations by December 2025**.

❖ It will **integrate thousands of sensors** which will **enable provision of an integrated surveillance picture to commanders and staff at all levels**, besides completing sensor-shooter grid by integrating with **Artillery Combat Command and Control System (ACCCS).**

❖ Complementing the BSS is the **Army Information and Decision Support System**, an upgraded and redesigned version of erstwhile **Combat Information Decision Support System**, which will integrate inputs from all operational and managerial information systems.

❖ **Bharat Electronics Limited** is the **system integrator** of this ambitious project.

ABOUT PROJECT SANJAY

❖ Indian Army's BSS, named 'SANJAY', was conceived **to develop an automated system with dedicated intra-communication.**

❖ It involves **integration of surveillance sensors at Division and Corps level on a customized Geographical Information System (GIS) platform** with multi sensor data fusion undertaken at the Surveillance Centre for providing inputs to the CIDSS.

6.5. TERRITORIAL ARMY

❖ Defence minister has recently approved posting of **Women Officers of the Territorial Army** along the **Line of Control** (LoC) with **Pakistan**.

ABOUT TERRITORIAL ARMY

❖ The Territorial Army (TA) was **raised by the British in 1920** through **Indian Territorial Act of 1920** and it was organized into two wings namely - **'The Auxiliary Force' for Europeans** & **Anglo-Indians and 'The Indian Territorial Force' for Indian Volunteers.**

❖ Post-independence, India's first **Governor General Shri C Rajagopalachari formally** inaugurated the **Indian Territorial Army** on **October 9th in 1949**.

❖ It is **an organization where volunteers apply for a short period of training every year**, so as to be ready to tackle any emergent situation or to serve for the defence of India.

❖ **Also known as the 'Terriers'**, it is **considered the second line of national defence** after the **regular Army**.

❖ The Territorial Army **is part of regular Army and its present role is to relieve the Regular Army from static duties** and **assist civil administration in dealing with natural calamities and maintenance of essential services** in situations where life of the communities is affected or the Security of the Country is threatened and to provide units for Regulars Army as and when required.

❖ **Any citizen** between the **age of 18-42 years** can be **a part of the service**.

❖ The **pensionable age for a soldier below officer's rank in the TA** is the same **as that of a regular soldier — 15 years**.

❖ **Operations**- The TA units were actively involved in **operations during the 1962, 1965 and 1971 wars**.

❖ The motto of the Territorial Army of India is **'Savdhani Va Shoorta'** i.e **Vigilance and Valour**.

6.6. MiG-21 CRASH

❖ A MiG-21 fighter jet of IAF crashed near **Rajasthan's Suratgarh**.

ABOUT MIG 21

❖ The MiG-21s **are among the six fighter jets presently flown by** IAF.

- ❖ The Mikoyan-Gurevich MiG-21s are **single engine**, **single-seater multi-role fighter/ground attack** aircraft **designed by the Mikoyan-Gurevich Design Bureau** in the **Soviet Union/Russia**.
- ❖ **First inducted by India in 1963**.
- ❖ Over the period, India has procured over **700 MiG-21 aircraft** of **different variants**- **Type-77**, **Type-96** and BIS.
  - ✓ The **latest** of them are the **MiG-21 Bison.**
- ❖ The aircraft in the past had proved their mettle in wars of **1965, 1971 and 1999 Kargil conflict**.
- ❖ Accidents- As per available government data, **close to 500 MiG-21s have crashed in the last 60 years**, **killing over 170 pilots** with varying causes.
- ❖ Phasing out of MiGs
  - ✓ **In September 2022, the No. 51 squadron** based in Srinagar was **number plated** (meaning retired from service).
  - ✓ The three MiG-21 Bison squadrons are planned to **be phased out by December 2025** and will be **replaced by the indigenous LCA Tejas** squadrons.

6.7. IAF HERITAGE CENTRE

- ❖ India's Defence Minister recently inaugurated the **nation's first Indian Air Force Heritage Centre in Chandigarh**.
- ❖ The centre, **spread across 17,000 sqft** at the Government Press Building, **houses five vintage aircraft**, **including the first IAF-made patent aircraft, the Air Force 'Kanpur-1 Vintage Prototype Aircraft'**.
- ❖ The heritage centre also **provides visitors with cockpit exposure** and **experience with flight simulators**.
- ❖ The centre will **also showcase various rescue operations being undertaken** by the IAF all over the country.

6.8. CYBER SURAKSHIT BHARAT

- ❖ **National e-governance division** under CSB, organised recently 36th **Chief Information Security Officers (CISO) Deep-Dive** training programme.
- ❖ **Cyber Surakshit Bharat** is an initiative of **Ministry of Electronics and Information Technology** (MeitY).
- ❖ It aims to spread awareness about cyber-crime and build capacities of Chief Information Security Officers (CISOs) and frontline IT officials, across all government departments.

6.9. THERMOBARIC BOMB

- ❖ Human rights group accused **Myanmar's military** of using thermobaric bomb.
- ❖ Thermobaric weapons — also known as **aerosol bombs**, **fuel air explosives**, or **vaccum bombs** — use **oxygen from the air for a large, high-temperature blast**.
  - ✓ A thermobaric weapon causes **significantly greater devastation than a conventional bomb** of comparable size.
- ❖ A **thermobaric bomb** consists of **a fuel container with two separate explosive charges**.
- ❖ When it **hits its target, first explosive charge opens the container and widely scatters fuel mixture as a cloud**.
- ❖ A **second charge then detonates the cloud**, resulting **in a huge fireball, a massive blast wave and a vacuum** which sucks up all surrounding oxygen.
- ❖ These **can be fired as rockets** from **tank-mounted launchers or dropped from aircraft**.
- ❖ There are **no international laws specifically banning their use**.

6.10. OPERATION SAMUDRAGUPT

- ❖ **About 2,500 kg drugs worth Rs.12,000 cr** were seized by **Narcotic Control Bureau (NCB) and Indian navy** as a part of **Operation Samudragupt,** which **targets maritime trafficking of drugs originating from Afghanistan**.
- ❖ It is **one of the biggest drug seizures** of drug **methamphetamine**

- ✓ It is **a potent central nervous system stimulant drug**.
- ❖ Methamphetamine was sourced from **Golden crescent**, comprising **Afghanistan, Iran and Pakistan**.
    - ✓ **Golden Triangle** includes **Myanmar, Laos** and **Thailand.**

6.11. EXERCISE SAMUDRA SHAKTI

- ❖ It is an **India-Indonesia Bilateral exercise**.
- ❖ The indigenously built **anti-submarine warfare corvette INS Kavaratti** arrived at Batam, Indonesia to take part in this exercise.
- ❖ The **primary purpose** of the Samudra Shakti exercise is **to enhance interoperability and mutual cooperation between the naval forces** of India and Indonesia.

6.12. INNOVATIONS FOR DEFENCE EXCELLENCE

- ❖ The **Innovations for Defence Excellence (iDEX)**, the **flagship initiative of the Ministry of Defence**, has signed its **250th contract** - the **first under Mission DefSpace** - and **100th SPRINT (Navy) contract** recently.
    - ✓ The contract is for **Micropropulsion system for cubesats** with the **Indian private entity InspeCity**.
- ❖ **The 'SPRINT' initiative**, a total of **75 Challenge statements for the Indian industry** was unveiled during the **Naval Innovation and Indigenisation Organisation (NIIO) seminar 'Swavlamban'** in **July 2022**.

> **Cubesats** are a **class of smallsats**, which are **modular; low-cost; easy to manufacture, integrate,** and **launch**; and form a **critical component for launch-on-demand**

- ✓ The initiative **aims at inducting at least 75 technologies/products** into the **Indian Navy** by **August 2023**.
- ❖ **Mission Defspace**
    - ✓ It is an ambitious effort **to develop innovative solutions** for the three Services (Indian airforce, Navy and Army) in the **space domain through the Indian industry and start-ups**.
    - ✓ **Startups, innovators and the private sector** will be invited to **find solutions for the problems** that will include **both offensive and defensive capabilities**.

ABOUT IDEX

- ❖ It was **launched in 2018.**
- ❖ iDEX aims to **promote innovation and technology development in Defence and Aerospace** by **engaging industries** which include **MSMEs, start-ups, individual innovators, R&D institutes** & **academia**.
- ❖ **iDEX** is being **implemented by Defence Innovation Organisation(DIO)**, established under the **Department of Defence Production**, **Ministry of Defence**.

6.13. INS VAGHSHEER

- ❖ The sixth **Scorpene Submarine** of **Project-75**, Indian Navy's **Kalvari class, 'Vaghsheer'** commenced its sea trials recently.

ABOUT VAGHSHEER

- ❖ INS Vagsheer (S26) is the **sixth submarine of the first batch of six Kalvari-class submarines** for the Indian Navy.

> Other five are **INS Kalvari, INS Khanderi, INS Karanj, INS Vela** and **INS Vagir**

- ❖ **Vagsheer** is named after the **sand fish, a deadly deep-sea predator** of the Indian Ocean.
- ❖ It is **designed by French naval defence and energy group Naval Group** and **manufactured by Mazagon Dock Limited**.

ABOUT KALVARI-CLASS SUBMARINES

- ❖ It is a class of **diesel-electric attack submarines** based on the **Scorpène-class submarine** being built for the Indian Navy.

- ❖ It has **been constructed with technology transfer from French firm Naval Groupunder** a programme called **Project 75**.
- ❖ The **state-of-the-art technology** used in Scorpene-class has **superior stealth features** such as **advanced acoustic silencing techniques, low radiated noise levels and ability to launch crippling attacks** with precision-guided weapons on board.
- ❖ They can **attack through launching the torpedoes and anti-ship missiles while underwater** or on the surface.

OTHER INFO

- ❖ **INS Arihant** is **India's first indigenous nuclear powered ballistic missile** capable submarine.
- ❖ The Indian Navy currently **operates sixteen diesel powered submarines**.
- ❖ **India's submarine fleet** is based at two locations: **Visakhapatnam on the east coast** and **Mumbai on the west coast**.

6.14. OPERATION DHVAST OF NIA

- ❖ **National Investigation Agency** (NIA) recently conducted **a nationwide operation called 'Operation Dhvast'** targeting the **interconnected network of terrorists, gangsters, and drug smugglers**.
- ❖ It was aimed at breaking the terror nexus of terrorists, and other notorious gangsters involved in targeted killings, terror funding of pro-Khalistan outfits, and extortion, and smuggling of drugs and weapons.
- ❖ Collaborating with the police in Punjab and Haryana, the **NIA carried out raids at 129 locations across multiple states**.

ABOUT NATIONAL INVESTIGATION AGENCY

- ❖ The NIA is **a federal agency established in 2009** by the Indian government to investigate and prosecute **crimes related to terrorism, insurgency, and national security**.
- ❖ It was **constituted under the National Investigation Agency (NIA) Act, 2008** with **headquarters** at **New Delhi**.
  - ✓ It was **formed in response** to the **2008 Mumbai terrorist attacks.**
- ❖ It **operates under the Ministry of Home Affairs** and has **jurisdiction over matters that affect the entire country**.
- ❖ The law under which the agency operates **extends to the whole of India** and **also applies to Indian citizens outside the country**.
- ❖ The agency was further empowered by the National Investigation Agency (Amendment) Act, 2019.
- ❖ The NIA is **authorized to take over terrorism-related cases from state police forces** and other agencies, and it can investigate cases across state boundaries **without requiring prior permission from state governments**.
- ❖ Functions **include collecting, analyzing, and disseminating intelligence** on terrorism and national security, **coordinating with law enforcement agencies** within and outside India, and **prosecuting cases before the NIA Special Court**.
- ❖ It **seeks the sanction of the Central government for prosecuting accused individuals** under the **Unlawful Activities (Prevention) Act (UAPA)** and **other scheduled offenses** like **Explosive Substances Act**, **Atomic Energy Act**, **Anti-Hijacking Act** etc.

6.15. ZORAWAR TANK

- ❖ The light tank Zorawar being jointly developed jointly by the **DRDO and private sector firm L & T** is expected to be ready for trials in the **high-altitude mountainous border with China by the end of 2023**.

ABOUT ZORAWAR TANK

- ❖ It is **an indigenously designed** and **developed Light Tank**.
- ❖ It is **designed to operate in varying terrain from high altitude areas and marginal terrains to island territories**.

- ❖ It will be **highly transportable** for **rapid deployment** to meet any operational situation.
- ❖ Zorawar will have niche technologies to include **Artificial Intelligence**, **Drone integration**, **Active Protection System, High Degree of Situational Awareness** and **amphibious operation capability**.
  - ✓ **An active protection system is designed to protect vehicles from anti-tank guided missiles** and **projectiles away from combat vehicles**.
- ❖ It will weigh **less than 25 tonnes** with a **high power-to-weight ratio** as well as **superior firepower and protection**.
- ❖ The tank has been **named after the legendary General Zorawar Singh Kahluria** who led multiple **successful victories in Tibet**.
  - ✓ He was **a military general who had served under Jammu's Raja Gulab Singh** in the 19th century.

6.16. GBU-57

- ❖ The US Air Force recently released **rare images of the weapon, the GBU-57**, known as the **"Massive Ordnance Penetrator"**.

ABOUT GBU-57

- ❖ It is a **GPS-guided, earth-penetrating strike weapon** for use against hard and deeply buried targets.
- ❖ **Manufactured by-Boeing**.
- ❖ It is used **to destroy deeply entrenched enemy bunkers** such as those concealing a supply of weapons of mass destruction (WMD).
- ❖ Dimensions
  - ✓ **20.5 feet long** with a **diameter of 31.5 inches**.
  - ✓ Weight: 14,000 kg
- ❖ The warhead case is made from a special high-performance steel alloy that can reportedly penetrate up to 200 feet of concrete.
- ❖ The bomb is **probably carrying a mix of AFX-757** — a standard explosive — **and PBXN-114**, a relatively new explosive compound.
- ❖ **B-2 stealth bomber is the only aircraft that can deploy** the bomb.
  - ✓ It can carry two of the bombs at a time.
- ❖ The bomb is **equipped with a delayed-action fuse**, allowing the warhead to survive the impact, not detonating until the bomb has stopped traveling underground.

6.17. INS SINDHURATNA

- ❖ The **Kilo-class submarine INS Sindhuratna** has successfully **reached Mumbai, India**, after undergoing a significant upgrade in Russia.
- ❖ INS Sindhuratna is a **diesel-electric submarine belonging to the Sindhughosh-class.**
- ❖ It was **commissioned in 1988** and has undergone several upgrades and refits to extend its operational life and capabilities.
- ❖ It plays a significant role in **operational readiness of the Western Naval Command at Mumbai.**
- ❖ With its modernized weapon and sensor suite, the submarine strengthens India's maritime capabilities and contributes to safeguarding the nation's interests and security in the Indian Ocean Region.

6.18. IRAN TESTS KHEIBER MISSILE

- ❖ **Iran** recently unveiled the **latest iteration of its liquid-fuelled Khorramshahr ballistic missile** amid wider tensions with the West over its nuclear program.
- ❖ The Khorramshahr-4 is **named after an Iranian city** that was the scene of heavy fighting during the Iran-Iraq War in the 1980s.
- ❖ It is a **surface to surface ballistic** missile developed by **Aerospace Industries Organisation under Iranian Defence Ministry.**

❖ The **missile also is called Kheibar**, after a **Jewish fortress conquered by the Muslims in the 7th century** — in what is now Saudi Arabia.
❖ The missile has a **2,000-kilometre range** with a **1,500-kilogram warhead**.
❖ It could be **prepared for launch in a short period**.
❖ It is modeled after **North Korea's Musudan ballistic missile**.

6.19.   NASAMS

❖ **USA** has recently approved the sale of **$285 million worth NASAMS Air Defence System** to **Ukraine**.
❖ **National Advanced Surface-to-Air Missile System** (NASAMS) is a highly adaptable combat-proven medium-range air defense solution.
❖ It has the ability to destroy fixed and rotary wing aircraft, unmanned aerial vehicles and emerging cruise missile threats.

6.20.   EXERCISE AL MOHED AL HINDI

❖ The bilateral exercise 'Al Mohed Al Hindi 23' is between **Indian Navy** and **Royal Saudi Naval Force**.
❖ It was held in **Al Jubail, Saudi Arabia.**
❖ INS Tarkash, INS Subhadra and Dornier Maritime Patrol aircraft (MPA) participated in the exercise from the Indian side.
❖ The RSNF was represented by HMS Badr and Abdul Aziz, MH 60R helo and UAV.

7. SPACE

7.1. STARBERRY SENSE

❖ Indian Space Research Organisation (ISRO) recently launched a **low-cost star sensor called StarBerrySense**, mounted on the **PSLV Orbital Experimental Module (POEM)**, which has performed well during its first-ever space test.

❖ StarBerrySense is **a low-cost sensor designed to quickly calculate the orientation of a spacecraft by identifying stars in its field of view**.

❖ Developed by the Space Payloads Group at the **Indian Institute of Astrophysics** (IIA), StarBerrySense is **built around the Raspberry Pi minicomputer** and is **cost-effective** and simple to build.

❖ POEM is a **unique initiative by ISRO** that **utilizes the spent 4th stage of the PSLV as an orbital platform** for carrying out scientific experiments.

7.2. START BY ISRO

❖ **Indian Space Research Organisation (ISRO)** has launched a new **introductory-level online training programme** called **START- Space Science and Technology Awareness Training.**

❖ START is aimed at **post-graduate and final-year undergraduate students** of **physical sciences and technology**.

❖ The program will provide **a comprehensive understanding** of the various aspects of the **discipline, research possibilities, and professional pathways**.

❖ It will cover various domains of Space Science, including **Astronomy and Astrophysics, Heliophysics and Sun-Earth interaction, Instrumentation, and Aeronomy**.

❖ It will be **delivered by scientists from Indian academia and ISRO centers.**

7.3. ISRO TESTS SEMI CRYOGENIC ENGINE

❖ **ISRO** recently tested **an intermediate configuration of its 2000 kN semi-cryogenic engine** at newly commissioned Semi-cryogenic Integrated Engine & Stage Test facility at ISRO Propulsion Complex (IPRC) in **Mahendragiri, Tamil Nadu.**

❖ Unlike a cryogenic engine, **a semi-cryogenic engine uses refined kerosene instead of liquid hydrogen**.
   ✓ The **Liquid oxygen is used as an oxidiser**.

❖ **Refined Kerosene occupies less space**, making it **possible to carry more propellant in a Semi Cryogenic engines fuel compartment**.

❖ **Semi-cryogenic engine is more powerful**, **eco-friendly** and **cost effective** as compared to a cryogenic engine.

7.4. HIMALAYAN CHANDRA TELESCOPE

❖ The **Himalayan Chandra Telescope** of **Indian Astronomical Observatory** located in **Hanle of Ladakh** has joined hands with 10 other global telescopes to observe the brightening of **BL Lacertae (BL Lac)**, a **blazar** located about **950 million light years away** from Earth.

BLAZAR
A blazar is a **type of galaxy** that is **powered by a humongous black hole** and is among one of the **brightest and most powerful objects in the universe**. They are known for **emitting** highly energetic particles and radiation, like **gamma rays, X-rays, and radio**

ABOUT HIMALAYAN CHANDRA TELESCOPE

❖ It is a **2 meter optical-infrared telescope** named after **Nobel laureate Subramaniam Chandrasekhar**.

❖ It is situated at the **Indian Astronomical Observatory (IAO) in Hanle near Leh in Ladakh.**

❖ It is **currently the tenth highest optical telescope in the world**.

❖ The **telescope remotely operated** using a **dedicated satellite communication link from the Centre for Research & Education in Science & Technology (CREST)**, Indian Institute of Astrophysics (IIA), Bangalore.
❖ Imaging instruments include a **Faint Object Spectrograph**, a **near infra-red** and **an optical CCD camera**.

ABOUT INDIAN ASTRONOMICAL OBSERVATORY

❖ Indian Astronomical Observatory is situated at an **altitude of 4500 meters atop Mt. Saraswati** in the vast Nilamkhul Plain in the **Hanle Valley of Changthang**.
❖ Other major telescopes at IAO, Hanle site (except Himalayan Chandra Telescope):
  ✓ **GROWTH-India Telescope**: It is the **country's first fully robotic research telescope**.
  ✓ **High Altitude Gamma Ray Telescope (HAGAR)**: It is an atmospheric Cerenkov experiment with **7 telescopes** setup in 2008.

7.5. X-Ray Polarimeter Satellite (XPOSAT) Mission

❖ The **Indian Space Research Organisation** is collaborating with the **Raman Research Institute (RRI)**, Bengaluru, an autonomous research institute, to build the X-Ray Polarimeter Satellite (XPoSat) that is scheduled to be launched later in 2023.

ABOUT X-RAY POLARIMETER SATELLITE (XPOSAT)

❖ It is **India's first**, and **only the world's second polarimetry mission** that is meant to **study various dynamics of bright astronomical X-ray sources** in **extreme conditions**.
❖ The **other such major mission** is **NASA's Imaging X-ray Polarimetry Explorer (IXPE)** that was **launched in 2021**.
❖ **XPoSat** will carry **two scientific payloads in a low earth orbit**:
  ✓ **Primary payload POLIX (Polarimeter Instrument in X-rays)** will measure polarimetry parameters (degree and angle of polarisation) **in energy range of 8-30 keV** (kiloelectron volt).
    ➤ This is first payload in medium X-ray energy band dedicated for polarimetry measurements.
  ✓ **XSPECT (X-ray Spectroscopy and Timing) payload** will give **spectroscopic information** (on how light is absorbed and emitted by objects) in **energy range of 0.8-15 keV.**
    ➤ It observes several types of sources viz, **X-ray pulsars, Black-hole binaries, low-magnetic field neutron star** etc.

> **X-rays** have much **higher energy** and much **shorter wavelengths**, between 0.03 and 3 nanometers, **so small that some x-rays are no bigger than a single atom** of many elements.
> **Polarimetry** is a **technique to measure the polarisation of light**.
> It is a tool that **allows astronomers to infer information about celestial objects**, from passing comets to distant galaxies.
> **Polarisation is seen across all wavelengths in electromagnetic spectrum**.

7.6. NVS-01

❖ **ISRO** has recently launched a new satellite **NVS-01.**
❖ NVS-01 is first of the India's **second-generation satellites envisaged for NavIC** (Navigation by Indian Constellation) services.
❖ It is **built by ISRO's UR Rao Satellite Centre** in Bengaluru.
❖ NVS-01, **weighing 2,232 kg satellite** - **heaviest in constellation**, was launched using **Geosynchronous Satellite Launch Vehicle (GSLV) rocket**.
❖ For the first time, **an indigenously developed Rubidium atomic clock** is flown in NVS-01 to provide accurate locations.
❖ It has **a mission life of over 12 years**, longer than 10-year life of first-generation (existing) satellites.
❖ This series **incorporates L1 band signals** additionally which **increases interoperability** with other satellite-based navigation systems.

> **Other global satellite based navigation systems**
>
> ❖ **GPS** of USA
> ❖ **GLONASS** of Russia
> ❖ **Galileo** of Europe
> ❖ **Beidou** of China

ABOUT NAVIC

- ❖ **NavIC**, earlier known as Indian Regional Navigation Satellite System (IRNSS), is designed with constellation of **seven satellites**.
- ❖ **Three satellites are placed in geostationary orbit** and **four satellites are placed in inclined geosynchronous orbit**.
- ❖ At present, India uses its NavIC series of satellites for civilian **(Standard Position Service)** and defence navigation **(Restricted Service)** in the Indian mainland and 1500 kms beyond India's borders.
- ❖ These **two services are provided in both L5** and **S band**.
- ❖ The system is used in **terrestrial, aerial, marine transportation, location-based services, personal mobility, resource monitoring, surveying and geodesy, scientific research** etc.

8. ENVIRONMENT

8.1. NATIONAL GREEN HYDROGEN MISSION

❖ Union Minister of Ports, Shipping and Waterways recently said that under the **National Hydrogen Mission** of the country, **Green Hydrogen/Ammonia bunkers and refuelling facilities** will be established in all major ports by **2035**.

ABOUT NATIONAL GREEN HYDROGEN MISSION:

❖ It was approved by the Union Cabinet in **January 2022**.
❖ Aim: To make **India a Global Hub for the production, utilization and export** of Green Hydrogen and its derivatives.
❖ The **mission outcomes** projected by 2030 are:
   ✓ **Development of green hydrogen production capacity of at least 5 MMT** (Million Metric Tonnes) per annum with an associated renewable energy capacity addition of about 125 GW in the country;
   ✓ Over **Rs. Eight lakh crore** in total investments;
   ✓ Creation of over **six lakh jobs**;
   ✓ Cumulative **reduction in fossil fuel imports over Rs. One lakh crore**;
   ✓ **Abatement of nearly 50 MMT of annual greenhouse gas emissions**;

TYPES OF HYDROGEN BASED ON EXTRACTION METHODS:

❖ **Green Hydrogen**: It is produced using **electrolysis of water** with **electricity generated by renewable energy**. The **carbon intensity ultimately depends on the carbon neutrality of the source of electricity** (i.e., the more renewable energy there is in the electricity fuel mix, the "greener" the hydrogen produced).
❖ **Grey Hydrogen**: It is produced via **coal or lignite gasification** (black or brown), or via a process called **steam methane reformation** (SMR) **of natural gas or methane** (grey). These tend to be mostly carbon-intensive processes.
❖ **Blue Hydrogen**: It is **produced via natural gas or coal gasification combined with carbon capture storage** (CCS) or **carbon capture use** (CCU) technologies to reduce carbon emissions.

8.2. ACHANAKMAR TIGER RESERVE

❖ A **tigress** that had been captured after it killed two persons and injured another in Chhattisgarh's Surajpur district was **released into Achanakmar Tiger Reserve**.

ABOUT ACHANAKMAR TIGER RESERVE

❖ It is located in the **Bilaspur district of Chhattisgarh**.
❖ It was **declared a tiger reserve in 2009**.
❖ It is a part of the huge **Achanakmar-Amarkantak Biosphere Reserve**.
❖ **Maniyari River** flows right from the centre of this reserve, which is the forest's lifeline.
❖ It has **a corridor connecting to Kanha and Bandhavgarh Tiger reserves** and plays a critical role in the dispersal of tigers among these reserves.
❖ It is close to **Amarkantak**, the source of the **Son River** and **Narmada River**.
❖ **Flora**: **Sal, bija, saja, haldu, teak, tinsa, dhawara, lendia, khamar and bamboo** bloom here along with over 600 species of medicinal plants.
❖ **Fauna**- It is home to the **Bengal tiger, Indian leopard, gaur, chital, striped hyena, Indian jackal, sloth bear, Ussuri dhole, sambar, nilgai, four-horned antelope, chinkara, blackbuck, Indian muntjac and wild boar**, four variety of **monkeys** among other species.

8.3. PAINTED STORKS

- One of the largest flocks of Painted Storks, almost 4000 birds, has been **spotted in Andhra Pradesh.**

ABOUT PAINTED STORKS

- Scientific name- **Mycteria leucocephala**
- They belong to **Ciconiidae family**.
- These birds are **widely distributed over plains of Asia**.
- These are **usually seen in freshwater wetlands** and occasionally in coastal regions.
- The painted stork is a **large bird**, measuring 90 to 100 cm in length and weighing 2,000 to 3,500 grams.
- They have a **wingspan of about 150 to 160 cm**.
- They have **a long heavy yellow beak** with a down curved tip.
- **Bare head is reddish or orange in colour.**
- Found in **Pakistan, India, Sri Lanka, Myanmar, Malaysia, Thailand and Vietnam**.
- IUCN Status: **'Near Threatened'**.

Its **breeding season** extends from **July to October in North India** and **November to March in South India**.

8.4. SIMILIPAL TIGER RESERVE (STR)

- A rare **melanistic tiger was found dead** in the core area of **Similipal Tiger Reserve**.

ABOUT SIMILIPAL TIGER RESERVE (STR)

- STR is located within the **Mayurbhanj District**, in the Northernmost part of **Odisha**.
- It is surrounded by high plateaus and hills, the highest peak being the **twin peaks of Khairiburu and Meghashini**.
- The terrain is mostly undulating and hilly, interspersed with **open grasslands and wooded areas**.
- It was **declared a 'Tiger Reserve' in the year 1956** and included under the national conservation programme **'Project Tiger' in 1973**.
- The **STR, along with a 'transitional area' of 2250 sq. km**, has been included as a part of the **World Network of Biosphere Reserves by UNESCO in the year 2009**.
- It is **part of the Similipal-Kuldiha-Hadgarh Elephant Reserve** popularly known as **Mayurbhanj Elephant Reserve**, which includes 3 protected areas i.e. **Similipal Tiger Reserve, Hadagarh Wildlife sanctuary and Kuldiha wildlife sanctuary.**
- It is the **only landscape in the world that is home to melanistic tigers**.
- Tribes including **Kolha, Santhala, Bhumija, Bhatudi, Gondas, Khadia, Mankadia and Sahara** live here.
- **Vegetation**- Similipal has 1,076 flowering species and 96 species of orchids. It boasts of having tropical semi-evergreen forests, tropical moist deciduous forests, dry deciduous hill forests, high level sal forests and sprawling meadows.
    - ✓ Sal is the dominant tree species here
- **Fauna**- Leopard, Gaur, Elephant, Langur, Barking and Spotted Deer, Sloth Bear Mongoose, Flying Squirrel, Porcupine, Turtle, Monitor Lizard, Python, Sambar, Pangolin etc.

8.5. FIT FOR 55

- **European Commission** has adopted a set of proposals termed Fit for 55.
- **Fit for 55 refers** to the **EU's target of reducing net greenhouse gas emissions by at least 55% by 2030**.
- It is a **set of proposals to revise and update EU legislation** and to put in place new initiatives to ensure that **EU policies are into line with the agreed climate goals**.
- This includes extension to emissions from maritime transport, reduction of emissions allowances, implementation of the global carbon offsetting and reduction scheme for international aviation etc.

8.6. HIJOL

❖ The suitable habitat for **hijol tree** to grow in the **India-Bangladesh landscape may shrink by 50.5%** due to erratic rainfall and temperature changes.

ABOUT HIJOL

❖ Hijol, or **Indian oak**, is a **medium-sized evergreen tree**.
❖ Scientific Name: **Barringtonia acutangula**
❖ It is **native to coastal wetlands in southern Asia and northern Australasia**. This species **grows on the banks of freshwater rivers**, the **edges of freshwater swamps and lagoons** and on seasonally flooded lowland plains, commonly on heavy soils from the **sea level up to about 400 m of altitude**.
  ✓ It is **commonly found in the Ganges-Brahmaputra-Meghna basin**.
❖ Tree grows to **about 8–15 m high** with **thick, smooth and oval in shape leaves.**
❖ Flowers are small, pink to red, sub-sessile, and purple-red with numerous stamens.
❖ Its bark has **tannin**, which is useful for **heart diseases.** Also Tonic is prepared from leaves and roots. Fish poison is prepared from its roots.

8.7. BANDHAVGARH NATIONAL PARK

❖ Archeologists have **unearthed 2,000-year-old society** from tiger reserve in Bandhavgarh National Park.
❖ Several **1,500-year old rock paintings** and **numerous 1,800-2,000-years old man-made water bodies** have been discovered.

ABOUT BANDHAVGARH NATIONAL PARK

❖ It is **spread across the Vindhya hills in Umaria district** in **Madhya Pradesh**.
❖ Bandhavgarh was **declared a National park in 1968** and then became **Tiger Reserve in 1993**.
❖ This park lies in the **Monsoon type with a Dry Winter Climate**.
❖ The whole park is filled with **more than 20 streams** like **Johilla, Janadh, Charanganga, Damnar, Banbei, Ambanala**, **Andhiyari Jhiria** etc which merge into the **Son river**.
❖ **Topography** comprises of **hills, valley, rivers, marshes and meadows** to give rise to diverse mixed vegetation **ranging** from **tall grasslands to thick Sal forest.**
❖ Bandhavgarh is best known for its **Evergreen Sal forest and Mixed forest**.
❖ About 515 species of plants and over 24o species of birds and many species of reptiles and insects are found there.
❖ Main Species Found: **Asiatic Jackal, Bengal Fox, Sloth Bear, Striped Hyena, Leopard and Tiger, Wild Pigs, Nilgai, Chinkara and Gaur**.

8.8. MUKUNDRA HILLS TIGER RESERVE

❖ A 9 year old **full-term pregnant tigress** suffering from severe constipation recently died at the Mukundra Hills Tiger Reserve during treatment.

ABOUT MUKUNDRA HILLS TIGER RESERVE

❖ **Mukundra Hills Tiger Reserve**, popularly known as **Darrah Wildlife Sanctuary**, is spread across **4 districts** – **Bundi, Kota, Jhalawar & Chittorgarh** in **Rajasthan**.
❖ The park is **situated in a valley formed by two parallel mountains** viz**. Mukundra and Gargola**.
❖ It consisits of **three wildlife sanctuaries**: **Darrah wildlife sanctuary**, **Chambal wildlife sanctuary** and **Jaswant Sagar wildlife sanctuary**.
❖ This tiger reserve was **once a hunting preserve belonging** to the **Maharaja of Kota**.
❖ It is located on the **eastern bank of the Chambal River** and is drained by its tributaries.
❖ Vegetation: Dry Deciduous Forest
❖ **Flora**: **Kala Dhok or Kaladhi** is the predominant species, along with **Khair, Ber, Kakan, Raunj** etc.
❖ On higher slopes Bel, Salar, Uum and Shisham is found.
❖ The important fauna includes **Leopard, Sloth bear, Nilgai, Chinkara, Spotted Deer, Small Indian Civet, Toddy Cat, Jackal, Hyena, Jungle Cat, Common Langur** etc.

❖ Common reptiles and amphibians found are **Pythons, Rat Snake, Buff-striped keelbacks, Green keelback, crocodiles, Gharial, Otter** and Turtles.

8.9. RIVER CITIES ALLIANCE

❖ **National Mission For Clean Ganga** (NMCG) organized RCA Global Seminar.

ABOUT RIVER CITIES ALLIANCE

❖ It is a dedicated platform launched in 2021, for river cities in India to ideate, discuss and exchange information for sustainable management of urban rivers.
❖ The Alliance will focus on **three broad themes**- **Networking**, **Capacity Building** and **Technical Support**.
❖ It includes cities from **both the Ganga basin and non-Ganga basin states** and has **expanded to 109 river cities across India** and **one international member city Aarhus** from **Denmark**.
❖ It is a **joint initiative** of **Ministry of Jal Shakti** & **Ministry of Housing and Urban Affairs**.

8.10. GANGETIC DOLPHIN

❖ **Thickly knitted fishing gill nets** have recently caused the death of river dolphin.

ABOUT GANGETIC DOLPHIN(PLATANISTA GANGETICA GANGETICA),

❖ It is a **river Dolphin**, and the **national aquatic animal of India**.
❖ Common name -Susu.
❖ They are **generally blind** and catch their prey using **ultrasonic sound which reaches the prey**.
❖ **Females are larger than males**.
❖ Found in d**eep waters**, in and **around the confluence of rivers**.
❖ States- **Assam, Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Jharkhand and West Bengal**.
❖ Threats include **Direct killing, habitat fragmentation by dams and barrages and indiscriminate fishing**.
❖ IUCN status: **Endangered**.

8.11. KALI TIGER RESERVE

❖ The National Tiger Conservation Authority (NTCA) recently written to the Chief Wildlife Warden of Karnataka to furnish a status report on an illegal resort in the **Castle Rock Wildlife Range of the Kali Tiger Reserve (KTR).**

ABOUT KALI TIGER RESERVE

❖ **Kali Tiger Reserve**, also known as **Dandeli-Anshi Tiger Reserve** is located in Uttara Kannada District of Karnataka.
❖ It is a **part of the Western Ghats**.
❖ The Tiger Reserve comprises of **two important protected areas** of the region viz.,
  ✓ **Dandeli Wildlife Sanctuary** and **Anshi National Park** are **contiguous to each other and form a single tract of protected area** located in biologically sensitive Western Ghats.
❖ **Kali River** flows through the tiger reserve.
❖ Vegetation: Forests are **primarily moist deciduous and semi-evergreen**, with **excellent patches of evergreen forests in the westernmost parts** as well as in deep valleys.
❖ Flora- **bintangur**, **Malabar tamarind**, **Garcinia morella**, more than **80 species of Orchids** etc.
❖ **Fauna**- tigers, black panthers, elephants, Indian bison, sloth bear, Indian wild boar, bonnet macaque, northern plains gray langur, gray slender loris, barking deer, sambar deer and spotted deer.

8.12. OZONE POLLUTION

❖ According to Central Pollution Control Board (CPCB) bulletins, ozone was identified as a prominent pollutant recently, when AQI was in the 'moderate' category.

- ✓ Ozone occurs both in **Earth's upper atmosphere (stratospheric or good ozone)** and **at ground level**.
- ❖ Ozone pollution refers to **tropospheric or "ground-level" ozone**.
- ❖ It is **formed when oxides of nitrogen** (NOX) and **Volatile Organic Compounds react in the presence of sunlight**.
- ❖ NOX is **released by combustion of fossil fuels** from vehicles and industries.
- ❖ Ozone **can also be transported long distances by wind**.
- ❖ Exposure to excessive ozone **can cause problems breathing, trigger asthma, reduce lung function** and lead to lung disease.

8.13.   MISSION AMRIT SAROVAR

- ❖ About **50,071 water bodies have been rejuvenated** ahead of schedule against the aim of building 50,000 'Amrit Sarovar' by August 2023, under the **Mission Amrit Sarovar**.
- ❖ Mission Amrit Sarovar was launched in 2022 with an objective to develop at least 75 Amrit Sarovar in every district of the country with a view to conserve water for the future.
- ❖ **Nodal ministry**- **Ministry of Rural Development**.
- ❖ It aims to **construct or renovate the 'Amrit Sarovar'** in such a way that they **become the centre of local community activities**.
- ❖ A **user group** is being formed **for each Amrit Sarovar** as there should be community ownership for their maintenance, so that their long-term conservation can be ensured.
    - ✓ So far **59,282 user groups have joined Mission Amrit Sarovar** for maintaining the Sarovar and generating their livelihood from it.

8.14.   BAOBAB TREE

- ❖ **Bhil tribe** are fighting the **forest department's permission** to a Hyderabad-based businessman to uproot the Baobab trees for sale to rich clients, **each tree costing ₹10 Lakhs**.
- ❖ Baobab belongs to the **genus Adansonia** are **native to mainland Africa, Madagascar, and Australia**.
- ❖ There are **around 1,000 Baobab trees in Dhar**, in **Madhya Pradesh's Mandu district**.
    - ✓ It is unclear how they reached India
- ❖ They have **unusual barrel-like trunks** and are **known for their extraordinary longevity** (live upto 2,000 years) and **ethnobotanical importance.**
- ❖ The tree's unique **pendulous flowers are pollinated by bats** and **bush babies**.
- ❖ IUCN Status: **Endangered**
- ❖ **Madhya Pradesh** government has applied for **a Geographical Indication (GI) tag for Boababs**.

> A 2015 research paper **History of the introduction of the African baobab in the Indian subcontinent** in Royal Society Open Science says the baobabs may have been brought to **Dhar around the same time they were to Mumbai, Gujarat and Chennai** -- between the **10th and 17th centuries**, and likely by African soldiers hired by the Islamic kingdoms of the time.

8.15.   BURACHAPORI WILDLIFE SANCTUARY

- ❖ **Burachapori Wildlife Sanctuary** was in news after Assam CM shared photographs of a successful eviction drive there.
    - ✓ This lead to **expansion** of the sanctuary by **16000 bughas.**

ABOUT BURACHAPORI WILDLIFE SANCTUARY

- ❖ It is located on the **southern bank of the river Brahmaputra** in the **Sonitpur district, Assam**.
- ❖ Though two wildlife sanctuaries i.**e Laokhowa WS** and **Burachapori WS** in Assam have two different names, they are **ecologically and geographically a singular entity**.
- ❖ The area was **declared a Reserved forest in 1974**; it became **a sanctuary in 1995**.

- ❖ The Bura Chapori Wildlife Sanctuary serves as **a notified buffer zone of the renowned Kaziranga Tiger Reserve**.
- ❖ It comprises of a **mosaic of wet alluvial grassland, riparian and semi-evergreen forests** dotted by wetland and river systems.
- ❖ Flora comprises of **abundance of freshwater mangrove trees** and **many species of trees and medicinal plants** in the sanctuary. E.g. **simul, korai, ajar and hijal** etc.
- ❖ Fauna-**Bengal Florican**, **One-horned Rhinoceros**, **Tiger, otter**, **civet cat**, **leopard cat**, **Asiatic buffalo**, **wild boar** and **barking deer**.

8.16. GHARIAL

- ❖ After a **3 decade absence**, a Gharial, **unique crocodilian species native to the Indian subcontinent**, has been **spotted in Pakistan's Punjab province**.
- ❖ Experts suggested that the **gharial may have come from India during floods** and **settled in the Satluj river**, near the border.
- ❖ **The Harike wetland**, located 50 km from the border, **where the Beas and Satluj rivers meet**, **served as the release site for 94 gharials under a conservation program** initiated by the Punjab government in India **between 2017 and 2021**.

ABOUT GHARIALS

- ❖ Gharials are a **species of crocodilian found in the fresh waters** of the northern part of India, **primarily in the Chambal River**.
- ❖ Scientific name - **Gavialis gangeticus**
- ❖ They are **known for their long, thin snouts**.
- ❖ **Protection status**
  - ✓ IUCN Red List-**critically endangered**
  - ✓ CITES -**Appendix I**
  - ✓ **Schedule I** of the **Wild Life (Protection) Act, 1972**.
- ❖ They are **an indicator species** of **clean river water**.
- ❖ **Threats**- river pollution, dam construction, fishing operations, floods, illegal sand mining, and poaching.

> **CONSERVATION EFFORTS**
>
> - ❖ Breeding Centres of **Kukrail Gharial Rehabilitation Centre** in Lucknow
> - ❖ **National Chambal Sanctuary (Gharial Eco Park**, Madhya Pradesh).

8.17. MOROCCAN LOCUST OUTBREAK

- ❖ The **'large-scale' outbreak** of the **Moroccan locust across eight provinces** in **Afghanistan's wheat basket** is **likely to destroy 700,000-1.2 million tonnes of wheat** or **25% of the total annual harvest**, alerted the **Food and Agriculture Organization** (FAO).
- ❖ **If** the Moroccan locust population **is left untreated**, its **population can increase a 100 times** in the next year.
- ❖ The Moroccan locust **eats more than 150 species of plants**, including tree crops, pastures, and 50 food crops, **all of which grow in Afghanistan**.

ABOUT MOROCCAN LOCUSTS

- ❖ These are known as the **most economically damaging plant pests worldwide**.
- ❖ Scientific name- **"Dociostaurus maroccanus".**
- ❖ They **belong to the family Acrididae**, which includes grasshoppers and locusts.
- ❖ These locusts are known for **their ability to form swarms, causing significant agricultural damage** in the regions they infest.
- ❖ These are **medium to large-sized insects**, with **adults typically measuring around 4-5 centimeters in length**.

> 4 Locusts species reported in India are-
>
> - ❖ **Desert locust**
> - ❖ **Migratory locust**
> - ❖ **Bombay Locust**
> - ❖ **Tree locust**
>
> **Desert Locus** is the **most harmful** for the plants and standing crops and pose a great threat to Indian Agriculture. They have their **origin from Saudi Arabia**

- ❖ They have **a robust body, short antennae, and powerful hind legs** adapted for jumping.
- ❖ The **coloration of their bodies can vary**, ranging **from greenish brown to reddish-brown**.

8.18.   MERI LIFE APP LAUNCHED

- ❖ Ministry of Environment, Forest and Climate Change (MoEF&CC) has launched **"Meri LiFE" app** to **encourage and facilitate youth participation in combating climate change**.
  - ✓ "**LiFE**" stands for **Lifestyle for environment** movement.
- ❖ It **aims to showcase the power of citizens, especially young people**, in saving the environment by emphasizing the impact of simple actions in daily lives.
- ❖ App has **5 themes- Save Energy**, **Save Water**, **Reduce Single Use Plastic**, **Adopt Sustainable Food Systems** and **Adopt Healthy Lifestyle**.
- ❖ MoEF&CC has developed **two dedicated portals i.**e.-
  - ✓ **Mission LiFE Portal** provides **open access to over 100 creative videos, and knowledge** materials created by Ministry.
  - ✓ **Meri LiFE Portal** enables **ministries and institutions to upload event reports and track progress** of ongoing mass mobilisation drive.

ABOUT MISSION LIFE

- ❖ The idea of LiFE was introduced by the Indian Prime Minister during the **26ᵗʰ United Nations Climate Change Conference of the Parties (COP26)** in **Glasgow** in **November 2021**.
- ❖ The LiFE Movement aims to utilize the **power of collective action and nudge individuals** across the world to undertake simple climate-friendly actions in their daily lives.
- ❖ Additionally, it also seeks to leverage the strength of social networks to influence social norms surrounding climate.
- ❖ The Mission plans to create and nurture a global network of individuals, namely **'Pro-Planet People' (P3)**.

8.19.   KISHTWAR HIGH ALTITUDE NATIONAL PARK

- ❖ A research team of the **Department of Wildlife Protection** has recently confirmed the **presence of snow leopard in Kishtwar High Altitude National Park** through **camera trap photographs**.

ABOUT KISHTWAR HIGH ALTITUDE NATIONAL PARK

- ❖ It is located in the **Kishtwar district** of UT of **Jammu and Kashmir**.
- ❖ The area was **declared as a Kishtwar High Altitude National Park in 1981**.
- ❖ It was **majorly founded to protect the Snow Leopards** that are now slowly vanishing from the nature.
- ❖ The area lies in the **central crystalline belt of the great Himalayas** and the tract is situated on the high altitudes i.e., **sub-alpine and alpine zone**.
- ❖ The National Park encompasses the **catchment area of Kiber, Nanth and Kiyar Nallas**, all of which drain south-west into **Marwah River** (locally called Mariv Sudir) which **later joins Chenab**.
- ❖ It encompasses **breathtaking alpine meadows, snow-capped peaks, and lush green forests**, serving as **a vital ecological corridor** for many wildlife species.
- ❖ Flora:
  - ✓ The flora mainly comprises **coniferous**, **alpine**, **meadows** and **scrub forests**.
  - ✓ **Trees** include **Fir, Himalayan Yew, Deodar, Blue Pine**, or **Kail** and **Spruce**.
- ❖ Fauna:
  - ✓ The park is a renowned **snow leopard reserve**.
  - ✓ **Brown Bear, Himalayan Black bear, Musk Deer, Ibex, Markhor, Wild boar, Bharal, Indian Muntijal, Serow, and Rhesus macaque** are also found here.
  - ✓ **Alligator-tailed vulture, bearded vulture, white-cheeked bulbul and the Himalayan jungle crow** are some of the **birds** found here.

ABOUT SNOW LEOPARD (PANTHERA UNCIA)

- ❖ **Habitat**
  - ✓ Mountainous regions of **central** and **southern Asia**.
  - ✓ In India, their geographical range encompasses: **Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.**
- ❖ **Hemis, Ladakh** is the **Snow Leopard capital** of the world.
- ❖ Protection status
  - ✓ IUCN red list- **Vulnerable**
  - ✓ Convention on International Trade of Endangered Species (CITES)- **Appendix I**
  - ✓ Wildlife (Protection) Act 1972- **Schedule 1**
- ❖ Snow Leopard is **on the list of 21 critically endangered species** for the **recovery programme of the Ministry of Environment Forest & Climate Change.**

8.20. NAWEGAON NAGZIRA TIGER RESERVE

- ❖ A tigress has given birth to four cubs in the **Navegaon Nagzira Tiger Reserve (**NNTR).
- ❖ Currently, the NNTR **has 12 to 17 tigers**, as per the recent All India Tiger Estimation report.

ABOUT NAWEGAON NAGZIRA TIGER RESERVE (NNTR):

- ❖ It is situated in **Gondia and Bhandara districts of Maharashtra**.
- ❖ It was **declared a Wildlife Sanctuary in 1970**.
- ❖ It was notified as the **46th Tiger Reserve of India** in **2013**.
- ❖ It **comprises Nawegaon National Park, Nawegaon Wildlife Sanctuary, Nagzira Wildlife Sanctuary, New Nagzira Wildlife Sanctuary** and **Koka Wildlife Sanctuary**.
- ❖ It is **connected with** many surrounding tiger reserves like **Pench and Kanha TR (Madhya Pradesh), Tadoba Andhari TR (Maharshtra), Indravati TR (Chhattisgarh)**.
- ❖ **Major forest type found in NNTR is Southern Tropical Dry Deciduous Forest** which **includes dry mixed forests to moist forest type**. There are **about 364 species of plants**.
  - ✓ **Bamboo occurs in abundance**.
- ❖ Fauna includes **Tiger, Panther, Small Indian Civet, Palm Civet, Wolf, Jackal, Wild Dog, Sloth Bear, Ratel, Common Giant Flying Squirrel, Gaur, Sambar, Chital, Four Horned Antelope, Mouse Deer** and **Pangolin**.

8.21. SEA BUTTERFLIES

- ❖ A recent study has revealed that due to **climate change and ocean acidification,** population of **sea butterflies is shrinking**.
  - ✓ This can **impact entire ocean food web**.

ABOUT SEA BUTTERFLIES

- ❖ **Sea butterflies(Thecosomata)**, are **a suborder of sea snails** known as shelled **pteropods**.
- ❖ Sea butterflies are **holoplanktonic.**
  - ✓ The **holoplankton, or true plankton**, consists of those **plants and animals that normally spend most or all of their life cycle solely within the water column**.
- ❖ They are **found in all oceans but** are more **diverse and abundant in colder waters**.
- ❖ Sea butterflies have **bilateral symmetry and a coiled or uncoiled shell of various shapes and sizes**.
- ❖ Sea butterflies play a significant **role in the global carbon cycle**. They incorporate **calcium carbonate** into their shells through a **process known as calcification**.
  - ✓ Their **shell is mostly transparent** and **very fragile** and **can be easily dissolved by ocean acidification**.
- ❖ Sea butterflies are **herbivorous organisms** that feed primarily on **phytoplankton, microscopic plants found** in the ocean.
- ❖ Sea butterflies are an **important food source** for various **marine organisms, including fish, seabirds, and whales**.

8.22. SATHYAMANGALAM TIGER RESERVE

❖ **Tamil Nadu** Forest department recently commenced a **3-day long elephant census** at **Sathyamangalam Tiger Reserve**, after a gap of 6 years.
❖ The **enumeration exercise** will be conducted in all **10 forest ranges** of **Sathyamangalam, Vilamundy, Bhavanisagar, Hassanure, Geermalam, Thalavadi, Gettavadi, Jeerahalli, Kadambur** and **Thooka Naicken Palayam**.

ABOUT SATHYAMANGALAM TIGER RESERVE

❖ It is located in the **Nilgiri Biosphere Reserve**, in the Erode district of **Tamil Nadu.**
❖ It was **declared a tiger reserve in 2013** and **covers an area of 1,411 square km**.
❖ The reserve is **situated at the confluence of the Western Ghats and the Eastern Ghats**, making it a unique ecological zone.
❖ Its area is **contiguous with** the **Mudumalai Tiger Reserve, Bandipur Tiger Reserve (Karnataka)** and **BR Tiger Reserve and Wildlife Sanctuary (Karnataka)**.
❖ Together, these reserves — forming the **Nilgiris biosphere landscape** — have the **biggest tiger population in the world, at over 280 tigers**.
❖ The region is **also a part of Nilgiri-Eastern Ghats Elephant Reserve**.
❖ The Sathyamangalam forest is **crisscrossed by several streams and rivers**, including the **Moyar River** (an important tributary of the **Cauvery River**).
❖ Flora- It consists of **southern tropical dry thorn forests**, **mixed deciduous forests**, **semi-evergreen forests**, and **Riparian forests**.
    ✓ Trees like **Neem, Tamarind, Sandalwood, Randi dumetorum, Zizyphus** are found.
❖ Fauna- **Elephant, Tiger, Panther, Sloth bear, Gaur, Black Buck, Spotted deer, Wild boar, Black napped hare**, **Common langur, Nilgiri langur, Striped neck mongoose** and **Bonnet macaque**.

8.23. WORLD'S OLDEST TREE

❖ A **5,000-year-old tree** in **Chile** has been **officially recognized as the world's oldest**.
❖ It is a **Patagonian cypress**, also known as **Fitzroya cupressoides**.
❖ It is **located in the Alerce Costero National Park** and is **nicknamed "Great Grandfather."**
❖ It is estimated to be between 5,000 and 6,500 years old, making it the oldest living organism on Earth.
❖ The Great Grandfather tree **is a massive specimen, measuring 28 meters tall and 4 meters (13 Feet) in diameter.**
❖ It is **believed to have survived several major climate changes over the centuries**, including the Little Ice Age.

8.24. ARSENIC CONTAMINATION

❖ A recent peer-reviewed study suggests that **even low levels of arsenic consumption may impact cognitive function** in children, adolescents, and young adults.
❖ The study found out that those exposed to arsenic had **reduced grey matter** (brain tissue that is vital to cognitive functions) and **weaker connections within key regions of the brain** that **enable concentration, switching between tasks, and temporary storage of information**.

ABOUT ARSENIC

❖ It is **an odourless and tasteless metalloid** widely distributed in the earth's crust.
❖ It is **naturally present at high levels in the earth crust** and groundwater of a number of countries.
❖ In India, the states **of West Bengal, Jharkhand, Bihar, Uttar Pradesh, Assam, Manipur, and Chhattisgarh** are reported to be most affected by arsenic contamination of groundwater above the permissible level.
❖ It is **highly toxic in its inorganic form**.

ARSENIC POISONING

❖ **Arsenicosis** (arsenic poisoning) occurs due to **accumulation of large amounts of arsenic in the body**.

❖ It leads to **adverse health effects through inhibition of essential enzymes**, which ultimately leads to **death from multi-system organ failure**.
❖ **Long-term exposure** to arsenic from drinking-water and food can **cause cancer and skin lesions, cardiovascular disease and diabetes**.
❖ In utero and early childhood exposure has been linked to **negative impacts on cognitive development** and **increased deaths in young adults**.

PREVENTIVE MEASURES

❖ Encourage piped water access rather than groundwater extraction,
❖ Install arsenic removal plants and
❖ If groundwater extraction is inevitable – encourage extraction from aquifers (water channels below the ground) that are deeper than 100 m, instead of **shallower aquifers**, which **generally contain higher amounts of arsenic**.

8.25. GREATER FLAMINGO IN NAJAFGARH

❖ A **greater flamingo** was rescued recently **from Najafgarh wetland**. The bird was caught in a high-tension wire and injured its wing and broke a bone.

ABOUT GREATER FLAMINGO (PHOENICOPTERUS ROSEUS)

❖ It is the **state bird of Gujarat**.
❖ Of the **six species of flamingos in the world**, **two** are found in India: the **tallest** of them, the **greater flamingo** and the **smallest one**, the **lesser flamingo** (Phoeniconaias minor).
❖ Greater flamingoes are found in various regions of **Africa**, the **southeastern parts of Asia** as well as **southern Europe**.
  ✓ In **Asia**, their distribution range includes the **coastal areas of India and Pakistan**.
❖ They are mainly found in shallow waters of **lagoons, lakes, estuaries,** and **muddy beaches**.

> **PROTECTION STATUS**
>
> • **IUCN Red list- Least concern**
> • **CITES- Appendix II**
> • **CMS- Appendix II**

ABOUT NAJAFGARH WETLAND

❖ Najafgarh Lake is **fed by Sahibi River.**
❖ It was **connected to the river Yamuna** by a natural **shallow nullah or drain called the Najafgarh nullah**.
❖ The presence of 281 bird species, including several **threatened ones such as Egyptian vulture, Sarus Crane, Steppe Eagle, Greater Spotted Eagle, Imperial Eagle** and those migrating along the Central Asian Flyway **has been reported at the lake**.
❖ It is the **second largest water body in Delhi-NCR after the Yamuna**.
❖ The Najafgarh water body which was **once spread over 226 square kms** has been shrinked to 7 square kms.
❖ The lake is **largely filled with sewage from Gurugram** and **surrounding villages of Delhi**.

8.26. WMO REPORT ON COVID

❖ An expert group set up by the World Meteorological Organisation (WMO) has concluded that **cooler and drier climates could have been more conducive to the transmission of Covid-19 virus**, but **available evidence does not suggest that weather conditions played a prominent role in the propagation of the virus.**
❖ The expert group said that **"high-quality"** research studies indicated a **"generally negative association"** between **temperature and Covid19 transmission**, meaning lower temperatures probably helped transmission of the virus.

ABOUT WORLD METROLOGICAL ORGANISATION

❖ The WMO is an **intergovernmental organization** with a **membership of 192 Member States** and **6 Member Territories**.

- ✓ **India is a member** of WMO **since 1949**.
- ❖ It **originated from the International Meteorological Organization** (IMO), which was established after the **1873 Vienna International Meteorological Congress**.
- ❖ It became **a specialised agency of the UN in 1951**.
- ❖ Parent organization- **UN-ECOSOC**
- ❖ Headquarters-**Geneva, Switzerland**

8.27. ORANG NATIONAL PARK

- ❖ A full grown rhino died after in an infighting incident with another rhino Orang national Park and Tiger Reserve.

ABOUT ORANG NATIONAL PARK

- ❖ It was formerly known as the **Rajiv Gandhi Orang National Park**.
- ❖ It is located on the **north bank of the Brahmaputra River** in the Darrang and Sonitpur districts of Assam.
- ❖ It was established as **a sanctuary in 1985** and **declared a National Park in April 1999**.
- ❖ It is the **49th Tiger Reserve** of the country, notified in 2016.
- ❖ It is also **known as the mini Kaziranga National Park** since the two parks have a similar landscape made up of marshes, streams and grasslands
- ❖ It is known for its population of **Great Indian One-Horned Rhinoceros** and the **Royal Bengal Tiger**.
- ❖ It is the **only stronghold of rhinoceros on the north bank of the Brahmaputra** river.
- ❖ Other **species include**
  - ✓ **pygmy hog**, **elephants, wild buffalo, Indian rock python** etc.
  - ✓ Bird species include- **Spot Billed Pelican, White Pelican, Greater Adjutant Stork, Brahminy Duck, Bengal Florican** etc.
- ❖ Flora: The park is rich in **vegetation of forests, natural forest, grasses, and aquatic and non-aquatic plants**. Example- **Bombax ceiba, Dalbergia sissoo, Sterculia villosa, Trewia nudiflora, Zizyphus jujuba and Litsea monopetala etc.**

> **NATIONAL PARKS IN ASSAM**
> 1. **Kaziranga** National Park
> 2. **Manas** National Park
> 3. **Dibru - Rajkhowa** National Park
> 4. **Nameri** National Park
> 5. **Orang** National Park and Tiger Reserve
> 6. **Dehing Patkai** National Park
> 7. **Raimona** National Park

8.28. BANDHAVGARH TIGER RESERVE

- ❖ A tiger cub was recently found dead with injuries in **Bandhavgarh toger reserve**.

ABOUT BANDHAVGARH TIGER RESERVE

- ❖ It is **located in the Umaria district of Madhya Pradesh** and is **spread over the Vindhya hills**.
- ❖ It was **declared a national park in 1968** and then **became Tiger Reserve in 1993**.
- ❖ The national park consists **of a core area of 105 sq km** and **a buffer area of approximately 400 sq km**.
- ❖ The national park was **the former hunting preserve of the Maharaja of Rewa** and at present is a **famous natural hub for White Tigers**.
  - ✓ **White Tigers, were first discovered in Rewa**, Madhya Pradesh not far from here.
- ❖ The name Bandhavgarh given to the reserve is due to **the presence of an ancient fort** which is **believed to be gifted by Lord Rama, to his younger brother Lakshmana**
- ❖ Bandhavgarh is specially **filled with Sal forest in the valleys**, and **Bamboo stretches on the lower slopes**. Other tree species include **Saj, Dhaora, Tendu, Arjun, Amla, Palas** etc.
- ❖ Fauna consists of **chital, sambhar, barking deer, nilgai, chinkara, wild pig, chowsingha, langur**, **rhesus macaque, tiger, leopard, wild dog, wolf and jackal.**

8.29. PEOPLE'S BIODIVERSITY REGISTER (PBR)

- ❖ The National Campaign for Updation and Verification of **People's Biodiversity Register** (PBR) was launched in Goa recently.
- ❖ It marks a **significant step towards the documentation and preservation of India's rich biological diversity**.
- ❖ There is a plan to set up PBR in every village across the country under **Mission LiFE**- lifestyle for environment.

ABOUT PEOPLE'S BIODIVERSITY REGISTER

- ❖ The People's Biodiversity Register serves as **a comprehensive record of various aspects of biodiversity**, including the **conservation of habitats, preservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals, micro-organisms**, and the **accumulation of knowledge related to the area's biological diversity**.
- ❖ As per the Biological Diversity Act 2002, **Biodiversity Management Committees (BMC)** are created for **"promoting conservation, sustainable use and documentation of biological diversity"** by **local bodies** across the country.
- ❖ **BMCs** have been **constituted by the local bodies in the States and Union Territories and are entrusted with preparation of the People's Biodiversity Registers** (PBRs), in consultation with local communities.

8.30. AXOLOTLS

- ❖ Scientists are studying how **Mexican axolotls (Ambystoma mexicanum) manage to quickly regenerate lost limbs**, gills, tail, even their eyes, and parts of the head.
  - ✓ By understanding how axolotls regenerate lost body parts, we might be able to do the same in humans.
- ❖ The axolotl is a **species of salamander** (lizard-like amphibians) **originally found in Lake Xochimilco, near Mexico City**.
- ❖ Sadly, they are **now almost extinct in the wild**.
- ❖ Their gene pool survives among individuals bred in captivity for the pet trade and for aquaria.
- ❖ Even though they are amphibians, **axolotls remain aquatic throughout their lives**.
- ❖ The name 'axolotl', of Aztec origin, has been variously interpreted as 'water dog', 'water twin', 'water sprite', or 'water slave'.
- ❖ IUCN red list- **critically endangered**
- ❖ Threats- The leading causes of Axolotl decline are **human development**, **waste water disposal**, and **loss of habitat** due to droughts.

8.31. NTCA CONSTITUTES NEW COMMITTEE TO OVERSEE CHEETAH PROJECT

- ❖ **National Tiger Conservation Authority (NTCA)** has established **an 11-member Cheetah Project Steering Committee** under the **Ministry of Environment, Forest and Climate Change**.
- ❖ **Rajesh Gopal**, secretary general of Global Tiger Forum, has been **appointed as its chairman**.
- ❖ The decision was taken after **six cheetahs**, which were brought as part of the translocation project, **died in the last two months**.
- ❖ The **panel will be in force for two years** and **hold at least one meeting every month.**
- ❖ It will **provide suggestions on community interface** and their involvement in project activities.
- ❖ It will also **provide suggestions on opening the cheetah habitat for eco-tourism** and regulations in this regard.

8.32. CHILIKA LAKE

- ❖ More than **60000 birds of 88 Bird species** were found in lake **during annual summer survey of birds** conducted by **Chilika wildlife division of Odisha.**
- ❖ The species **grey-headed swamphen** or **purple swamphen** were **spotted the most number** (8,386) followed by **Asian Openbilled-stork, whiskered tern, little cormorant, little egret** and others.

ABOUT CHILIKA LAKE

- ❖ It is **Asia's largest brackish water lagoon**.
- ❖ Located at the **mouth of the Daya River**, Chilka Lake is the **largest coastal lagoon in India** and also the **second largest saltwater lagoon in the world** after the **New Caledonian barrier reef** in New Caledonia.
- ❖ It is **studded with small islands** including **Nalabana island, rajhans island, honeymoon island, breakfast island** etc.
- ❖ Chilika Lake was **first Indian Wetland of International Importance** (WII) to be designated under **Ramsar Convention in 1981**.
- ❖ It was **also first site in Asia** which was **removed** from **Montreux Record (MR) in 2002**.
- ❖ It is the **largest wintering ground for migratory birds** on the **Indian sub-continent**.
- ❖ Birds **from** the **Caspian Sea, Lake Baikal, Aral Sea and other remote parts of Russia, Kirghiz steppes of Mongolia, Central and Southeast Asia, Ladakh and Himalayas** come here.
- ❖ **Kalijai Temple**, devoted to Goddess Kalijai is situated on **an island in Chilika Lake**.
- ❖ **Satapada side of Chilika lake** is best place **to observe Irrawaddy dolphins** (IUCN Red List –**Endangered**).

> **Montreux Record** under the Ramsar Convention is a register of Wetlands of International Importance **where changes in ecological character have occurred, are occurring, or are likely to occur** as a result of technological developments, pollution or other human interference.
>
> Currently, **two wetlands** of India are in Montreux record: **Keoladeo National Park** (Rajasthan) and **Loktak Lake** (Manipur).

8.33. ATAL BHUJAL YOJANA

- ❖ The Atal Bhujal Yojana (Atal Jal) will continue for an **additional two years** beyond its **original 2025 end date**, as per the recent **National Level Steering Committee (NLSC)** decision.

ABOUT ATAL BHUJAL YOJANA

- ❖ It is a **Central Sector Scheme**, launched in **2020**, under **Ministry of Jal Shakti**.
- ❖ It demonstrates **community-led sustainable groundwater management** which can be taken to scale.
- ❖ It envisages **people's participation** through the formation of **'Water User Associations', water budgeting,** preparation & implementation of **Gram-panchayat-wise water security plans**, etc.
- ❖ The identified over-exploited and water-stressed areas for the implementation of the scheme are **Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan**, and **Uttar Pradesh**.
  - ✓ The States have been **selected according to the degree of groundwater exploitation and degradation**, established **legal and regulatory instruments**, **institutional readiness**, and experience in implementing initiatives related to groundwater management.
- ❖ **Funding**: **50:50 between Government of India** and **World Bank**.
- ❖ Atal Jal is **active across 8,220 water-stressed Gram Panchayats** within 80 districts of seven Indian states.

8.34. URBAN CLIMATE FILM FESTIVAL

- ❖ The **first-ever Urban Climate Film Festival** is going to take place in New Town, **Kolkata** in **first week of June 2023**.
- ❖ **16 films from 12 countries are scheduled to be screened**, along with Q&A sessions with filmmakers in order to spark conversations about building climate-resilient cities and invite inputs from the public.
- ❖ It aspires to **employ the powerful medium of film to enlighten audiences about the environmental, social, and economic impacts of climate change** on **urban settlements**.

8.35. GHARIALS

- ❖ As many as **35 hatchlings of the gharial**, a crocodile species, were spotted at the **Satkosia gorge by the Mahanadi River** in **eastern Odisha recently**.

❖ The gorge is **located within the Satkosia Tiger Reserve**, which is designated as a United Nations Protected area.

  ✓ It is **also designated as a Ramsar site in 2021**.

❖ **Odisha houses all three** species of crocodiles- **Gharial, Mugger and Saltwater** crocodiles.

ABOUT GHARIALS

❖ Scientific name- **Gavialis gangeticus**

❖ They are **genetically weaker than saltwater crocodiles and muggers.**

❖ Gharials are **found majorly in Chambal River**, a tributary of Yamuna River.

❖ **Threats**- Alteration of habitat, depletion of prey base, poaching for use of body parts etc .

❖ **Protection status**

  ✓ IUCN red list status: **Critically Endangered**

  ✓ Wildlife (Protection) Act, 1972- **Schedule 1**

3 species of crocodile and IUCN status
Gharial- Critically Endangered
Mugger- Vulnerable
Saltwater crocodile- Least Concern

9. POLICY AND PROGRAMME

9.1. NATIONAL SCHEDULE CASTE- SCHEDULE TRIBE HUB

❖ It has crossed **over 1 lakh beneficiary registrations**.

ABOUT NATIONAL SC-ST HUB

❖ It is **set up to provide professional support to SC and ST Entrepreneurs** to fulfill the obligations under the **Public Procurement Policy** for Micro and Small Enterprises Order 2012.
❖ Launched in **2016**.
❖ Implementing Body- **National Small Industries Corporation (NSIC)**, a public sector undertaking under the **administrative control of the Ministry of MSME**.
❖ Several special subsidy schemes/programmes have been approved under National SC/ST including Single Point Registration Scheme, Special Marketing Assistance Scheme etc.

9.2. MISSION KARMYOGI

❖ A Minister in the cabinet recently stated that **'Mission Karmayogi'** institutionalised the process of capacity building, particularly for the benefit of civil servants, with the aim to shape the Century India of 2047.

ABOUT MISSION KARMYOGI OR NATIONAL PROGRAMME FOR CIVIL SERVICES CAPACITY BUILDING (NPCSCB)

❖ Mission Karmayogi aims to prepare Civil Servants for the future by making them more creative, constructive & innovative through transparency and technology.
❖ There will be more **focus on 'on-site learning'** in complementing "off-site learning".
❖ Karmayogi seeks to shift the focus **from rule-specific** to **role-specific**.
❖ The Mission will help training the officers to **meet the challenges of the society.**
❖ It aims **"comprehensive reform of the capacity building apparatus at individual, institutional and process levels for efficient public service delivery"**.
❖ It will improve the Human Resource management practices in the Government and will **use scale & state of the art infrastructure** to augment the capacity of Civil Servants.
❖ Mission Karmayogi has the **following six pillars**:
   ✓ Policy Framework,
   ✓ Institutional Framework,
   ✓ Competency Framework,
   ✓ Digital Learning Framework (Integrated Government Online Training Karmayogi Platform (iGOT-Karmayogi),
   ✓ electronic Human Resource Management System (e-HRMS), and
   ✓ Monitoring and Evaluation Framework.
❖ **Executing Bodies:** It will be steered by four new bodies-
   ✓ Prime Minister's **Public Human Resources Council**,
   ✓ **Capacity Building Commission**,
   ✓ **Special Purpose Vehicle** (SPV) that will own and operate the digital assets and technological platform for online training, and
   ✓ **Coordination Unit**, which will be headed by the Cabinet Secretary.

9.3. INTERNAL COMPLAINTS COMMITTEE

❖ **Half of India's national sports federations don't** have an **internal complaints committee** (ICC), as required by the **Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) (PoSH)Act, 2013**.
❖ An ICC was designed to be the **first port of call for any grievance** under PoSH Act.

- ❖ An ICC is **mandatory in every private or public organisation** that has **10 or more employees**.
- ❖ The ICC should consist of **at least four members-**
  - ✓ At least **50% should be women**.
  - ✓ One should be **a senior woman employee** as the **presiding officer**.
  - ✓ **One** should be an **external member** from a **non-governmental organization or a legal background**.
  - ✓ The ICC members should be **appointed for a term of 3 years** and should **undergo regular training on the POSH Act** and related issues.
- ❖ **Objective**- making workplaces safer for women by preventing, prohibiting and redressing acts of sexual harassment against them in the workplace.
- ❖ The Act is based on **Vishakha guidelines** laid down by **Supreme Court in 1997**.
- ❖ **Other key Features of PoSH Act**
  - ✓ **Defines sexual harassment at workplace** and creates a mechanism for redressal of complaints.
  - ✓ **Wide definition of aggrieved woman** to cover **all women**, irrespective of their age or employment status and whether in organized or unorganized sectors, public or private, and covers clients, customers and domestic workers as well.
  - ✓ **District Officer** to **constitute Local Committee to receive complaints** from organisations with less than 10 workers or if complaint is against the employer itself.

9.4. NATIONAL CENTRE FOR GOOD GOVERNANCE (NCGG)

- ❖ National Centre for Good Governance (NCGG) is **expanding its capacity to train more civil servants from different countries**.

ABOUT NATIONAL CENTER FOR GOOD GOVERNANCE (NCGG)

- ❖ It was **set up in 2014** as an **apex–level autonomous institution** under the **Ministry of Personnel, Public Grievances and Pensions.**
- ❖ The Centre traces its origin to the **National Institute of Administrative Research (NIAR)**, which was set up in **1995** by the **Lal Bahadur Shastri National Academy of Administration (LBSNAA)**, the Government of **India's topmost training institute for civil services**.
  - o NIAR was subsequently rechristened and subsumed into NCGG.
- ❖ It is **mandated to work in areas of public policy, governance, reforms, and capacity building of civil servants of the country** as well as **those of other developing nations**.
- ❖ It **curates training courses for civil servants from India** and other developing countries.
- ❖ 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.
- ❖ NCGG has been extensively working in **areas such as primary and elementary education, decentralized planning at district and block levels, capacity building of Panchayat Raj Institutions (PRIs), participatory models of learning and action, rural development, cooperatives**, and **public sector management**, etc.
- ❖ NCGG is **governed by a Governing Body**, under the **Chairmanship** of the **Cabinet Secretary**.

9.5. 3 SOCIAL SECURITY SCHEMES COMPLETE 8 YEARS

- ❖ **Atal Pension Yojana** (APY), **Pradhan Mantri Jeevan Jyoti Bima Yojana** (PMJJBY), **Pradhan Mantri Suraksha Bima Yojana** (PMSBY) have recently **completed 8 years**.
- ❖ **All three** are **Central Sector Schemes** and under purview of **Ministry of Finance**.

ABOUT ATAL PENSION YOJANA

- ❖ APY which **replaced Swavalamban scheme,** aims to **covers exigencies in old age**.
- ❖ It **provides minimum guaranteed pension for people** in **unorganized sector** to all bank account holders in **age group of 18 to 40 years**.
- ❖ It's **administered by Pension Fund Regulatory and Development Authority (PFRDA)** under National Pension System (NPS).

- ❖ **Guaranteed monthly pension of Rs 1,000** (minimum) and **its multiple upto Rs 5,000 /month after attaining age of 60 years**, depending on contribution.
- ❖ **Subscriptions**-5 crore individuals till date.

Both PMJJBY and PMSBY aim to **provide affordable insurance and security** to people.

ABOUT PRADHAN MANTRI JEEVAN JYOTI BIMA YOJANA (PMJJBY)

- ❖ **1 year life insurance scheme** which is renewable every year.
- ❖ It offers **Rs 2 Lakh life cover for death** due to any reason with **premium of Rs. 436/- per annum**.
- ❖ Offered by **Life Insurance Corporation(LIC)**.
- ❖ It is available to citizens, including NRIs aged **of 18 to 50 years**.
- ❖ Subject to annual renewal, **benefits are available till age of 55**
    - ✓ **Entry** to scheme is **restricted** at **age of 50 years**.
- ❖ Enrolments till date- **16.19 crore**

ABOUT PRADHAN MANTRI SURAKSHA BIMA YOJANA (PMSBY)

- ❖ 1 year **accidental insurance scheme** which is renewable every year.
- ❖ Offers protection against death or disability due to an accident.
    - ✓ **Rs. 2 lakh** for **accidental death** and **permanent full disability**.
    - ✓ **Rs. 1 lakh** for **permanent partial disability**.
- ❖ Offered through **Public Sector General Insurance** companies.
- ❖ Available to citizens including NRIs, **aged 18 to 70 years** having a bank account.
- ❖ Premium payable- **Rs.20/- per annum per member**.
- ❖ Enrolments till date- **over 34.18 crore**.

9.6. POSHAN BHI, PADHAI BHI SCHEME

- ❖ It was launched recently by **Ministry of Women and Child Development (MoWCD).**
    - ✓ MoWCD had set up a **22-member high level task force on ECCE** chaired by former IAS officer **Sanjay Kaul**.
- ❖ The scheme will focus on **Early Childhood Care and Education (ECCE)** i.e. first six years of child's life at anganwadis across the country.

IMPORTANT HIGHLIGHTS:

- ❖ The **National Institute of Public Cooperation and Child Development (NIPCCD)** has been **roped in for the training** of Anganwadi workers
- ❖ It targets children's development in every domain mentioned in the **National Curriculum Framework**, like **physical and motor development, cognitive development** etc.
- ❖ It will focus on **promoting holistic and quality early stimulation** and **pre-primary education** for children.
- ❖ **Early Childhood Care and Education (ECCE)**
    - ✓ It refers to **providing care including health and nutrition** as well as **early learning opportunities** to all young children.
    - ✓ **EECE** is a **crucial component of Mission Saksham Anganwadi** and **Poshan 2.0 (Mission Poshan 2.0)** and it was **foreseen under the National Education Policy (NEP), 2020**.

OTHER INFO

- ❖ Anganwadi centers in India are established under **Integrated Child Development scheme (1975)**.
- ❖ Almost **1.39 million operational Anganwadi centers** across the country are providing **supplementary nutrition** and **early care and education** to more than **8 crore children** under the age of **6 years.**

9.7. RAISING AND ACCELERATING MSMEs PERFORMANCE PROGRAMME

- ❖ First meeting of **national MSME Council** held with emphasis on RAMP.

ABOUT RAMP

❖ It is a **World Bank assisted Central Sector Scheme**, supporting **COVID Resilience and Recovery interventions** of the **Ministry of Micro, Small and Medium Enterprises** (MoMSME).

❖ It aims at
   ✓ Improving access to market and credit
   ✓ Strengthening institutions and governance at the Centre and State
   ✓ Improving Centre-State linkages and partnerships
   ✓ Addressing issues of delayed payments and greening of MSMEs

❖ The total outlay for the scheme is Rs. 6,062.45 crore out of which **Rs. 3750 crore would be a loan from the World Bank** and the **remaining Rs. 2312.45 crore would be funded by India**.

❖ The **National MSME Council** has been set up **to oversee inter-Central Ministerial/Departmental coordination.**

9.8. ONE STATION ONE PRODUCT SCHEME

❖ Ministry of Railways has launched **One station one product Scheme (OSOP) scheme** over Indian Railways to promote **'Vocal for Local' vision** and **create additional income opportunities** for marginalised section.

❖ As of 1 May, the **OSOP scheme covered 728 railway stations** with **785 OSOP outlets** in **21 states and three union territories**.

❖ Under the scheme, OSOP stalls at railway stations offer a diverse range of products unique to their **respective regions, including handicrafts, textiles, traditional garments, and local agricultural produce** and processed foods.

❖ The stalls are **designed uniformly through the National Design Institute** to ensure consistency and promote the scheme's visibility and reach.

❖ OSOP outlets offer products specific to the area and include artefacts made by **indigenous tribes, handlooms by local weavers, handicrafts like world-famous wood carving, chikankari and zari-zardozi work on clothes**, spices, tea, coffee, and other **processed/semi-processed food items/products indigenously grown** in the area.

9.9. REHABILITATION COUNCIL OF INDIA

❖ Rehabilitation Council of India (RCI) recently organised **National Workshop on Inclusive Learning**.

ABOUT REHABILITATION COUNCIL OF INDIA

❖ RCI was **initially set up as a registered society in 1986**.

❖ In 1992, the **Rehabilitation Council of India Act** was enacted by Parliament, and it became a **Statutory Body in 1993**.

❖ It is under the purview of **Ministry of Social Justice & Empowerment.**

❖ **Functions**
   ✓ To **develop, standardize and regulate training programmes/ courses** at various levels in the field of Rehabilitation and Special Education.
   ✓ **Standardise the syllabus** of special education.
   ✓ **Maintain a Central Rehabilitation Register** (CRR) of **all qualified professionals and personnel** working in the field of rehabilitation and special education.
   ✓ To take **punitive action against unqualified persons delivering services** to persons with disabilities.

9.10. MEGA TEXTILE PARKS

❖ PM has recently said that the new **Mega Textile Park at Dhar district in Madhya Pradesh** will strengthen Make in India and will create new job opportunities for the youth.

- ❖ The Centre has **selected sites** in **Tamil Nadu, Telangana, Karnataka, Maharashtra, Gujarat, Madhya Pradesh and Uttar Pradesh** to set up new textile parks under the **PM Mega Integrated Textile Regions and Apparel (PM MITRA) scheme**.
- ❖ **PM MITRA Park** will be developed by **a Special Purpose Vehicle** which will be **owned by the Central govt (49%) and State govt.(51%)** and **in a Public Private Partnership (PPP) Mode**.
- ❖ It will **offer the opportunity to create an Integrated Textiles Value Chain** right from spinning, weaving, processing/dyeing and printing to garment manufacturing etc. at one location and will reduce the logistics cost of the Industry.
- ❖ **Each MITRA Park** will have **an incubation centre, common processing house and a common effluent treatment plant** and other textile related facilities such as **design centres and testing centres**.

FUNDING

- ❖ The parks will be **set up by 2026-27**.
- ❖ The **total outlay** for the project is **Rs 4,445 crore**, though the initial allocation in the 2023-24 Budget is only Rs 200 crore.
- ❖ The **Ministry of Textiles (nodal ministry)** will disburse **Development Capital Fund of ₹500 crore in two tranches** for each of the seven facilities.
- ❖ A **Competitive Incentive Support** upto **Rs 300 crore per park to the units in PM MITRA Park** shall also be provided to incentivise speedy implementation.

9.11. e-Malkhan

- ❖ All the 23 police stations **under the Visakhapatnam Police Commissionerate** are likely to get e-Malkhana soon.
- ❖ e-Malkhana is a **scientific way of storing property and evidence recovered** from crime scene.
- ❖ **The property seized and evidences collected** from the crime scene **can be stored in standard size cardboard boxes**, which will be numbered with other details.
- ❖ **A dynamic QR code** will be generated and pasted on the box.
- ❖ **A dedicated website is also hosted** and all details pertaining to the case and property will be uploaded.

9.12. Pradhan Mantri Jan Vikas Karyakram

- ❖ **Ministry of Minority Affairs** has approved a grant of Rs. 45.34 Crores under **Pradhan Mantri Jan Vikas Karyakram (PMJVK)**.
- ❖ **Central Council for Research in Unani Medicine (CCRUM)** has been sanctioned a total amount of Rs. 35.52 crores and **National Institute of Unani Medicine (NIUM), Bengaluru** has been sanctioned Rs. 9.81 crores.
- ❖ This will support the **upgradation of Unani Medicine facilities at Hyderabad, Chennai, Lucknow, Silchar and Bengaluru**.

ABOUT PMJVK

- ❖ It is a **centrally sponsored scheme (CSS)** under **Ministry of minority affairs**.
- ❖ The erstwhile **Multi-sectoral Development Programme (MsDP)** has been **restructured and renamed** as **Pradhan Mantri Jan Vikas Karyakram** for effective implementation, since 2018.
- ❖ It aims to develop **infrastructure projects**, provide **basic amenities** and **reduce imbalances and development deficit** in the **identified Minority Concentration Areas**.
- ❖ PMJVK is **implemented through the State Governments/ Union Territory Governments.**
- ❖ Projects under PMJVK are proposed by the States/ UTs **where land is already available with the State/ UT**.
  - ✓ The **Central Government does not acquire land for construction** under the scheme. The land cost or land acquisition costs are not covered under this programme.

- ❖ The scheme is **now implemented in all Districts of the country including all the Aspirational Districts**.
- ❖ For consideration under PMJVK, the communities notified as minority communities under Section 2 (c) of the National Commission for Minorities Act, 1992 would be taken as Minority Communities.

> 6 communities- **Muslims, Sikhs, Christians, Buddhists, Zoroastrians** (Parsis) and Jains have been notified as **Minority Communities.**

9.13. REWARD PROGRAM

- ❖ The Secretary, Department of Land Resources recently reviewed the **Implementation Support Mission of World Bank** Assisted **Rejuvenating Watersheds for Agricultural Resilience through Innovative Development (REWARD) program**.

ABOUT REWARD

- ❖ REWARD is **a World Bank assisted Watershed development program**, being **implemented from 2021 to 2026.**
- ❖ **Aim**- to **strengthen capacities of National and State institutions** to adopt improved watershed management for increasing farmers resilience and support value chains in selected watersheds of participating States.
- ❖ The program is being implemented to **introduce modern watershed practices in the Department of Land Resources in the Ministry of Rural Development** and **in the States of Karnataka and Odisha**.
- ❖ **Karnataka** has been identified as a **"lighthouse partner" by the World Bank** in developing the science-based watershed model.
- ❖ At the **central level**, the scope of the REWARD program covers **management, monitoring, communication and knowledge sharing functions by DoLR**.
- ❖ At the **State level**, the REWARD program will **be contiguous in scope to the Watershed Development Component of PMKSY 2.0**, and **support implementation of key science-based activities and demonstrations** which eventually aims at synergising broader perspective of WDC-PMKSY 2.0 in other States in India.

10. INDEX AND REPORTS

10.1. NATIONAL MANUFACTURING INNOVATION SURVEY (NMIS) 2021-22 RELEASED

- ❖ NMIS 2021-22 was **undertaken by Department of Science and Technology** in collaboration with **United Nations Industrial Development Organization (UNIDO)** to evaluate innovation performance of manufacturing firms in India.
- ❖ This study is **a follow-up of DST's first National Innovation Survey** held in **2011**.
- ❖ It had two specific components viz.
  - ✓ **Firm-level survey**: It captured data related to process of innovation, access to finance, resources, and information for innovation.
  - ✓ **Sectorial System of innovation survey**: It targeted firm and non-firm actors through **5 selected sectors** i.e., **food & beverage, textiles, automotive, pharmaceutical, and Information and Communication Technology** (ICT).
- ❖ Firm level survey findings were used to compile **India Manufacturing Innovation Index (IMII), covering 28 states and 6 UTs**.
- ❖ **Major findings**
  - ✓ Indian manufacturing sector has **an overall IMII score of 28.17**.
  - ✓ **Karnataka** ranked highest on NMIS score **followed by Dadra & Nagar Haveli and Daman & Diu, Telangana, and Tamil Nadu**.
  - ✓ **Low scoring states** are **North-eastern states** (excluding Assam), followed by Bihar, Assam, Jharkhand.
  - ✓ **Barriers to innovation** - lack of access to 4.0 technologies, no clear national innovation strategy, high cost, restricted finance, etc.

ABOUT UNIDO

- ❖ **UNIDO** (established in 1966) is a **specialized agency of UN** to promote, and accelerate industrial development.
- ❖ HQ- **Vienna, Austria.**
- ❖ **Members- 171 (India** is a **founding member)**.
- ❖ **UNIDO** is **custodian** for **6 industry-related indicators** under **SDG 9**.

10.2. WORLD PRESS FREEDOM INDEX 2023

- ❖ According to World Press Freedom Index 2023, by global media watchdog **Reporters Without Borders** (RSF), India has slipped to the **161st position out of 180 countries** from 150th rank last year**.**
- ❖ **Pakistan, Afghanistan, Bhutan and Sri Lanka** have **better ranking** than India**.**
- ❖ There are **more than 100,000 newspapers** (including 36,000 weeklies) and **380 TV news channels currently** operating in the country.
- ❖ The World Press Freedom Index is based **on five different factors** that are used to calculate scores and rank countries- **Political, Economic, Legislative, Social**, and **Security indicator**.
- ❖ **Scores are calculated for each of these indicators** and used to determine the overall ranking of countries in terms of press freedom.

10.3. UN-ESCAP REPORT

- ❖ The report **'The Race to Net Zero: Accelerating Climate Action in Asia and the Pacific'** was recently **released by UNESCAP.**
- ❖ According to the report, **most countries in the Asia-Pacific region are "insufficiently prepared" to face extreme weather events** and **natural disasters**.

MAJOR FINDINGS

❖ **The Asia-Pacific region** has experienced **a faster rise in temperatures over the past 60 years than the global average.**

❖ **Natural and biological hazards in the Asia-Pacific region** have contributed an **estimated annual economic loss** of **$780 billion.**

❖ **85% of Asia and the Pacific's primary energy supply** comes from **fossil fuels, while 60% of the region's energy-related CO2 emissions** come from **coal.**

RECOMMENDATIONS

❖ Control emissions in 3 key sectors- **energy, transport, and international trade and investment.**

❖ Building **low-carbon industries**

❖ **Financing climate action** through **coherent policies**

ABOUT ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (ESCAP)

❖ **HQ-Bangkok, Thailand**

❖ It was **established as Economic Commission for Asia and the Far East (ECAFE) in 1947 in Shanghai**. It changed its name to ESCAP in 1976.

❖ It supports **inclusive, resilient and sustainable development in Asia-Pacific region** by generating action-oriented knowledge, and by providing technical assistance and capacity-building services.

❖ **53 member states including India** and **9 associate members**.

❖ **One of the five regional commissions of UN.**

10.4.   DATA GOVERNANCE QUALITY INDEX

❖ The **Union Ministry of Ports, Shipping and Waterways** (MoPSW) has secured the **2nd position among 66 ministries** in the **Data Governance Quality Index (DGQI) assessment** for 2022-2023 Q3.

❖ Administered by the **Development Monitoring and Evaluation Office (DMEO)** under **NITI Aayog**, the **DGQI survey** has the objective of **evaluating the level of maturity of administrative data systems** and **their application in the decision-making process** of various **Ministries and Departments** on implementation of **Central Sector Schemes (**CS) and **Centrally Sponsored Schemes** (CSS).

❖ DGQI assessment encompasses **six** pivotal themes, including **Data Generation**, **Data Quality**, **Use of Technology**, **Data Analysis**, **Use and Dissemination**, **Data security and HR Capacity** and **Case Studies**.

❖ The DGQI assessment covers three key pillars of data preparedness:
   ✓ **Data Strategy**
   ✓ **Data systems**
   ✓ **Data-driven outcomes**.

10.5.   'INCENTIVISING THE DEVELOPMENT OF NEW ANTIBACTERIAL TREATMENTS 2023' REPORT

❖ **'Incentivising the Development of New Antibacterial Treatments 2023' Report** was recently released by **World Health Organization** (WHO) in partnership with **Global AMR R&D Hub.**

ABOUT ANTI-MICROBIAL RESISTANCE

❖ **AMR occurs** when **microorganisms such as bacteria, viruses, parasites or fungi become resistant** to antimicrobial treatments to which they were previously susceptible.

❖ **Reasons** of increasing AMR:
   ✓ **Improper consumption of antibiotics** due to lack of awareness;
   ✓ **Excessive use** of antibiotics in **livestock** and **poultry farming** etc.
   ✓ **Contamination around pharmaceutical manufacturing** sites **releasing large amounts of active antimicrobials** into the environment

> **Global AMR R&D Hub** is a **partnership of countries, non-governmental donor organisations and intergovernmental organisations** to address challenges and improve coordination and collaboration in global AMR R&D **using One Health approach**.

MAJOR FINDINGS

❖ AMR is among **top 10 global public health threats** that humanity faces, **associated with deaths of 4.95 million people in 2019**.

❖ **1 in 5 of deaths caused by AMR** occurred in **children under age of 5**.

❖ AMR could cost the **world's economy USD 100 trillion by 2050**, if **no action is taken**.

10.6.	"THRIVING: MAKING CITIES GREEN, RESILIENT, AND INCLUSIVE IN A CHANGING CLIMATE"

❖ A report titled "Thriving: Making Cities Green, Resilient, and Inclusive in a Changing Climate" was released recently by the **World Bank**.

❖ It highlighted the **role of cities in addressing global climate challenge**.

MAJOR FINDINGS

❖ Number of **people living in cities increased from 1.19 billion to 4.46 billion** between 1970 and 2022.

❖ Cities are responsible for **approximately 70%of global greenhouse gas emissions**.

❖ **North American cities** are the **largest per capita emitters**, while **cities in Sub-Saharan Africa remain lowest per capita emitters** on average.

❖ **Cities in lower-income countries** account for **only 14% of global urban CO2 emissions**.

10.7.	TRANSPORT OUTLOOK 2023

❖ The **Transport Outlook 2023** report was recently **released by International Transport Forum** at Leipzig Transport Summit.

❖ It is a **biennial report**.

MAJOR FINDINGS

❖ The Report examines the **impacts of different policy measures on global transport** demand and carbon dioxide emissions to 2050.

❖ The report emphasises on **crucial role that decarbonising transport sector will play in achieving SDG goals**.

❖ If action to decarbonise transport is accelerated, the transport sector can **reduce its CO2 emissions by about 80% over the next 25 years** (compared to 2019).

❖ The efforts must include
  ✓ **investing in public transport** infrastructure,
  ✓ supporting the **transition to transport modes with higher occupancy** or load factors, and
  ✓ promoting the **development of more compact cities**.

> **About Leipzig (Germany) Transport Summit**
>
> ❖ Transport ministers from across 64 member countries of the ITF gathered under the **event theme of 'Transport Enabling Sustainable Economies'**.
> ❖ The **United Kingdom** holds the **current Presidency of the annual Summit**.

ABOUT INTERNATIONAL TRANSPORT FORUM

❖ It is **an intergovernmental organization**.

❖ It is **politically autonomous** and **administratively integrated** with the OECD.

❖ Member: **64 member countries,** including **India**.

❖ It **acts as a think tank for transport policy** and **organizes the Annual Summit of transport ministers**.

❖ The ITF is the **only global body that covers all transport modes**.

❖ The **Decarbonising Transport initiative** of the **ITF** promotes **carbon-neutral mobility** to help **stop climate change**.

❖ It is based at OECD Headquarters in **Paris, France.**

11. INTERNATIONAL, SUMMITS

11.1. BRICS

- ❖ **19 nations** including Saudi Arabia, UAE, Algeria, Egypt, Bahrain, and Iran **have expressed interest in joining** the emerging-markets bloc of **BRICS** (Brazil, Russia, India, China, and South Africa).
- ❖ BRICS will hold its **annual summit in Cape Town** during the first week of **June**.

OTHER DEVELOPMENTS

- ❖ BRICS is planning to launch **its own "new currency" system**, a **major step towards de-dollarization**.
  - ✓ **De-dollarization** refers to the process wherein **countries tend to reduce their reliance on US dollar** (USD) as a reserve currency, medium of exchange, and also a unit of account.
  - ✓ It entails a mix of macroeconomic and microeconomic policies to enhance the attractiveness of the local currency in economic transactions.
- ❖ As per estimates, by 2028, **BRICS is expected to make up 35 percent of global economy**.

ABOUT BRICS

- ❖ The group was **formalised in 2006** during the **1st meeting of BRIC** (Brazil, Russia, India, and China) **Foreign Ministers** on margins of United Nations General Assembly (UNGA).
  - ✓ **South Africa joined it in 2010**.
- ❖ HQ- **Shanghai, China**
- ❖ It **deliberates on important issues under three pillars of political and security, economic and financial, and cultural and people** to people exchanges.
- ❖ Objective: Promote peace, security, development and cooperation; establish a more equitable and fair world.
- ❖ It **comprises 41% of world population**, having **24% of world GDP** and over **16% share in world trade**.
- ❖ It also established **New Development Bank**.

11.2. ASIA INITIATIVE

- ❖ India stressed the need to check tax evasion while addressing the meeting of the Asia Initiative of Global Forum.

ABOUT ASIA INITIATIVE (BALI DECLARATION)

- ❖ The Asia Initiative is focused on **developing tailored solutions to ensure the implementation of tax transparency** standards across Asia.
- ❖ Members: **17 countries including India.**

11.3. INDIA TO JOIN CORSIA BY ICAO

- ❖ India recently announced that it will **start participating in the International Civil Aviation Organisation's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation** (CORSIA) and the Long-Term Aspirational Goals (LTAG) from 2027.

ABOUT CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION (CORSIA)

- ❖ It is a **global market-based measure** designed to **offset international aviation $CO2$ emissions** in order to stabilize the levels of such emissions.
- ❖ Offsetting of $CO2$ emissions will be achieved **through the acquisition and cancellation of emissions units from the global carbon market** by aeroplane operators.
- ❖ It **does not apply to domestic aviation**.

❖ CORSIA will **mitigate around 2.5 billion tonnes of CO2** between 2021 and 2035, which is an annual average of 164 million tonnes of CO2.

❖ Under it, **aircraft operators will begin monitoring their emissions from international flights** and **begin acquiring offsets for their emissions growth**.

ABOUT LONG-TERM ASPIRATIONAL GOALS (LTAG)

❖ 41st ICAO Assembly adopted LTAG for **international aviation of net-zero carbon emissions by 2050 in support of UNFCCC Paris Agreement**.

❖ LTAG **does not attribute specific obligations or commitments in form of emissions reduction goals** to individual states but each state will contribute within its own nation

ABOUT INTERNATIONAL CIVIL AVIATION ORGANISATION (ICAO)

❖ ICAO is an **intergovernmental specialized agency associated with the United Nations** (UN).

❖ Established in **1947** by the **Convention on International Civil Aviation (1944)** known as **Chicago Convention**.

❖ HQ: **Montreal, Canada**

❖ Functions:
  ✓ Developing **safe and efficient international air transport** for peaceful purposes.
  ✓ It **sets standards and regulations** necessary for aviation safety, security and facilitation, efficiency
  ✓ **Serves as a clearinghouse for cooperation and discussion** on civil aviation issues among its **193 member states**.
  ✓ It also **promotes regional and international agreements** aimed at liberalizing aviation markets.

RELATED NEWS

❖ **International Air Transport Association (IATA)** market analysis report says that India is fast emerging as a key global aviation market.

ABOUT INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

❖ IATA is an **international trade body** founded in **1945** by a group of airlines.

❖ Currently, IATA represents some 300 airlines comprising 94% of the international scheduled air traffic.

❖ HQ: **Montreal, Canada**

❖ IATA supports many areas of aviation activity and helps formulate industry policy on critical aviation issues, including environmental concerns.

11.4. G7

❖ Group of Seven advanced nations agreed on adopting "risk-based" regulation on artificial intelligence, as European lawmakers hurry to introduce an AI Act to enforce rules on emerging tools such as ChatGPT.

ABOUT G7

❖ The G-7 or 'Group of Seven' are **Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States**.

❖ The G-7 nations meet at annual summits that are presided over by leaders of member countries on a **rotational basis**.

❖ The summit is an **informal gathering** that lasts two days, in which leaders of member countries discuss a wide range of global issues.

❖ The G-7 **does not have a formal constitution** or **fixed headquarters**.

❖ The **decisions** taken by leaders during annual summits are **non-binding**.

BRIEF HISTORY

❖ It was **formed in 1975** by the **top economies of the time** as an informal forum to discuss pressing world issues.

❖ **Canada joined the group in 1976**, and the **European Union began attending in 1977**.

❖ The **G-7 was known as the 'G-8' for several years** after the original seven were **joined by Russia in 1997**.

❖ The **Group returned to being called G-7 after Russia was expelled as a member in 2014** following the latter's **annexation of the Crimea region of Ukraine**.

11.5. Laundromat' Countries

❖ A report by **Finland based group** cited that **India is leader of five countries** named as the **"Laundromat" countries**.

❖ The so-called **"laundromat" countries** are countries that **buy Russian oil and sell processed products to European countries**, thus sidestepping European sanctions against Russian Oil.

❖ The five countries (India, China, Turkey, UAE and Singapore) are identified as 'laundromats' for Western countries **by the Centre for Research on Energy and Clean Air (CREA)**.

❖ The **five countries are responsible for 70 percent of Russia's crude oil exports**, the study highlighted.

11.6. ADB launches IFCAP

❖ Asian Development Bank is launching the **Innovative Finance Facility for Climate in Asia and the Pacific (IF-CAP)**, a landmark program which will help ADB accelerate much-needed climate financing.

❖ IF-CAP is a **multi-donor financing partnership facility** with goal of scaling-up finance for accelerated action against climate change in Asia and Pacific.

❖ IF-CAP is a **landmark program of ADB with initial partners** being **Denmark, Japan, Republic of Korea, Sweden, United Kingdom, and United States**.

❖ This is the **first time any multilateral development bank** has adopted a program of this kind.

❖ **Need**
   ✓ Asia and Pacific is **uniquely vulnerable to impacts of climate change**, such as hurricanes, droughts, heat waves, floods, and sea-level rises.
   ✓ **Immense climate financing gap**.

ABOUT ADB

❖ Asian Development Bank (ADB) was **established in the year 1966**, with **head office at Manila** (Philippines).

❖ It was established after a resolution was passed at **first Ministerial Conference on Asian Economic Cooperation** held by **United Nations Economic Commission for Asia and Far East in 1963**.

❖ The aim of the ADB is social development by reducing poverty in the Asia Pacific with inclusive growth, sustainable growth, and regional integration. This is carried out through an 80% investment in the public sector.

❖ Member- 68 members (India- founding member).

❖ **Board of Governors** is the highest policy-making body, which comprises **one representative from each of 68 member nations**.

❖ **Five largest shareholders** –Japan, United States, China, India, and Australia.

11.7. Ekatha Harbour

❖ Defence Minister of India recently laid the foundation stone for the **Maldives** National Defence Forces Coast Guard 'Ekatha Harbour'.

❖ The development of the **Coast Guard Harbour** and repair facility at **Sifavaru** is one of the biggest grant-in-aid projects of India.

❖ It is located at Sifavaru in **Uthuru Thila Falhu (UTF) atoll**, where India is assisting in construction of a naval dockyard.

11.8. Chhatrapati Shivaji Maharaj statue unveiled in Mauritius

❖ Deputy Chief Minister of Maharashtra recently revealed a statue of Chhatrapati Shivaji Maharaj in **Mauritius**.

11.9. PROJECT DANTAK

❖ The Prime Minister recently praised the initiative **Project Dantak** to commemorate the **64th Raising Day**.
❖ Project Dantak was **established in 1961.**
❖ Project Dantak is **an overseas project of the Border Roads Organisation** (BRO) under the Ministry **of Defence**.
❖ It was **tasked to construct the pioneering motorable roads in Bhutan**.
❖ Some notable projects executed by the project include **construction of Paro Airport, Thimphu – Trashigang Highway, Telecommunication & Hydro Power Infrastructure**, **Sherubtse College,** and **India House Estate**.
❖ The **project recruits local workers from Bhutan** as well as **Indian workers from adjoining districts along the India-Bhutan border**.

11.10. ARAB LEAGUE

❖ Arab league members **have readmitted Syria** whose **membership was suspended in 2011**.

ABOUT ARAB LEAGUE

❖ Arab League, also called **League of Arab States (LAS)** is a **regional organization of Arab states** in the **Middle East** and parts of **Africa**.
❖ It is **an intergovernmental pan-Arab organisation of Arab states** in **Middle East** and **North Africa**.
❖ It was **established in Cairo on 22nd March 1945**, following **adoption of Alexandria Protocol in 1944**.
❖ The **founding member states** were **Egypt, Syria, Lebanon, Iraq, Jordan, Saudi Arabia, and Yemen**.
    ✓ Currently it has **22 Arab countries as members** including **Palestine**, which the League regards as an independent state.
❖ It was **established in response to concerns about post-war colonial divisions of territory** and also strong **opposition to emergence of a Jewish state on Palestinian territory**.
❖ HQ- **Cairo, Egypt**.
❖ **Aim**- To strengthen ties among member states, coordinate their policies and direct them towards a common good.
❖ The highest body of the league is the **Council, composed of representatives of member states, usually foreign ministers**, their representatives or permanent delegates.
❖ The **League makes decisions on a majority basis**, but there is no mechanism to compel members to comply with resolutions.
❖ **Each member has one vote on the Council, decisions being binding only on those states that have voted for them**.

11.11. I2U2

❖ Recently, **Saudi Arabia** hosted a **special meeting of the National Security Advisers** (NSAs) of **India, the US, and the UAE**.
❖ The meeting focused on **regional initiatives on infrastructure**.
❖ A **plan to connect Gulf countries via a railway network** and **connect to India via shipping lanes** from "two ports" in the region is highlighted.
    ✓ The idea for the initiative came up **during talks held over the past 18 months by the I2U2**.

ABOUT I2U2

❖ I2U2 is a **new grouping** formed by **India, Israel, the UAE, and the US**, also referred to as the **West Asian Quad**.

- ❖ The I2U2 Quad, works on connecting **"South Asia to the Middle East to the United States in ways that advance economic technology and diplomacy".**
- ❖ **Aim**:
  - ✓ **Expanding economic and political cooperation** in the Middle East and Asia.
  - ✓ To **foster support and cooperation in infrastructure, technology and maritime security**.
- ❖ I2U2 was **initially formed in October 2021** following the **Abraham Accords**.
  - ✓ Abraham Accords **normalized relations between Israel and a number of Arab Gulf countries.**
- ❖ The **first virtual summit** of I2U2 took place in **2022**.
  - ✓ The summit focused heavily on the global food and energy crisis resulting from the conflict in Ukraine.

11.12. SITTWE PORT

- ❖ Recently, **India and Myanmar jointly inaugurated the Sittwe Port** in **Myanmar's Rakhine State**, marking an important milestone in enhancing bilateral and regional trade while also contributing to the local economy of the state.
- ❖ The port's operationalization is expected to provide greater connectivity and leads to employment opportunities
- ❖ Aims to provide an **alternative connectivity route for Mizoram with Indian ports through the Kaladan River in Myanmar**.
- ❖ It includes segments such as shipping from **Haldia to Sittwe port**, **inland water transport from Sittwe to Paletwa via the Kaladan River**, **road transport from Paletwa to the Indo-Myanmar border**, and further road transport to NH.54 in India.
- ❖ The **Sittwe Port is part of the Kaladan Multi-Modal Transit Transport Project**, **funded by the Indian government**, and will play a crucial role in linking India's East Coast to the North-eastern states through waterways and roads.

11.13. STATE VISIT

- ❖ Prime Minister Narendra Modi will travel to the **US for an official state visit** from **June 21 to 24**, where he will be hosted by US President Joe Biden at the White House.
- ❖ This will be Narendra Modi's **first state visit to the US during his nine-year long reign** as prime minister.
  - ✓ The **last state visit to the US** by an Indian was by then **Prime Minister Manmohan Singh** from November 23 to 25, **2009**.
- ❖ While PM Modi has visited the US multiple times during his tenure, **none of the visits were categorised as a state visit**, which is the **highest ranked visit according to diplomatic protocol**.

ABOUT STATE VISITS

- ❖ State visits are **visits to foreign countries** led by a **head of state/government, acting in their sovereign capacity**.
- ❖ They are, **therefore, officially described as a "visit of [name of state]" rather than "visit of [name of leader]"**.
- ❖ **State visits to the US only occur on the invitation of the president** of the United States, acting in their capacity as the head of state.
- ❖ State visits **are typically a few days long and comprise a number of elaborate ceremonies**, subject to the schedule of the visiting head of state.
- ❖ In the US, these **ceremonies include**,
  - ✓ **A flight line ceremony** (where the visiting head of state is greeted at the tarmac after landing),
  - ✓ **A 21-gun salute white house arrival** ceremony,
  - ✓ A **white house dinner**,
  - ✓ Exchange of **diplomatic gifts**,
  - ✓ **An invitation to stay at the blair house** (the us president's guesthouse across the pennsylvania avenue) and
  - ✓ **Flag streetlining**.

11.14. INDIAN OCEAN CONFERENCE (IOC)

❖ The 6th Indian Ocean Conference (IOC) is being held between May 12-13 in **Dhaka, Bangladesh**.
❖ It will discuss aspects strengthening cooperation between the countries of the Indian Ocean region.
❖ The 6th edition of the Conference is being **organised by India Foundation** in association with the **Ministry of Foreign Affairs, Bangladesh** and **S. Rajaratnam School of International Studies**.
❖ **Theme**: "Peace, Prosperity and Partnership for a Resilient Future".
❖ The Conference endeavours to bring **critical states and principal maritime partners of the region together** on a common platform to deliberate upon the prospects of regional cooperation for Security And Growth for All in the Region (SAGAR).
❖ The **first edition** of the Conference was held **in Singapore in 2016**.

11.15. SCO ADOPTS INDIA'S DPI PROPOSAL

❖ **Shanghai Cooperation Organisation** members have adopted India's proposal for Digital Public Infrastructure (DPI).
❖ This highlights **India's growing leadership in digital realm** and its efforts to bridge digital divide and promote more digitally connected region.
❖ Platforms such as **Aadhaar, United Payments Interface (UPI), and DigiLocker are included** in the proposal.
　　✓ **DPI** refers to **a set of shared digital building blocks**, such as **applications, systems, and platforms,** powered by **interoperable open standards or specifications**.

ABOUT INDIA STACK

❖ India Stack is a **set of Application Programming Interface (APIs)** that **allows governments, businesses, startups and developers** to utilise an **unique digital Infrastructure to solve India's hard problems** towards **presence-less, paperless, and cashless service delivery**.
❖ It **consists of three different layers:**
　　✓ **Unique identity** (Aadhaar);
　　✓ **complimentary payments systems** (UPI, Aadhaar Payments Bridge, Aadhaar Enabled Payment Service); and
　　✓ **data exchange** (DigiLocker and Account Aggregator)

Distinct Technology Layers
Presence less layer : Where a universal biometric digital identity allows people to participate in any service from anywhere in the country.
Paperless layer : Where digital records move with an individual's digital identity, eliminating the need for massive amount of paper collection and storage.
Cashless layer : Where a single interface to all the country's bank accounts and wallets to democratize payments.
Consent layer : Which allows data to move freely and securely to democratize the market for data.

11.16. INTERNATIONAL ORGANIZATION FOR MIGRATION

❖ **Amy E. Pope of USA has** been elected the **next Director General of IOM**.
　　✓ She will become the **first woman to head IOM**.

ABOUT INTERNATIONAL ORGANIZATION FOR MIGRATION

❖ IOM is a part of the United Nations system, as a related organization.
❖ IOM was **established in 1951** as **Intergovernmental Committee for European Migration (ICEM)** to help **resettle people displaced by World War II**.
❖ It **was granted Permanent Observer status to UN General Assembly** in **1992**.
❖ It is **leading intergovernmental organization in the field of migration**.
❖ It has **175 member states** (including **India**).
❖ **Publication**
　　✓ **World Migration Report** is published annually by **IOM**.

- ❖ IOM works in **four broad areas of migration management**:
    - ✓ **Migration and development**,
    - ✓ **Facilitating migration**,
    - ✓ **Regulating migration** and
    - ✓ **Forced migration**

11.17. 50 STARTUPS EXCHANGE PROGRAMME

- ❖ The **initial batch of 10 start-up companies** participating in the 50 start-ups exchange program **between India and Bangladesh have returned to Dhaka** after a successful visit to India.
- ❖ The exchange program **facilitates visits between 50 start-ups from Bangladesh and 50 start-ups from India**, aiming to **foster partnerships, expand business relations, share experiences and knowledge**, and promote collaboration among young entrepreneurs.

11.18. LIBYAN PM FATHI BASHAGHA EXPELLED

- ❖ The Libyan Parliament has expelled **Prime Minister Fathi Bashagha,** referring him for investigation.
- ❖ Finance Minister **Osama Hamad** has been **appointed** as his replacement.

11.19. EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT

- ❖ The EBRD HAS pledged **further support for war-torn Ukraine** with plans to increase **its capital by 3 billion-5 billion euros**.

ABOUT EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)

- ❖ The European Bank for Reconstruction and Development (EBRD) is an international financial institution.
- ❖ It was **founded in April 1991 to** support **countries of the former Eastern Bloc** in the process of **establishing their private sectors**.
- ❖ EBRD, as a multilateral development investment bank, uses **investment as a tool in building market economies**.
- ❖ HQ- **London**
- ❖ It provides project **financing mainly for private enterprises**, usually together with other commercial lending partners, **in countries that are committed to, and apply, democratic principles.**
- ❖ It **prioritizes support for countries in Central and West Asia**, and **North Africa**.
- ❖ The organization also **promotes environmentally sustainable development** and **gender equality and promises to be fully transparent**.
- ❖ It **does not finance** stand-alone **gambling facilities**, **substances banned** by international law, selected **alcoholic products**, **defence-related activities** and the **tobacco industry**.
- ❖ It is owned by **69 countries from five continents**, as well as the **European Union** and the **European Investment Bank**.
- ❖ India became the **EBRD's 69th shareholder** when it **joined the Bank in July 2018**.

11.20. RASHT-ASTARA RAILWAY

- ❖ **Russia** and **Iran** have **signed a deal to build an Iranian railway line**, the **Rasht-Astara railway** as part of **International North–South Transport Corridor** (INSTC).
- ❖ It is **intended to connect India, Iran, Russia, Azerbaijan and other countries via railways and sea** – forming a route that **can rival the Suez Canal as a major global trade route**.

ABOUT RASHT ASTRA RAILWAY

- ❖ It is a **162km railway** that will **connect the city of Rasht (Iran) near the Caspian Sea, to Astara (Azerbaijan) on the border with Azerbaijan**.

❖ Transportation along the **new corridor will substantially cut travel times** and **costs and help develop new logistics chains**.

❖ It would **help to connect Russian ports on the Baltic Sea** with **Iranian ports in the Indian Ocean and the Gulf**.

❖ It is an important and strategic step in the direction of **cooperation between Tehran and Moscow**.

ABOUT INTERNATIONAL NORTH–SOUTH TRANSPORT CORRIDOR

❖ It is **a 7,200-kilometer multi-modal transportation route** linking the **Indian Ocean and the Persian Gulf to the Caspian Sea** via Iran and **onward to northern Europe** via St. Petersburg in Russia.

❖ It was launched in **September 2000 in St. Petersburg**, by **Iran, Russia and India** for the purpose of promoting transportation cooperation among the Member States.

❖ Since then, **INSTC membership has expanded** to include **10 more countries – Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Syria, Belarus, and Oman**.

  ✓ Bulgaria has been included as an observer state. The Baltic countries like Latvia and Estonia have also expressed willingness to join.

11.21. MAHATMA GANDHI BUST UNVEILED IN HIROSHIMA

❖ **PM Modi** recently unveiled **the bust of Mahatma Gandhi in Hiroshima, Japan**.

❖ The Mahatma Gandhi bust **serves as a gift from the GoI to the city of Hiroshima**.

❖ The ceremony took place **during the Prime Minister's visit to the G-7 summit**.

❖ **Created by** the renowned Padma Bhushan awardee Shri **Ram Vanji Sutar**, the triumphant statue **stands tall at 42 inches**, crafted from **durable bronze material**.

❖ It has been **positioned beside the Motoyasu River**, which is situated near the iconic A-Bomb Dome.

  ✓ The **A-Bomb Dome** is a well-known site that attracts thousands of people daily, including tourists and locals alike.

OTHER INFO

❖ The US conducted the **world's first nuclear attack** on **Hiroshima on August 6, 1945**, destroying the city and **killing some 140,000 people**.

❖ The **uranium bomb**, nicknamed **Little Boy**, **weighed 9,700 pounds**.

❖ The second **implosion-type plutonium bomb**, nicknamed **Fat Man**, weighed 10,800 pounds and was **dropped on Nagasaki on August 9, 1945.**

11.22. OPERATION KARUNA

❖ India has launched Operation Karuna to aid **those affected by Cyclone Mocha in Myanmar**.

❖ Three ships, INS **Shivalik, INS Kamorta, and INS Savitri**, arrived in Yangon with emergency **relief material** such as **food supplies, tents, essential medicines, water pumps, portable generators, clothes**, and **hygiene items**.

ABOUT CYCLONE MOCHA

❖ **Cyclone Mocha** has been **classified as an extremely severe cyclonic storm by the IMD** and a **'Super Cyclone'** by the global weather website Zoom Earth.

❖ The storm **emerged in the Bay of Bengal** and has been **recorded as the strongest all-season cyclone to form in the Arabian Sea and Bay of Bengal since 1982**, with a wind speed of 277 kmph.

❖ The name **'Mocha' has been suggested** by **Yemen**.

❖ In Myanmar, **Rakhine state is the worst-hit** while in **Bangladesh the cyclone destroyed shelters** in the **world's largest refugee camp at Cox's Bazar** which houses a million Rohingya refugees from Myanmar.

11.23. FIPIC

❖ PM Modi called Small Island nations of the Pacific Ocean as "large ocean states", recently highlighting the importance of the 14 members of the Forum for India Pacific Islands Cooperation (FIPIC).

<table>
<tr><td>PAST SUMMITS
The first FIPIC summit took place in Suva, Fiji.
The second FIPIC Summit was conducted in 2015 in Jaipur, India.</td></tr>
</table>

❖ The **3rd forum for India-Pacific islands co-operation (FIPIC Summit)** was held at **Port Moresby**
   ✓ It was jointly hosted by India with **Papua New Guinea**.

ABOUT FORUM FOR INDIA-PACIFIC ISLANDS COOPERATION (FIPIC)

❖ FIPIC is a multinational grouping for cooperation between **India and 14 Pacific Islands nations**. These are-
   ✓ **Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Samoa, Solomon Islands, Palau, Papua New Guinea, Tonga, Tuvalu** and **Vanuatu.**
❖ FIPIC, or the Forum for India-Pacific Islands Cooperation, was established by Indian Prime Minister Narendra Modi **in November 2014.**
❖ The FIPIC initiative marks **a serious effort to expand India's engagement in the Pacific region**.
❖ A major part of India's engagement with these countries is through development assistance under South-South Cooperation, mainly in **capacity building** (training, scholarships, grant-in-aid and loan assistance) and **community development projects**.

11.24. RAILWAYS HANDS OVER 20 LOCOMOTIVES TO BANGLADESH

❖ Indian Railways has handed over **20 broad gauge (BG) locomotives to Bangladesh** in a bid to strengthen bilateral relations.
❖ A commitment regarding this was made by the Indian government during **Prime Minister Sheikh Hasina's visit to India** in 2019.
❖ The locomotives, **valued at over Rs 100 crore**, will **help augment Bangladesh's railway network and improve passenger and freight train** operations.

11.25. GANHRI DEFERS NHRC ACCREDITATION

❖ For the second time in a decade, the **U.N.-recognised Global Alliance of National Human Rights Institutions (GANHRI)** has **deferred** the **accreditation of National Human Rights Commission** of India.
❖ It cited **objections like political interference in appointments**, **involving the police in probes into human rights violations**, and **poor cooperation with civil society**.
❖ The United Nations' **Paris Principles, adopted in 1993 by the U.N. General Assembly, provide** the **international benchmarks** against which National Human Rights Institutions (NHRI) can be accredited.

ABOUT GANHRI

❖ Established in 1993 as **International Coordinating Committee of National Institutions** for promotion and protection of human rights (ICC).

❖ **Highest deliberative body** is **General Assembly**.

❖ **The Bureau** is the GANHRI's **executive committee**. It is **comprised of 16 members**, **4 from each of GANHRI regional networks** of **Africa, Americas, Asia-Pacific, and Europe**.

❖ HQ: **Geneva, Switzerland**

❖ The **GANHRI consists of sixteen, 'A' status NHRIs**, 4 from each region.
  ✓ 'A' status accreditation also grants **participation in the work and decision-making** of the GANHRI, as well as the work of the **Human Rights Council** and **other U.N. mechanisms.**

❖ The GANHRI, **through the Sub-Committee on Accreditation (SCA)** is **responsible for reviewing and accrediting NHRIs** in compliance with the Paris Principles **every five years**.

ABOUT NHRC

❖ NHRC of India is **an independent statutory body** established **on 12 October, 1993** as per provisions of Protection of Human Rights Act, 1993(later amended in 2006).

❖ HQ- New Delhi.

❖ It is the **watchdog of human rights in the country**, i.e. the rights related to life, liberty, equality and dignity of the individual guaranteed by Indian Constitution or embodied in the international covenants and enforceable by courts in India.

❖ It was established **in conformity with the Paris Principles**.

❖ **With respect to GANHRI accreditation**
  ✓ It has been **accredited as an 'A' Status NHRI** since the beginning of the accreditation process for NHRIs in 1999, which **it retained in 2006, 2011, and in 2017**.
  ✓ In 2016, NHRC's accreditation was **deferred by a year** and later in its recommendations in **2017 GANHRI asked the NHRC to address its lack of diversity** (regarding women representatives from other marginalised social groups).
  ✓ An **amendment to Protection of Human Rights Act in 2019 sought to address these concerns**. It **increased members of NHRC and made chairpersons of National Commission for Backward Classes** and **National Commission for Protection of Child Rights**, and **Chief Commissioner for Persons with Disabilities deemed members of NHRC**.

11.26. EAEU TO SPEED UP FTA WITH INDIA

❖ **Eurasian Economic Union** (EAEU) met recently to speed up efforts on proposed Free Trade Agreement (FTA) with India.
❖ It would **give India market access to resource-rich Eurasia**.
  ✓ **FTA** is a pact between two or more nations to reduce barriers to imports and exports among them.

ABOUT EAEU

❖ The Eurasian Economic Union is **an international organization for regional economic integration.**
❖ It **came into existence on 1ˢᵗ January 2015**.
❖ **Member** states: **Armenia, Belarus, Kazakhstan, the Kyrgyz, and Russia.**
❖ The EAEU **provides for free movement of goods, services, capital, and labor within its borders**.
❖ It pursues, coordinates, & harmonizes the policies in the sectors determined by the Treaty and international agreements within the Union.

11.27. G20 ACWG MEETING

❖ The Anti-Corruption Working Group meeting under the G20 India Presidency concluded recently at the **Tehri, Uttarakhand**.

ABOUT ANTI-CORRUPTION WORKING GROUP

❖ Established in **2010**, the **G20 Anti-Corruption Working Group (ACWG) reports to G20 Leaders** on anti-corruption.
❖ The ACWG is **chaired by the Presidency of the G20** and **a co-chair**.
❖ Its primary goal is to prepare **"comprehensive recommendations for consideration by leaders on how the G20** could continue to make practical and **valuable contributions to international efforts to combat corruption"**.
❖ Thematic focus areas include **public and private sector integrity and transparency, bribery, international cooperation, asset recovery, beneficial ownership transparency, vulnerable sectors** and **capacity-building**.
❖ The group's work is **guided by the St. Petersburg Strategic Framework** and by multi-year action plans.
❖ The **ACWG actively works with the World Bank Group, the OECD, the UNODC, the IMF, the FATF**, as well as with the **Business 20 (B20) and the Civil Society 20 (C20).**

11.28. INDO-PACIFIC ECONOMIC FRAMEWORK

❖ **USA hosted** the **2ⁿᵈ Indo-Pacific Economic Framework for Prosperity** (IPEF) ministerial meeting in **Detroit** recently.

ABOUT INDO-PACIFIC ECONOMIC FRAMEWORK FOR PROSPERITY (IPEF)

❖ IPEF is a **US led framework** for **14 participating countries to solidify their relationships** and engage in **crucial economic and trade matters** that concern the region.
❖ IPEF Member countries: **The United States, India, Australia, Brunei, Fiji, Indonesia, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam**.
❖ The framework is structured around four pillars relating to Trade (Pillar I); Supply Chains (Pillar II); Clean Economy (Pillar III); and Fair Economy (Pillar IV).

Framework	Represents	India's status
Pillar 1	Trade	Observer status
Pillar 2	Supply Chains	Joined
Pillar 3	Clean Economy	Joined
Pillar 4	Fair Economy	Joined

❖ At this meeting, negotiations under the **Supply Chains (Pillar-II)** were substantially concluded while good progress was reported under the other IPEF Pillars.
❖ Highlights
  ✓ The **proposed IPEF Supply Chain Agreement** will have **three new IPEF supply chain bodies to facilitate cooperation on supply chain issues**.
    ➢ The **IPEF Supply Chain Council** will establish a mechanism to develop sector-specific action plans for critical sectors and key goods to enhance the resilience of IPEF partner's supply chains.
    ➢ The **IPEF Supply Chain Crisis Response Network** would establish an emergency communications channel to seek support during a supply chain disruption.
    ➢ The **IPEF Labour Rights Advisory Board** will consist of government, workers and employer representatives on labour rights and sustainable trade and investment.

11.29. ROUTE OF DEVELOPMENT PROJECT

❖ **Iraq** recently unveiled **a $17 billion project named Route of Development project** linking **Europe, west Asia and Asia**.
❖ It is an ambitious **road and rail infrastructure project**.
❖ It also envisage **development of Grand Faw Port** in the **oil-rich south of Iraq linking it to the Turkish border**.
❖ It also envisions **facilitating the transportation of tourists and pilgrims to Shiite holy sites in Iraq** and **the holy city of Mecca in Saudi Arabia for the Haj pilgrimage**

11.30. WOMEN IN UN PEACE KEEPING FORCES

❖ India will **train ASEAN women personnel** under India-ASEAN Initiative for women in UNPK operations to **expand India-ASEAN defence cooperation**.
❖ The training will include **two different initiatives**-
  ✓ **Tailor-made courses for women peacekeepers of ASEAN** member-states **at Centre for UNPK in India**.
    ➢ Under this, **total 20 peacekeepers** would be trained.
  ✓ **'Table Top Exercise'** for **women officers from ASEAN** incorporating facets of **UNPK challenges** to be conducted.
❖ **Women in Peacekeeping Forces**
  ✓ For the first time, **an all-female Formed Police Unit** (FPU) **was deployed in Liberia in 2007**.
  ✓ As per UN, in 2020, out of approximately 95,000 peacekeepers, **women constitute 4.8% of military contingents** and **10.9% of formed police units**.

ABOUT UNPK MISSION

❖ It aims to **assist host countries to transition from situations of conflict to peace**.
❖ It is guided by **three basic principles**:
  ✓ **Consent of parties**;
  ✓ **Impartiality**; and
  ✓ **Non-use of force** except in self-defence and defence of the mandate.
❖ Peacekeeping operations get their **mandates from UN Security Council**.
❖ **International Day of UN Peacekeepers** is celebrated on **29th May every year**.
  ✓ Theme for 2023- **"Peace begins with me."**
❖ **The first UN peacekeeping mission** named the **'United Nations Truce Supervision Organisation',** or **UNTSO, began** operations in **Palestine in 1948 on May 29.**

11.31. CAG INDIA RE-ELECTED AS WHO EXTERNAL AUDITOR

- ❖ **Girish Chandra Murmu**, the **Comptroller and Auditor General of India,** has been **re-elected as the External Auditor of the World Health Organization (WHO)** for a **four-year term from 2024 to 2027**.
    - ✓ The re-election took place **during the 76th World Health Assembly in Geneva**.
- ❖ He was **also elected as the External Auditor for the International Labour Organisation** (ILO) in March 2023.
- ❖ **Additionally**, the CAG of India holds the position of **External Auditor** for other international organizations like **Food and Agriculture Organization, International Atomic Energy Agency**, and **Inter-Parliamentary Union**.
- ❖ **Function** of the External Auditor of the WHO- To conduct **independent audits and provide assurance on the financial statements**, **compliance with regulations**, **effectiveness of operations**, and **risk management within the organization**.

12.   DAYS TO REMEMBER

12.1.   INTERNATIONAL LABOUR DAY

- ❖ International Labour Day, popularly known as International Workers' Day or May Day is observed on **May 1st every year**.

ABOUT INTERNATIONAL LABOUR DAY

- ❖ It is celebrated to commemorate the struggles and sacrifices of the workers' and labours' movement.
- ❖ It is **celebrated in more than 80 countries, including India, Cuba, and China.**
- ❖ People in different parts of the world **hold marches on this day to promote the rights of working-class people** and to protect them from exploitation.

BRIEF HISTORY

- ❖ The tradition of Labour Day **dates back to 19th century America**.
- ❖ On **May 1st, 1886**, workers in **Chicago** organized a strike to **demand an eight-hour workday**.
- ❖ In **1889**, the International Congress of Socialist parties met in **Paris** and **decided to celebrate Labour Day or Worker's Day on May 1**.
- ❖ Thus, the **first International Labour Day** was celebrated on **May 1, 1890**.

INDIAN CONTEXT

- ❖ The **first labour day** was celebrated in India on **May 1, 1923, in Chennai**.
- ❖ The first May Day celebrations were **organized by the Labour Kisan Party of Hindustan**.
- ❖ It is known by various names, such as **Antarrashtriya Shramik Diwas, Kamgar Din** in Hindi, **Kamgar Divas** in Marathi, **Karmikara Dinacharane** in Kannada, **Karmika Dinotsavam** in Telugu and **Uzhaipalar Dhinam** in Tamil.

12.2.   MAHARASHTRA DAY AND GUJARAT DAY

- ❖ Maharashtra Day and Gujarat Day is celebrated on May 1 every year to mark the foundation day of the Indian states.
- ❖ The states ware established on **May 1, 1960**, after the **State Reorganization Act was passed** by the Indian government.
- ❖ A larger **bilingual Bombay state**, was **divided into Gujarat and Maharashtra**.

12.3.   WORLD PRESS FREEDOM DAY-MAY 3RD

- ❖ **World Press Freedom Day** is observed **every year** on **May 3rd**.
- ❖ The occasion emphasizes the importance of unrestricted journalism and advocates for the fundamental right of freedom of speech.

❖ World Press Freedom Day 2023 focuses on the **theme** of **"Shaping a Future of Rights: Freedom of Expression as a Driver for All Other Human Rights,"** which emphasizes the critical role of freedom of expression in safeguarding and promoting other human rights.

12.4. INTERNATIONAL LEOPARD DAY- MAY 3ʳᵈ

❖ A new portal dedicated to leopards (Panthera pardus) was launched by the Cape Leopard Trust (CLT), an active predator conservation working group, **on International Leopard Day (May 3)** to promote and celebrate leopards worldwide.

ABOUT LEOPARDS

❖ The leopard (Panthera pardus) is **one of the five extant species in the genus Panthera**, a member of the **cat family, Felidae**.

❖ The leopard is distinguished by its **well-camouflaged fur, opportunistic hunting behavior, broad diet, strength, and its ability to adapt to a variety of habitats** including savanna and rainforest, grasslands, desert and semi-desert regions of southern Africa, woodlands, and riverine forests.

❖ **Global Distribution**- These cats are distributed across areas, stretching from **sub-Saharan Africa to West Asia and the Middle East**, reaching **South and Southeast Asia and Siberia**.

❖ The **earliest known leopard fossils excavated in Europe are estimated 600,000 years old**, dating to the late Early Pleistocene.

❖ Leopards are **carnivores and their diet includes** animals such as antelopes, gazelles, monkeys etc.

❖ Leopards **attain all required moisture from their food**, so they can survive without drinking water for long periods of time.

❖ Leopards are **closely related to Black panthers** which are leopards, but with **recessive melanistic genes**.

❖ **Threats**- habitat fragmentation, poaching for its skin and teeth, illegal trade etc

❖ Protection status
  ✓ **IUCN Red List: Vulnerable.**
  ✓ **CITES: Appendix-I.**
  ✓ **Indian Wildlife (Protection) Act, 1972: Schedule-I.**

12.5. INTERNATIONAL FIREFIGHTERS DAY 2023- MAY 4ᵀᴴ

❖ **International Firefighters Day,** observed on **May 4ᵗʰ each year,** is a day dedicated to recognizing and honouring the brave individuals who put their lives on the line every day to save others.

❖ **International Firefighters Day was established** in **1999** to pay tribute to the courage and sacrifices made by firefighters worldwide.

❖ Over time, this day has evolved into a global event that celebrates the bravery, resilience, and selflessness of firefighters around the world.

12.6. WORLD THALASSEMIA DAY 2023- MAY 8ᵀᴴ

❖ **World Thalassemia Day** is observed on **May 8ᵗʰ** to raise awareness about the genetic disorder called Thalassemia.

❖ The **theme** for this year's International Thalassemia Day is **"Strengthening Education to Bridge the Thalassemia Care Gap."**

❖ The **Thalassemia International Federation (TIF),** a non-profit organization, established and organized the **first World Thalassemia Day in 1994**.

ABOUT THALASSEMIA

❖ Thalassemia is a **genetic blood disorder** that **affects the production of haemoglobin**, the protein that carries oxygen in the blood.

❖ **Haemoglobin** is made up of two types of proteins, **alpha and beta globin**.

- ❖ Individuals with Thalassemia have **a mutation in one or both of the genes** responsible for producing alpha or beta globin, resulting in reduced or absent production of one or both types of globin.
- ❖ This leads to a shortage of haemoglobin, causing anaemia and other related complications.
- ❖ There are **two main types of Thalassemia**: **alpha Thalassemia** and **beta Thalassemia**.
  - ✓ **Alpha Thalassemia** occurs when there is a problem with the alpha globin gene, resulting in a reduced production of alpha globin.
  - ✓ **Beta Thalassemia**, on the other hand, occurs when there is a problem with the beta globin gene, leading to reduced or absent production of beta globin.
- ❖ The disorder is **most commonly found in populations from the Mediterranean, Middle East, and Southeast Asia**.
- ❖ There is **currently no cure for Thalassemia**, **but** treatment options include **blood transfusions, bone marrow transplants, and gene therapy**.

12.7. WORLD ATHLETICS DAY 2023 OBSERVED ON 7TH MAY

- ❖ **World Athletics Day**, established by the International Amateur Athletic Federation, is celebrated on **May 7th** every year.
- ❖ **Aim**-to promote sports and exercise as a means of preventing diseases and maintaining good health.
- ❖ **Theme** for World Athletics Day 2023 is "**Athletics for All – A New Beginning.**"
- ❖ The **International Amateur Athletic Federation (IAAF)** created **World Athletics Day in 1996** to promote the importance of sports for physical and mental well-being.

12.8. WORLD RED CROSS DAY-MAY 8TH

- ❖ World Red Cross and Red Crescent Day is celebrated annually on May 8th to **honor the birth anniversary of Henry Dunant**, the founder of **International Committee of the Red Cross (ICRC)** and was the **first recipient of the Nobel Peace Prize**.
  - ✓ The **first-ever Red Cross Day** was observed **on May 8, 1948**.
- ❖ The **theme** of **World Red Cross Day for 2023** is "**Everything we do comes from the heart.**"
- ❖ The **Red Cross and Red Crescent Movement** is a worldwide humanitarian network that operates in almost every country across the globe.
- ❖ The network offers aid and support to people in need during various emergencies, conflicts, disasters, and other crises and strives to alleviate human suffering, safeguard human dignity, and promote health, peace, and overall well-being.

12.9. INTERNATIONAL NURSES DAY 2023- MAY 12TH

- ❖ **International Nurses Day** is observed on the **12th May every year** to commemorate the **birth of Florence Nightingale**, the **founder of modern nursing**, who was born on **May 12, 1820**.
- ❖ The **theme for International Nurses Day 2023** is 'Our Nurses. Our Future.'
- ❖ International Nurses Day dates **back to 1974** when the **International Council of Nurses officially declared May 12 as a day to celebrate nurses worldwide**.

12.10. WORLD MIGRATORY BIRD DAY 2023- MAY 13TH

- ❖ **World Migratory Bird Day** is a global event **held twice a year on the second Saturday of May and October**.
- ❖ World Migratory Bird Day 2023 will be officially held on **13 May and 14 October**.
- ❖ In 2023, the **focus** is on **water** and **its importance for these birds**.

12.11. INTERNATIONAL DAY OF LIVING TOGETHER IN PEACE 2023 MAY 16TH

- ❖ **The International Day of Living Together in Peace is celebrated annually on May 16** to encourage peace, tolerance, inclusivity, understanding, and solidarity among individuals and communities globally.

❖ **In 2017, the UN General Assembly designated May 16** as the International Day of Living Together in Peace.

12.12. INTERNATIONAL DAY OF FAMILIES 2023 –MAY 15TH

❖ **International Day of Families is celebrated on May 15th** to raise awareness of the importance of families and their role in society.
❖ The **theme** of International Day of Families 2023 is **'Demographic Trends and Families'.**
❖ The **first** International Day of Families was celebrated in **1994**.

12.13. WORLD TELECOMMUNICATION AND INFORMATION SOCIETY DAY- MAY 17TH

❖ **World Telecommunication Day**, now called **World Telecommunication and Information Society Day**, is observed on **May 17th** under the auspices of the **International Telecommunication Union (ITU)**
❖ The theme for **World Telecommunication and Information Society Day 2023** is **"Enabling the least developed nations through information and communication technologies."**
❖ World Telecommunications Day was established on May 17, 1969, to commemorate the founding of the ITU.

ABOUT INTERNATIONAL TELECOMMUNICATION UNION

❖ It was **originally known as the International Telegraph Union.**
❖ The ITU was **created with the signing of the inaugural International Telegraph Convention** on May 17, 1865, in Paris.
❖ In **1932**, it **changed its name to the International Telecommunication Union.**
❖ It became **a specialized agency of the United Nations in 1947**.
❖ **HQ : Geneva, Switzerland**

12.14. WORLD HYPERTENSION DAY 2023- 17TH MAY

❖ World Hypertension Day 2023 was observed on **May 17th**.
❖ This annual event aims to **raise awareness about hypertension, its causes, and the importance of prevention and management**.
❖ Theme- **'Measure Your Blood Pressure Accurately, Control It, Live Longer.'**

12.15. INTERNATIONAL MUSEUM DAY 2023- MAY 18TH

❖ International Museum Day is celebrated on **May 18th.**
❖ The theme for this year's International Museum Day is **"Museums, Sustainability and Well-being"**.
❖ Museums can contribute to goals of sustainability and wellbeing by **gathering, conserving, and showcasing artifacts that narrate the history of our planet** and **its diverse life forms**.

12.16. WORLD AIDS VACCINE DAY 2023- MAY 18TH

❖ **May 18th** is recognized as **World AIDS Vaccine Day**, an occasion that emphasizes the importance of creating a vaccine for the incurable illness.
❖ This day, also known as HIV Vaccine Awareness Day also pays tribute to the dedicated scientists and researchers who are committed to developing a vaccine to prevent HIV/AIDS.
❖ It was **first observed in 1998**.
❖ According to the WHO, HIV has resulted in the **loss of 40.1 million lives** thus far.

NOTE-

❖ **World AIDS Day** is designated on **1st December every year.**
❖ It is **an international day** observed **since 1988 and** dedicated to raising awareness of the AIDS pandemic

12.17. WORLD BEE DAY 2023 - MAY 20TH

- ❖ World Bee Day is **annually held on May 20th** to **increase understanding and recognition of the vital role bees** and other pollinators play in our ecosystem.
- ❖ United Nations **introduced World Bee Day in 2017** to bring focus to the essential role played by bees and other pollinators in our ecosystems.
- ❖ **May 20th was selected** as the date to **honor the birthday of Anton Janša, a Slovenian beekeeping pioneer and renowned bee expert**.
- ❖ The **theme** for **World Bee Day 2023** is **"Engaging in Pollinator-Friendly Agricultural Production."**

12.18. INTERNATIONAL TEA DAY 2023- MAY 21ST

- ❖ International Tea Day is observed annually on **May 21st** to celebrate the long history and cultural significance of tea around the world.
- ❖ The United Nations General Assembly proclaimed May 21st as International Tea Day in 2019 and **first official U.N. International Tea Day was celebrated on May 21, 2020**.

ABOUT TEA

- ❖ The origins of tea can be traced to ancient China.
- ❖ Tea is a beverage made from the **Camellia sinensis plant**.
- ❖ It is the **world's most consumed drink**, after water, with **over 2 billion cups consumed every day**.
- ❖ It is grown in over 50 countries
- ❖ India is the **second-largest producer of tea globally**.
- ❖ Conditions for tea growth
  - ✓ It is a **tropical and sub-tropical** plant and **grows well in hot and humid climates**.
  - ✓ The **ideal temperature for its growth is 20°-30°**C and temperatures above 35°C and below 10°C are harmful for the bush.
  - ✓ It **requires 150-300 cm annual rainfall** which should be **well distributed throughout the year**.
  - ✓ The **most suitable soil for tea cultivation is slightly acidic soil (without calcium)** with porous sub-soil which permits a free percolation of water.

> - **Darjeeling Tea** also known as **"Champagne of teas,"** worldwide because of its flowery scent **was the 1st GI tag product**.
> - Tea Board of India is in charge of **developing and promoting the tea industry in India**. Headquarters - Kolkata

12.19. WORLD DAY FOR CULTURAL DIVERSITY FOR DIALOGUE AND DEVELOPMENT- MAY 21ST

- ❖ **World Day for Cultural Diversity for Dialogue and Development**, also known as **Diversity Day**, is **annually celebrated on May 21st**.
- ❖ The purpose of the World Day for Cultural Diversity is to celebrate the richness of the world's cultures and to promote intercultural dialogue.

12.20. WORLD METROLOGY DAY 2023- MAY 20TH

- ❖ World Metrology Day is celebrated on **20th May each year**.
- ❖ It is **an annual celebration of the signature** of the **Metre Convention** on **20th May 1875** by **representatives of seventeen nations**.
  - ✓ **Metre Convention** was an **international treaty signed in Paris** which **established the basis for international agreement** on **units of measurement**.
- ❖ The **theme** for World Metrology Day 2023 is **'Measurements supporting the global food system'**.

12.21. WORLD TURTLE DAY 2023- MAY 23RD

- ❖ World Turtle Day is an annually observed **on every May 23rd.**
- ❖ World Turtle Day is marked to raise awareness about the need to protect turtles and tortoises and their nesting sites around the world.
- ❖ World Turtle Day was **founded by the American Tortoise Rescue** (ATR), a nonprofit organization dedicated to the protection and welfare of turtles and tortoises.
- ❖ It was **first celebrated in the year 2000.**

12.22. WORLD SCHIZOPHRENIA AWARENESS DAY- MAY 24

- ❖ World Schizophrenia Awareness Day is **observed every year on May 24th**.
- ❖ It was **first observed in 1984** by the World Health Organization (WHO) and other organizations

ABOUT SCHIZOPHRENIA

- ❖ Schizophrenia is a **chronic, severe mental disorder** that **affects the way a person thinks, acts, expresses emotions, perceives reality**, and relates to others.
- ❖ It **mostly affects young adults** in the productive age group.
- ❖ **One in every 100 people experiences schizophrenia.**
- ❖ **Men are twice as likely to develop** this condition as **compared to women**.
- ❖ Symptoms differ from person to person, but they generally fall into three main categories:
    - ✓ **Psychotic symptoms**- Hallucinations, Delusions, thought disorder, Movement disorder.
    - ✓ **Negative symptoms**- loss of motivation, loss of interest or enjoyment in daily activities, withdrawal from social life, difficulty showing emotions, and difficulty functioning normally.
    - ✓ **Cognitive symptoms**- problems in attention, concentration, and memory.
- ❖ There is **no cure** for schizophrenia. However a variety of **antipsychotic medications are effective in reducing the psychotic symptoms**.

12.23. WORLD NO tobacco day- MAY 31ST

- ❖ **World No Tobacco Day** is annually **observed on May 31**, organized by the **World Health Organization (WHO)** to promote awareness about the detrimental consequences of tobacco usage and advocate for policies aimed at reducing tobacco consumption.
- ❖ The **primary goal** of this initiative is to **educate the public about the health hazards associated with tobacco use, encompassing both smoking** and **smokeless tobacco products.**
- ❖ **Theme** for **World No Tobacco Day 2023** is **"We need food, not tobacco".**
- ❖ The 2023 global campaign aims to **raise awareness about alternative crop production and marketing opportunities** for tobacco farmers and encourage them to grow sustainable, nutritious crops.

13.   APPOINTMENTS

13.1.   KARNATAKA DGP IS NEW CBI DIRECTOR

❖ **Praveen Sood**, the **Director General of Police in Karnataka**, has been appointed as the next director of the Central Bureau of Investigation (CBI).

❖ He will take on the **position for two years** after **Subodh Kumar Jaiswal's term ends on May 25**.

13.2.   NEW UPSC CHAIRMAN

• Sh. **Manoj Soni** was recently sworn in as the **chairman** of **Union Public Service Commission** (UPSC).

• He had joined the **Commission as the member on June 28, 2017**, has been **performing the duties of the UPSC chairman since April 5, 2022**.

• Prior to his appointment in the UPSC, he has served **three terms as Vice-Chancellor** in **universities** in **Gujarat**.

13.3.   HARSH JAIN IS NEW IAMAI CHAIRMAN

❖ The **Internet and Mobile Association of India** (IAMAI) has elected **Harsh Jain**, as its new Chairman.
  ✓ He is the founder of **Dream11**, a leading online fantasy gaming platform.

❖ **Rajesh Magow** of MakeMyTrip has been appointed as the vice chairperson, and **Satyan Gajwani** of Times Internet will serve as the Treasurer.

❖ **Internet and Mobile Association of India** (IAMAI) is a **not-for-profit industry body** registered under the **Societies Registration Act, 1860**.

❖ **Mandate**- to **expand and enhance the online and mobile value-added services sectors**.

14.   PERSON IN NEWS

14.1.   RAJA RAVI VARMA

❖ Raja Ravi Varma's **unfinished works will be unveiled at Kilimanoor Palace** in Kerala on **175th birth anniversary**.

ABOUT RAJA RAVI VARMA

❖ He was **born on April 29, 1848**, in Kilimanoor.

❖ He was an Indian painter, born in Kerala, best known for **uniting Hindu mythological subject matter with European realist historicist painting style**.

❖ He created **over 7000 paintings in his lifetime**.

❖ He was the **first Indian artist to use oil paints**, which were brought to India by the Britishers.

❖ His painting **'Hamsa Damayanti'**, which depicts the story of **King Nala and Damayanti from Mahabharata** won the **first prize at Vienna Exhibition in 1873**.
  ✓ Other major works include **Nair Lady Adorning Her Hair, Shakuntala, woman holding a fruit, Yashoda Krishna** etc.

❖ He was **awarded Kaiser-i-Hind Gold Medal in 1904** by British government.

❖ Raja Ravi Varma was the **first Indian artist to have his works exhibited in Europe.**

❖ He was a **member of the Royal Academy of Arts in London**, making him the **first Indian** to receive this honour.

❖ He was a **pioneer in using art as a means of social reform, promoting education for women and advocating against social evils** like child marriage.

14.2.   RANAJIT GUHA PASSES AWAY

❖ Noted **historian Ranajit Guha has passed away**.
  ✓ He was 100 years old, died at his residence in Austria.
❖ Born on **May 23, 1923** at Barisal in present-day Bangladesh, **Guha's family later shifted to Kolkata**.
❖ He had studied in a school in the city and completed his post-graduation in History from Calcutta University.
❖ One of his well-known books is '**Elementary Aspects of Peasant Insurgency in Colonial India**'

14.3.   KARAIKUDI R RANI PASS AWAY

❖ Legendary **mridangam** artist **Karaikudi R Rani** passed away recently.
❖ Born on September 11, 1945, in Karaikudi in Tamil Nadu, he shifted from vocal training initially to learning mridangam.
❖ He was greatly inspired by mridangam vidwan **Palghat Mani Iyer**.
❖ He received his **first national award at a young age of 18** from the then President S Radhakrishnan.
❖ He was considered as one among the **all-time greatest mridangam vidwans** and had played alongside Carnatic giants like **M S Subbulakshmi** and **D K Pattammal**.

ABOUT MRIDANGAM

❖ Mridangam is a **popular bifacial drum of Carnatic music** and is used as an accompaniment in South Indian Classical music.
❖ It is also known by the name of **maddal or maddalam**.
❖ It is **one of the oldest Indian percussion instruments**, originating 2,000 years ago.
❖ It is made of **leather and jackwood**.
❖ It is held across the lap and played on both ends with the hands and fingers.
❖ **Other variations** of Mridangam are **mrdanga, pakhawaj, or tannumai**.
❖ A similar instrument, the **pakhavaj**, is played in the Hindustani tradition of northern India, as well as in Pakistan and Bangladesh.

14.4.   RABINDRANATH TAGORE

Prime Minister recently paid tributes to Nobel laureate Rabindranath Tagore on his birth anniversary.

ABOUT RABINDRANATH TAGORE

❖ He was a **world-renowned poet, litterateur, philosopher** and **Asia's first Nobel laureate**.
❖ He was born in Kolkata on May 7th, 1861 and was also referred to as **'Kabiguru',** and **'Biswakabi'**.
❖ He was popularly known as **Bard of Bengal**, and **people used to call him Gurudev**.
❖ In **1913** he became the **first non-European to receive the Nobel Prize for Literature**.
❖ He was also **an influential artist and musician**.
  ✓ He wrote **around 2230 songs** and **painted 3000 paintings**. His songs are known as **Rabindra Sangeet**.
❖ Rabindranath Tagore **wrote India's national anthem, Jana Gana Mana**.
  ✓ He **also wrote Amar Sonar Bangla, the national anthem for Bangladesh**
  ✓ **Even, t**he Sri Lankan national anthem was inspired by his work.
❖ He was **awarded a knighthood in 1915**, but he **returned it in 1919** as a protest against the **Jallianwalla Bagh Massacre**.
❖ **Viswa Bharti University**, or **Shantiniketan** was **founded by Rabindranath Tagore**.
❖ He was a **good friend of Mahatma Gandhi** and is said to have given him the **title of Mahatma**.
❖ **Major Works:**

✓ Tagore's most notable work of **poetry is Gitanjali: Song Offerings**, for which he **received the Nobel Prize in Literature in 1913**.
  ➢ **Sonar Tari** and **Manasi;** plays- **Chitra** and **The Post Office** are other major works.
✓ He is credited with pioneering the short story form in Bengali literature, with some of his best work collected **in The Hungry Stones and Other Stories** and **The Glimpses of Bengal Life**.

14.5. ROBERT LUCAS

❖ Chicago University economist and Nobel laureate **Robert E Lucas**, 85, passed away recently.
❖ He won the **Nobel Prize** in **1995** for his **work on rational expectations and efficacy of government intervention in economy**.
❖ He argued that **if people are rational**, which is assumed in microeconomics, **then government intervention will only have an impact on prices and inflation** if **it is unexpected or unpredictable**.
❖ Otherwise, **people adjust their expectations for future inflation as soon as policy is announced** and **it then has no impact on prices as well as the inflation**.
❖ His research was **seen as a direct confrontation with Keynesian economics**, which said that with other factors constant, government spending can lead to a rise in output.

14.6. SARATH BABU

❖ Veteran actor **Sarath Babu** has passed away recently aged 71.
❖ Born as **Sathyam Babu Dixithulu** on July 31, 1951**, in Amudalavalasa in AP**, he adopted Sarath Babu for the screen.
❖ He **started his career in films in 1973 with Rama Rajyam in Telugu.**
❖ He got a big break with K Balachander for the film Nizhal Nijamagiradu in 1978 which was remade into Idi kadha kaadu in Telugu

14.7. MUHAMMAD IQBAL

❖ The Academic Council of **Delhi University** recently passed a motion to remove a chapter on **Pakistan's national poet Muhammad Iqbal**, also known as **Allama Iqbal**, from the political science syllabus.
❖ Born in **1877** in **Sialkot in undivided India**, Iqbal wrote the **famous song 'Saare jahan se achha'**.
❖ He is also known for **giving birth to the 'idea of Pakistan'.**
❖ He was **knighted by King George V** who gave him the **title of "Sir" in 1922**.
❖ His first book, **Asrár-I Khudí (The Secrets of the Self)**, was published in **1915**. It was followed by **Ramuz-e-Bekhudi (The Mysteries of Selflessness)** in **1918**.

15. AWARDS AND HONOURS

15.1. 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**.
- ❖ It was her volume of poetry, **Girls Without Clothes**, that earned her the prestigious Leipzig Book Prize.
- ❖ Stepanova, a Russian-Jewish poet, novelist, and journalist born in Moscow in 1972, has been a vocal critic of Vladimir Putin's administration.

ABOUT THE LEIPZIG BOOK PRIZE

- ❖ The Leipzig Book Prize for European Understanding is a prestigious literary award that has been **awarded annually since 1994**.
- ❖ The prize aims to **promote a greater understanding between European cultures** by recognizing outstanding works of fiction, non-fiction, and poetry that contribute to this goal.
- ❖ The prize is awarded as part of the Leipzig Book Fair in Germany and is presented in **three categories**: **fiction, non-fiction, and translation**.
- ❖ The winner in each category receives a cash prize and a bronze sculpture.

15.2. WORLD PRESS FREEDOM PRIZE

- ❖ Three imprisoned women journalists- **Niloofar Hamedi, Elaheh Mohammadi and Narges Mohammadi** from **Iran** have been **awarded the UNESCO World Press Freedom Prize 2023** for their commitment to truth and accountability.
  - ✓ World Press Freedom Day is observed on 3rd May, every year.
- ❖ The **UNESCO/Guillermo Cano World Press Freedom Prize** was established in **1997**.
- ❖ It is **presented annually to a person, organization or institution** that has made an outstanding contribution to press freedom, and especially when this has been achieved in the face of danger.

15.3. JAYANT NARLIKAR GETS GOVIND SWARUP AWARD

- ❖ Prof Jayant V. Narlikar, a renowned astronomer and founder director of IUCAA , received the **inaugural Govind Swarup Lifetime Achievement Award** from the Astronomical Society of India (ASI).
- ❖ Narlikar is a past president of ASI and was the founding director of the **Inter-University Centre for Astronomy and Astrophysics (IUCAA)**.
- ❖ Prof Narlikar's notable achievements include **his research on the Universe**, his contributions to Astrophysics, particularly the Narlikar-Hoyle theory, and his **pioneering work in cosmology research** in India.

ABOUT THE AWARD

- ❖ The Govind Swarup Lifetime Achievement Award is an award **given by the Astronomical Society of India (ASI)** to recognize individuals who have **made exceptional contributions to the field of astronomy throughout their careers**.
- ❖ The award was **instituted in 2022** and is named after **Govind Swarup, a pioneer in the field of radio astronomy in India**.
- ❖ It carries a **cash prize of Rs. 1,50,000**/-, funded by the **family of Govind Swarup**, as well as **a plaque, and a citation**.

15.4. CHEVALIER DE LA LEGION D'HONNEUR

❖ Recently, **N. Chandrasekaran**, Chairman of Tata Group, was bestowed with **Chevalier de la Legion d'honneur award** for his remarkable contributions in strengthening the trade relationship between India and France.

❖ National Order of the Legion of Honour (French: Ordre national de la Légion d'honneur) is **France's highest civilian award**.

❖ The Legion of Honour **consists of five classes, representing descending ranks**: **Grand Cross, Grand Officer, Commander, Officer, and Knight, or chevalier**.

❖ The Chevalier de la Legion d'honneur was **established by Napoleon Bonaparte in 1802**.

15.5. MoE DISCONTINUES TWO HINDI AWARDS

❖ The **Union Higher Education Ministry** has discontinued the 'Shiksha Puraskar' and the 'Hinditar Bhashi Hindi Lekhak Puraskar'.

❖ The decision is part of the **Union Home Ministry's move to rationalise various awards instituted by the Centre**.

ABOUT 'SHIKSHA PURASKAR'

❖ It was **launched by the Centre in 1992** for encouraging original writings in Hindi.

❖ Under the 'Shiksha Puraskar', **five awards worth ₹1 lakh each is** given every year.

❖ The 'Shiksha Puraskar' is given to **books originally written in Hindi by Hindi and non-Hindi-speaking authors** in various fields of knowledge such as **education policy, method of teaching, Social Sciences, Philosophy, political thought, culture, communication, moral science, science and technology, medical science, law, Political Science, Environment**, and other subjects related to education.

ABOUT HINDITAR BHASHI HINDI LEKHAK PURASKAR

❖ It is an award given to **promote writings in Hindi by writers from non-Hindi speaking areas**.

❖ It **carries a cash prize of ₹50,000**.

15.6. INTERNATIONAL BOOKER PRIZE

❖ **Georgi Gospodinov's** novel, **"Time Shelter,"** translated by **Angela Rodel**, has been awarded the **prestigious 2023 International Booker Prize.**

❖ It marks the **first time a Bulgarian novel has been awarded** this literary honor.

15.7. DAG HAMMARKSJOLD MEDAL

❖ India's Permanent Representative to the United Nations recently received the **Dag Hammarksjold Medals** on behalf of **Head Constables Shishupal Singh** and **Sanwala Ram Vishnoi**.

❖ The Dag Hammarksjold Medal is the **highest honor awarded to UN peacekeepers**.

❖ It is **awarded posthumously to members of peacekeeping operations** as a tribute to the **sacrifice of those who have lost their lives** in peacekeeping operations.

❖ The **medal is named after the second Secretary-General of the United Nations**, **Dag Hammarskjold**.

16. SPORTS

16.1. LUCA BRECEL WINS SNOOKER WORLD CHAMPIONSHIP

❖ **Luca Brecel**, the 28-year-old Belgian snooker player, claimed his first world title after **defeating Mark Selby (England)** in a thrilling final at the Crucible in Sheffield.

16.2. PRAVEEN CHITHRAVEL

❖ Indian athlete **Praveen Chithravel** achieved an extraordinary feat by winning the men's triple jump event **at an athletics meet in Havana, Cuba**, with a **record-breaking national mark of 17.37m**.
❖ He **surpassed the previous men's triple jump national record of 17.30m**, set by **Renjith Maheswary** in **Bangalore in 2016**.
❖ This accomplishment of Praveen Chithravel **also qualifies him for the World Athletics Championships 2023**.

16.3. DOHA DIAMOND LEAGUE

❖ **Neeraj Chopra** clinched the top spot in the javelin event of the Doha **Diamond League with a throw of 88.67 m**.
❖ The Diamond League is **an annual series of elite track and field competitions**.
❖ It was **started in 2010** as a replacement for the previous IAAF Golden League and IAAF World Athletics Final events.
❖ The Diamond League **is organised by World Athletics** (formerly IAAF or International Association of Athletics Federations), the international governing body for athletics.

16.4. MEN'S WORLD BOXING CHAMPIONSHIP-INDIA SHINES

❖ PM has conveyed his heartfelt congratulations to **Deepak Bhoria, Hussamuddin, and Nishant Dev** for their remarkable achievement in the Men's World Boxing Championship.
❖ They have **created history by ensuring India's best-ever haul of three medals** at the prestigious tournament.
❖ **Deepak Bhoria (51kg) won silver**, **Hussamuddin (57kg)** and **Nishant Dev (71kg)** won **bronze medals** in the semifinals.
❖ The Men's World Boxing Championship is being held in **Tashkent, Uzbekistan.**

16.5. ISSF WORLD CUP

❖ **Sarabjot Singh** and **TS Divya** emerged as **champions in the mixed team 10m air pistol** event at the ISSF World Cup in **Baku, Azerbaijan**.
❖ The **ISSF World Cup** is an **international shooting sport competition** organised by the **International Shooting Sport Federation (ISSF).**
❖ The ISSF is the **governing body for the Olympic shooting events** and is responsible for overseeing and promoting the shooting sport on a global scale.

16.6. VUPPALA PRRANEETH IS INDIA'S 82ND GRANDMASTER

❖ V. Prraneeth, a **15-year-old chess player from Telangana**, achieved the title of Grandmaster, becoming the **sixth from the state** and the **82nd in India**.
❖ He secured this **milestone by defeating GM Hans Niemann** from the US during the penultimate round of the Baku Open 2023.
❖ The **first Indian grandmaster was Viswanathan Anand**, who won the **title in 1988**.

17.   SOCIAL ISSUES, HEALTH, EDUCATION

17.1.   YELLOW FEVER

❖ 117 passengers of Indian Origin arriving from **Sudan** are currently quarantined because they were **not vaccinated against Yellow Fever**.

ABOUT YELLOW FEVER:

❖ Yellow fever is often associated with **jaundice**, hence the name yellow.
❖ Yellow fever occurs in 47 endemic countries in **Africa** and in **Central and South America**.
   ✓ Around 90% of cases reported every year occur in Sub-Saharan Africa.
❖ The yellow fever virus is **transmitted by infected mosquitoes**, most commonly from the **Aedes species** – the same mosquito that spreads **the Zika, Chikungunya and Dengue virus**.
   ✓ **Haemogogus mosquitoes also spread it** and are mostly found in the jungle.
   ✓ The disease **cannot spread by contact from one person to another**.
❖ **Symptoms**: Fever, headache, jaundice, muscle pain, nausea, vomiting and fatigue.
   ✓ A small proportion of patients who contract the virus develop severe symptoms and approximately half of those die within 7 to 10 days.
❖ Prevention and Treatment:
   ✓ A single dose of **yellow fever vaccine**, known as **17D**, provides **life-long immunity against the disease**.
   ✓ There is **no specific treatment for yellow fever** but good **supportive treatment of symptoms**, such as dehydration, fever and infection, improves survival rates.

17.2.   FABRY DISEASE

❖ As per reports patients suffering from **Fabry disease have not received any financial help** for treatment despite **availability of ₹50 lakh of financial support for treatment of all rare disease patients** in National Policy for Rare Diseases 2021.

ABOUT FABRY DISEASE

❖ Fabry Disease is a **rare inherited neurological disorder** that occurs when **enzyme alpha-galactosidase-A cannot efficiently break down fatty materials** known as lipids into smaller components that provide energy to body.
❖ It belongs to a group of diseases known as **lysosomal storage disorders**. Lysosomes function as the primary digestive tract of cells.
❖ **Symptoms:** Heart enlargement, Progressive kidney impairment leading to renal failure, Gastrointestinal difficulties, Numbness, tingling, burning or pain in the hands or feet etc.
❖ **Types of Fabry disease**
   ✓ **Classic type**: Symptoms of this type appears during childhood or the teenage years. It may be noticeable as early as age two.
   ✓ **Late-onset/atypical type**: People with late-onset Fabry disease don't have symptoms until they're in their 30s or older.
❖ The **first indication** of a problem may be **kidney failure or heart disease**.
❖ **Treatment**: The patients are treated by **intravenously administered enzyme replacement therapy** (ERT) or **Oral Chaperone Therapy.**

17.3.   MONKEY POX

❖ A team from the **Institute of Organic Chemistry and Biochemistry** in **Prague** deciphered the structure of the **protein methyltransferase from the monkeypox virus**.
❖ It is with the **help of methyltransferase protein** that the **virus escapes human immunity** and causes monkeypox disease.

ABOUT MPOX (MONKEYPOX)

❖ It is a **viral zoonotic disease** caused by **monkeypox virus**, a member of the **Orthopoxvirus genus** in the **family Poxviridae.**

❖ The **first human case of mpox** was recorded in **1970** in the **Democratic Republic of the Congo** (DRC).
  ✓ **Nigeria** witnessed the **biggest outbreak of the disease in 2017.**

❖ There are **two known types (clades) of mpox virus** — one that originated in **Central Africa (Clade I)** and one that originated in **West Africa (Clade II)**.

❖ **Common symptoms** are a skin rash or mucosal lesions, which can last 2–4 weeks accompanied by fever, headache, muscle aches, back pain, low energy, and swollen lymph nodes.

❖ **Transmission**:
  ✓ Mostly transmitted to people from **wild animals such as rodents and primates**.
  ✓ **Human-to-human transmission also** occurs.
  ✓ Monkeypox virus is transmitted from one person to another by contact with lesions, body fluids, respiratory droplets and contaminated materials such as bedding.

❖ There are **no specific treatments for monkeypox** virus infection.
  ✓ Early and supportive care is important to help manage symptoms and avoid further problems.

17.4.   DENGUE

❖ Researchers at the Indian Institute of Science in Bengaluru recently revealed that the **Dengue virus in India has evolved dramatically**.

❖ Study found that the **cases of mosquito-borne viral disease have steadily increased in the last 50 years, predominantly in South-East Asian counties**.

ABOUT DENGUE FEVER

❖ The dengue virus belongs to the family **Flaviviridae** and has **four serotypes: DEN-1, DEN-2, DEN-3, and DEN-4.**

❖ It is **an illness spread by the bite of infected Aedes mosquitos** which also carry viruses like Zika and chikungunya.

❖ The virus is **most commonly found in tropical and subtropical regions**, including Central and South America, Africa, parts of Asia and the Pacific Islands.

❖ Mild dengue fever causes **a high fever and flu-like symptoms**.

❖ The **severe form of dengue fever**, also called **dengue hemorrhagic fever**, can cause serious **bleeding**, a sudden **drop in blood pressure** (shock) and **death**.

❖ It **isn't contagious from person to person except when passed from a pregnant person to their child**.

❖ There is **no specific treatment for dengue**. The focus is on treating pain symptoms.

DENGUE VACCINE

❖ **Dengvaxia or CYD-TDV** has been approved by the US Food & Drug Administration, the first dengue vaccine to get the regulatory nod in the US.
  ✓ Dengvaxia is basically a **live, attenuated dengue virus**.

17.5.   CU-CHAYAN PORTAL

❖ **University Grants Commission** (UGC) has launched **CU– Chayan**, a **unified faculty recruitment portal** for **Central universities**.

❖ The portal would cater to the needs of all the stakeholders in the teachers' recruitment process.

❖ The portal will provide **a common platform for listing of vacancies, advertisements and jobs** across all Central Universities.

❖ The portal makes the **recruitment process completely online starting from application to screening**, with alerts to all the users of the portal.

17.6. FOOD STREET PROJECT

❖ Union Minister of Health and Family Welfare, recently reviewed the **'Food Street Project'**.
❖ It is **aimed at developing 100 healthy and hygienic food-streets** across the country.
❖ The project seeks to encourage safe and healthy food practices, reduce foodborne illnesses and improve overall health outcomes.
❖ To operationalize the food streets, the **National Health Mission will provide assistance of one crore rupees per food street**.
❖ The initiative will be **implemented through NHM in convergence** with the **Ministry of Housing and Urban Affairs**.
❖ These **initiatives include training of food handlers, independent third-party audits, and certification under the Clean Street Food Hub initiative** of the Eat Right India movement.

17.7. RESPIRATORY SYNCYTIAL VIRUS

❖ **US Food and Drug Administration** has approved GSK's **Arexvy**, **world's first RSV vaccine for older adults**.
❖ RSV belongs to the **genus Orthopneumovirus** within the **family Pneumoviridae** and order **Mononegavirales**.
❖ It is **a common respiratory virus** that usually causes mild, cold-like symptoms.
❖ It is characterized by its **highly contagious nature** i.e., it has a high potential to infect people.
❖ Most people recover in a week or two, but **RSV can be serious, especially for infants and older adults**.
❖ It is the **most common cause of bronchiolitis** (inflammation of the small airways in the lung) and **pneumonia** (infection of the lungs) in children younger than 1 year of age in the United States.
❖ RSV is increasingly being recognized as **an important pathogen in older adults**.

17.8. SAKHSHAM: LEARNING MANAGEMENT INFORMATION SYSTEM

❖ The **Ministry of Health and Family Welfare** has launched the SAKSHAM:LMIS.
❖ It has been **developed by the National Institute of Health & Family Welfare** (NIHFW), New Delhi.
❖ Currently SAKSHAM: LMIS is **hosting more than 200 public health** and **100 clinical courses** through online mode.
❖ **Health professionals can register themselves** for these courses on the portal and **get the certification after undergoing requisite training and qualifying the required assessment criteria**.
❖ SAKSHAM is **a dedicated and unified platform** for providing online training and medical education to all health professionals in the country.
❖ It will **ensure inclusive capacity building of health professionals** from **primary health centres located in rural and remote areas all the way up to tertiary care and corporate hospitals** in metropolitan cities.

17.9. MPOX

❖ The World Health Organization (**WHO**) has **ended the global health emergency for Mpox**.

ABOUT MPOX

❖ Mpox is a **viral zoonotic disease most** commonly found in Africa and has infected around 87,000 people in 2022.
❖ Monkeypox virus was **initially discovered in lab monkeys in Copenhagen, Denmark**, in **1958**.
❖ The **very first human cases** were reported to be **discovered in the Democratic Republic of Congo in 1970**.
❖ The **virus is a member of the Poxviridae family** which is genetically similar to other poxviruses.
❖ It **spreads through close contact with an infected individual** and **can be transmitted from animals** too.
   ✓ Transmission can also occur **by inoculation or via the placenta** (**congenital monkeypox**).
❖ **Symptoms** are similar to smallpox including fever, rashes, swollen lymph nodes, headaches etc, although with less clinical severity.
❖ Currently **there is no approved anti-viral treatment** for the disease.

17.10. ENDOSULFAN

❖ The **Supreme Court recently transferred to Kerala High Court** the **responsibility of monitoring the measures taken by the State to provide medical and palliative care** for **victims of endosulfan contamination**.

❖ Advocates representing Kerala govt reported that **₹5 lakh compensation** has been provided to **almost all of the 3700 victims**.

ABOUT ENDOSULFAN

❖ Endosulfan is an **organochlorine insecticide** which was **first introduced in the 1950s** and is commonly **known by its trade name Thiodan**.

❖ It is **sprayed on crops like cotton, cashew, fruits, tea, paddy, tobacco** etc. for control of **pests such as whiteflies, aphids, beetles, worms** etc.

❖ Supreme Court **banned its production and distribution in 2011**.

❖ Endosulfan is a **known carcinogen, neurotoxin and genotoxin** (damages DNA).
  ✓ Health effects include **neurotoxicity**, **late sexual maturity**, **physical deformities**, **poisoning**, among others.

❖ Endosulfan is **listed under both the Rotterdam Convention on the Prior Informed Consent** and the **Stockholm Convention on Persistent Organic Pollutants**.

Rotterdam convention (1998)

It aims to promote **cooperation and responsibility sharing measures** amongst different countries dealing with trade in hazardous chemicals and pesticides.

PIC, Prior Informed Consent is the main feature of the convention.

Stockholm convention (2001)
The convention aims to reduce the concentration of persistent organic pollutants (POPs) which are chemical substances that not only remain in the atmosphere for longer periods but also possess the **ability to bio-accumulate**.
The convention listed 12 POPs as **'dirty dozen'**-aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, mirex, polychlorinated biphenyls, polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, and

17.11. NATIONAL MEDICAL COMMISSION

❖ As per the new regulations by the National Medical Commission (NMC), doctors will now have to get a Unique Identification Number (UID) to be able to practice medicine in the country

❖ The **UID will be generated centrally by the NMC Ethics board.**

ABOUT NATIONAL MEDICAL COMMISSION (NMC)

❖ NMC has been constituted by **National Medical Commission Act, 2019** replacing the **Medical Council of India** (MCI), which was constituted under the Indian Medical Council Act, 1956.

❖ The NMC will function as the **country's top regulator of medical education and medical professionals**.

❖ It grants **recognition of medical qualifications gives accreditation to medical schools, grants registration to medical practitioners**, **monitors medical practice** and **assesses the medical infrastructure** in India.

Organisational structure

It consists of -

❖ **33 members** including Chairman-medical professionals only,
❖ **10 ex-officio members** and
❖ **22 part-time members**.

- ❖ HQ-**New Delhi**
- ❖ **It has** four autonomous boards:
  - ✓ **Under-Graduate Medical Education Board** (sets norms for undergraduate courses),
  - ✓ **Post-Graduate Medical Education Board** (sets norms for post-graduate courses),
  - ✓ **Medical Assessment and Rating Board**
  - ✓ **Ethics and Medical Registration Board** (regulates professional conduct of the doctors and registers them).

17.12. 75/25 INITIATIVE

- ❖ Health Ministry has unveiled the **"75/25" initiative** and **Shashakt Portal**, aiming to revolutionize the management and prevention of non-communicable diseases (NCDs) in India.
- ❖ This ambitious program sets a **target of providing Standard Care to 75 million individuals** with **hypertension** and **diabetes by 2025**.
- ❖ The Ministry **plans to train 40,000 Primary Health Care Medical Officers on the Standard Treatment Workflow** for NCDs through the **Shashakt Portal**.

17.13. LUMPY SKIN DISEASE

- ❖ Rising cases of lumpy skin disease (LSD) in livestock of **Darjeeling and Kalimpong districts of West Bengal** were reported recently.

ABOUT LUMPY SKIN DISEASE

- ❖ It is an **acute to chronic, highly infectious viral disease** that affects cattle.
- ❖ It is caused by the **lumpy skin disease virus (LSDV),** which belongs to the genus **capripoxvirus**, a part of the **poxviridae family** (**smallpox and monkeypox** viruses are also a part of the same family).
- ❖ The **first reported outbreak of LSD** occurred **in Zambia in 1929.**
- ❖ **The Food and Agriculture Organization (FAO)** estimates that its **mortality rate is less than 10%.**
- ❖ Symptoms include -**fever, nodules on the skin, mucous membranes and internal organs**, emaciation, enlarged lymph nodes, oedema of the skin, and sometimes death.
- ❖ It is **not transmissible to humans**.
- ❖ Transmission: LSD is primarily spread between animals through the bite of vectors, such as mosquitoes and flies.
  - ✓ **Indirectly** it can spread from **contaminated equipment**, **movement of infected animals** etc.
- ❖ **Treatment:**
  - ✓ It has **no direct antiviral treatment**.
  - ✓ There are **no specific antiviral drugs for treating LSD**, and treatment primarily involves **supportive care** for the affected animals by **use of antibiotics, painkillers, and wound care sprays.**
  - ✓ As there's no treatment, **vaccines are used to control disease transmission**

OTHER INFO

- ❖ Lumpi-ProVacInd is a **live attenuated vaccine** developed **jointly by ICAR's National Research Centre on Equines** and the **Indian Veterinary Research Institute**, which is targeted to protect cattle against the LSD virus, and **provides 100% protection**.
- ❖ It is **expected to be commercially launched soon**.

17.14. STRENGTHENING TEACHING-LEARNING AND RESULTS FOR STATES (STARS) PROJECT

- ❖ The **Ministry of Education** and the **World Bank** recently held a **workshop on School-to-Work Transition under the Strengthening Teaching-Learning and Results for States (STARS) Program**.

ABOUT STARS

- ❖ It is a **centrally sponsored scheme**.

❖ There are **six Indian states** which are covered under the STARS Project- **Himachal Pradesh, Rajasthan, Maharashtra, Madhya Pradesh, Kerala and Odisha**.

❖ The project is being implemented **through the Samagra Shiksha Scheme.**

❖ The total cost of the project is **approximately Rs. 5,718 crore.**

❖ The World Bank has provided financial support **worth Rs. 3700 crores** through **International Bank for Reconstruction and Development** (IBRD), which is **the lending arm of the World** Bank.

❖ Its focus is on those **elements that will most directly support school education enhancement**.

❖ 2 major components

  ✓ **Strengthening of learning assessment systems**, Establishing **a National Assessment Center (PARAKH)** etc. **at National level**.

❖ **Strengthening Early Childhood Education**, classroom instruction, Vocational education etc. **at state level**.

ABOUT PARAKH

❖ It stands for The **Performance Assessment, Review, and Analysis of Knowledge for Holistic Development.**

❖ PARAKH has been **launched as part of the implementation of the National Education Policy (NEP)-2020** that envisaged a standard-setting body to **advise school boards regarding new assessment patterns** and latest research, and promote collaborations between them.

❖ It will be tasked with **holding periodic learning outcomes tests like the National Achievement Survey (NAS)** and **State Achievement Surveys**.

17.15. THE CHANGATHI PROJECT

❖ Many migrant workers appeared in examination **under Changathi project** of **Kerala Literacy Mission**.

❖ The project has been envisaged by the literacy mission for **teaching migrant labourers to read and write Malayalam** and **Hindi**.

❖ It is designed to **address the exclusion faced by migrant labourers** in society, this program aims to teach them to **read and write Malayalam and Hindi**.

❖ The programme was first **launched on August 15, 2017, in Perumbavoor, Kerala**.

❖ Examination was conducted based **on 'Hamari Malayalam'**, a **textbook specially prepared by the literacy mission** for the purpose.

17.16. RICE FORTIFICATION

❖ India's pilot studies on rice fortification showed that nutritional anaemia could be reduced, with a **significant drop in the prevalence of anaemia among schoolchildren**, according to a United Nations report.

Fortification is the practice of deliberately increasing the content of an essential micronutrient, vitamins and minerals (including trace elements) in food to improve its nutritional quality and provide a public health benefit with minimal risk to health.

The fortification factor **does not last for more than 45 days**, so it isn't advisable to store fortified rice for long

ABOUT RICE FORTIFICATION

❖ Fortification of rice is the **process of adding Fortified Rice Kernels (FRK)**, containing **FSSAI prescribed micronutrients (Iron, Folic Acid, Vitamin B12)** to **normal Rice in the ratio of 1:100** (Mixing 1 Kg of FRK with 100 Kg custom milled rice).

❖ According to the FSSAI norms, 1 kg fortified rice shall contain **iron (28mg-42.5mg)**, **folic acid (75-125 microgram)** and **Vitamin B-12 (0.75-1.25 microgram)**.

❖ Rice may also be fortified with **zinc** (10 mg-15 mg), **vitamin A** (500-750 microgram RE), **vitamin B-1** (1 mg-1.5 mg), **vitamin B-2** (1.25 mg-1.75 mg), **vitamin B-3** (12.5 mg-20 mg) and **vitamin B-6** (1.5 mg-2.5 mg) per kg.

❖ Fortified rice is **almost similar to traditional rice** in terms of **taste, aroma and texture**.
❖ The fortification process **takes place during milling of rice** in rice mills.
❖ It is found to be **a cost-effective and complementary strategy** to increase vitamin and mineral content in diets with low turnaround time (TAT) and a step towards nutritional security.
❖ **Rice is chosen** because it is one of India's major staple foods, **consumed by about two-thirds of the population**.

17.17. DENGUE

❖ **Indian Council of Medical Research (ICMR)** has recently confirmed that **dengue's infection geography** has expanded **from eight States in 2001 to across the country** in the last two decades, with an 11-fold increase and repeated outbreaks.
❖ Dengue has now breached the **country's last bastion, Ladakh.**
❖ It is **now endemic in more than 100 countries**, and **according to the World Health Organization half of the world population now at risk**.
❖ **Reasons**-The **enhanced risk of dengue** has been **propelled by several factors**, including **climate change, urbanised environments** that are temperature controlled, and **increased travel.**

ABOUT DENGUE

❖ Dengue is a **mosquito-borne tropical disease** caused by the **dengue virus (Genus Flavivirus)** transmitted by female mosquitoes, mainly of the species **Aedes aegypti** and to a lesser extent, **Aedes albopictus**.
  ✓ These mosquitoes are **also vectors of the chikungunya, yellow fever and Zika viruses**.
❖ There are 4 distinct, but closely related, serotypes of the virus that cause dengue (DEN-1, DEN-2, DEN-3 and DEN-4).
  ✓ Serotypes are **separate groups** within a **species of microorganisms that all share a similar characteristic.**
❖ Symptoms include **sudden high fever, severe headaches, pain behind the eyes, severe bone, joint, and muscle pain**, etc.
❖ There is **no specific medicine to treat dengue infection**.

17.18. DISEASE X

❖ After announcing that that **COVID-19 was no longer a global health emergency**, the **World Health Organization** (WHO) warned that **"Disease X" can lead to an "even deadlier" pandemic.**

ABOUT DISEASE X

❖ Disease X is **not real yet** and has **not been identified in any human beings**.
❖ It represents **a hypothetical, unknown pathogen** that could cause **a future epidemic**.
❖ The **name was adopted by the WHO in 2018** on their shortlist of **blueprint priority diseases** to ensure that their planning was sufficiently flexible to adapt to an unknown pathogen.
❖ Disease X **could also be zoonotic,** meaning that it could be caused by germs jumping from animals to humans.

PRIORITY LIST

❖ Apart from Disease X, **Covid-19, Crimean-Congo haemorrhagic fever, Ebola virus disease, Marburg virus disease, Lassa fever, MERS-CoV and SARS, Nipah and henipaviral diseases, Rift Valley fever and Zika** are other diseases **on WHO's priority diseases list**.

18. MISCELLANEOUS

18.1. RETURN TO ROOTS

❖ For the first time in the history of Ladakh the **Australian High Commission in India** has announced its Government Grant for a Project in Kargil.
❖ The **project "Return to Roots"** aims to **integrate traditional knowledge with the current school science curriculum** in alignment with the goals of the National Education Policy which includes increasing scientific engagement among school children of the tribal background.

18.2. RIGHT TO WALK

❖ **Punjab** has become the **first state to implement the 'right to walk'**.
❖ Right to walk **make it mandatory for all road-owning agencies, including the NHAI, to provide footpaths** and **cycle tracks** on the road.

18.3. VIGYAN VAIBHAV PORTAL

❖ **Vigyan Vaibhav** portal is dedicated to **seventy-five Indian scientists**.
❖ It **identifies the contribution of women and men** in equal numbers.
❖ It is **developed by Indira Gandhi National Centre for the Arts (IGNCA)**.
  ✓ The Indira Gandhi National Centre for the Arts (IGNCA) was **established in 1987** as an **autonomous institution under the Ministry of Culture**, as a centre for research, academic pursuit and dissemination in the field of the arts.

18.4. RUSKIN BOND'S A NEW BOOK 'THE GOLDEN YEARS'

❖ Indian author Ruskin Bond's book titled **"The Golden Years: The Many Joys of Living a Good Long Life"** was released on 19th May 2023, Bond's 89th birthday.
❖ The book is published by HarperCollins India.
❖ "The Golden Years" **focuses on Bond's experiences during the 60s, 70s and 80s**.
❖ The book is a collection of essays and reflections on aging.

18.5. PATCH REPORTING APP

❖ **Uttarakhand govt**. recently inaugurated the innovative **"Patch Reporting App"**.
❖ Developed by **the Public Works Department**, this user-friendly application **aims to address the persistent issue of potholes on the state's roads**.
❖ It offers a **convenient platform for citizens to register complaints and provide detailed information about encountered potholes**.
❖ **Users can capture photographs of the potholes** to supplement their reports.

19. HIMACHAL NEWS

19.1. SERVICES OF CONTRACTUAL, DAILY WAGE EMPLOYEES REGULARISED

❖ The state government has decided to regularise the services of the **contractual employees who have completed two years of service on March 31, 2023**.

❖ Additionally, those who are **due to complete two years of service by September 30** will also **be regularised** after the said date.

❖ Besides, the government has also decided to **regularise the services of daily-wage workers, who completed four years of service on March 31, 2023.**

❖ Those who are due to complete four years of services by September 30 will also be regularised accordingly.

19.2. YOL IN HIMACHAL SHEDS TAG OF CANTONMENT TOWN

❖ The picturesque **Yol** in **Kangra district of Himachal Pradesh** has shed its tag as a **cantonment town** with the defence ministry effecting the change and making provisions for the merger of civil areas with the local municipality.

❖ The **military area within the cantonment will be converted into a military station** and the **civil area will be merged with the municipality**.

❖ The move will prove **beneficial to all stakeholders** and that **civilians**, who until now were not getting access to welfare schemes of the state government through the municipality, will now be able to avail them.

19.3. SOLAN FAILS TO SECURE AMRUT FUNDING

❖ **Solan** has failed to find central grant under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) even as **eight other urban local bodies (ULBs) have received Rs 154.07 crore for augmenting water supply works**.

  ✓ These towns are **Mandi, Theog, Rajgarh, Chamba, Hamirpur, Sunni, Rampur and Dalhousie.**

❖ While tendering process was underway in the eight civic bodies for executing the water supply projects, Solan was struggling to secure funds to augment its water supply as well as its sewage management scheme.

19.4. RS 2-CRORE GRANT RELEASED FOR DARLA HELIPORT

❖ The government has proposed to construct **a heliport at Darla village in Sujanpur constituency** of **Hamirpur**.

❖ It is learnt that the state Tourism Department has **released a sum of Rs 2 crore** to begin construction of the **heliport on a hill on the banks of the Beas**.

❖ Sources revealed that the Public Works Department had submitted a proposal of Rs 5 crore for the construction of the helipad.

19.5. HIMACHAL APPROVES MONTHLY INCENTIVE OF RS 1,500 FOR WOMEN OF SPITI

❖ The Himachal Pradesh Cabinet, under the leadership of CM, has announced a monthly incentive of **Rs 1,500 for women in the Spiti Valley**.

❖ The incentive will be **provided to all eligible women, including Buddhist nuns, above the age of 18 years**.

❖ This initiative is **called the Indira Gandhi Mahila Samman Nidhi**.

19.6. HIMACHAL GOVT NOTIFIES RULES FOR OPS IMPLEMENTATION

❖ The state government notified the much-awaited rules for the implementation of the old pension scheme (OPS) for its employees.

✓ The Congress government had restored the OPS in its first Cabinet meeting after assuming power.

❖ The OPS **will cover 1.36 lakh state government employees**, who at present come under the New Pension Scheme (NPS).

❖ As per the notification issued by issued by Chief Secretary ,the new rules, called Central Civil Services (Pension) (HP Fourth Amendment) Rules, 2023, would come into force retrospectively from April 1.

❖ The **employees appointed between May 5, 2005, and March 31, 2023**, who were covered under the New Pension Scheme (NPS), would now be covered under the OPS.

❖ It states that the new rules shall also apply to government servants, who had retired or died between May 5, 2005, and March 31, 2023.

❖ Retired government servants or their eligible family members can exercise their option for pensionary benefits under these rules from April 1, 2023.

19.7. PROJECT CHAMBYAL

❖ Many artists and craftsmen specialising in Chamba "rumal", "thal", "chappal", miniature painting, sculpture, wood and stone art continue to earn their livelihood through traditional crafts, thereby preserving the glorious traditions of the region.

❖ **To preserve and promote the rich art and culture** of Chamba, the district administration has started the **"Chambyal" project**.

❖ Art and craft societies have been registered to give practical shape to the project.

❖ Famous art products of the district like **Chamba "rumal" and Chamba "chappal" have received the Geographical Indication (GI) tag under the GI Act, 1999**.

❖ On the initiative of the district administration, **the Himachal Pradesh Patent Information Centre, Shimla**, has completed the process under the GI tag for Chamba metal craft as well.

19.8. CENTRE FIXES MINIMUM IMPORT PRICE FOR APPLE

❖ Providing a **major relief to the apple growers of Himachal Pradesh and Jammu and Kashmir**, the Centre has fixed **Minimum Import Price (MIP)** for apple by amending its import policy.

❖ As per the **notification issued by the Director General of Foreign Trade, Department of Commerce,** "Import of apples under ITC (HS) 08081000 is prohibited wherever the CIF import price is **less than or equal to Rs 50 per kilogram**." The CIF import price **comprises cost, insurance and freight**.

19.9. PALAMPUR INSTITUTE TO WORK WITH ISRO CENTRE

❖ The **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)**, **Palampur**, is collaborating with the Space Application Centre (SAC) of the Indian Space Research Organisation (ISRO) to study the impact of climate change on pine forests in the state.

❖ The **PhenoMet Station** consists of **a time-lapse camera and an automated weather station**, which will record pictures of the surrounding **pine forests every 30 minutes** and record **various weather parameters** such as air temperature, relative humidity, rainfall, active photosynthetic radiations, etc throughout the year.

19.10. HIGHEST IN NORTH INDIA, 2.2% CANCER RATE IN HIMACHAL

❖ Chief Minister has recently said that that the cancer prevalence rate in **Himachal was 2.2 per cent against the national average of 0.6 per cent**, which was very worrisome.

❖ He added that his government would make efforts to provide best cancer treatment facilities as around 8,500 cases were detected in the state every year.

❖ CM held a meeting with prominent oncologist Dr GK Rath, Prof Emeritus, Department of Radiation and Oncology and Head of the National Cancer Institute, (NCI), AIIMS, New Delhi.

19.11. MONAL COUNT RISES TO 176 AT KULLU NATIONAL PARK

❖ The population of the **Himalayan monal**, the **former state bird**, **has risen to 176 at the Great Himalayan National Park (GHNP), a UNESCO world heritage site, in Kullu district**, revealed a survey conducted by the park authorities for 2022-23.
  ✓ Last year, the strength of the bird was 168, while it was **merely 90 in 2015-16**.
❖ The Himalayan monal is **continuously under threat from poachers** because of its **colourful crest**, which people use to decorate their caps.
  ✓ However, the use of the crest of the bird on the cap is prohibited under law.

ABOUT HIMALAYAN MONAL

❖ Himalayan monal (Lophophorus impejanus) is widely distributed **from Afghanistan to northeast India**.
❖ It is the **national bird of Nepal**, where it is known as the danphe or danfe.
❖ It is the **state bird of Uttarakhand**.
❖ IUCN status- **Least Concern; CITES- Appendix 1**

19.12. HIM DATA PORTAL LAUNCHED

❖ The need of the hour is that **all state government agencies should collaborate, connect, and respond to the needs of the public** more efficiently by accessing accurate and real-time data, the CM said.
❖ The Chief Minister also launched the **'Him Data Portal'** a **common digital platform to integrate data of all organisations for the deliverance of welfare schemes** and to serve the public better.
❖ **From July 2023**, the state government would start the **Him Parivar project**, which would give a **special digital identity to the people of the state**.

19.13. SHIMLA MAYOR

❖ **Surender Chauhan,** councillor of Ward no 28, was **elected unopposed as mayor of Shimla**.
❖ **Uma Kaushal** was elected unopposed as **deputy mayor**.

19.14. CBI DIRECTOR HAILS FROM KANGRA

❖ A 1986-batch IPS officer **Parveen Sood**, who was appointed the **new Director of the Central Bureau of Investigation** (CBI) by the Government of India, hails from **Garli Pragpur in Kangra district**.

19.15. DY CM GETS COOPERATION DEPARTMENT

❖ Deputy Chief Minister **Mukesh Agnihotri** was recently given the charge of Cooperation Department, in addition to his three current portfolios.
❖ He would now look after **Jal Shakti, Transport, Language, Art and Culture and Cooperation departments**.

19.16. HPCL TO SET UP RS 500 CR ETHANOL PLANT IN UNA

❖ Chief Minister recently said that Hindustan Petroleum Corporation Limited (HPCL) would set up an **ethanol plant at Jeetpur Baheri** in **Una district at a cost of Rs 500 crore**.
❖ CM was presiding over a meeting to discuss **various aspects of the construction of the proposed ethanol plant on 30 acres**.

19.17. CENTRE OF EXCELLENCE IN HAMIRPUR

- Anurag Thakur, Union Minister for Information and Broadcasting, recently said that **a centre of excellence would be set up in Hamirpur** to hone **young sporting talents and promote sports**.
- The centre of excellence, which will spot young talent and prepare Olympiad-level sportspersons, will be established in Hamirpur in the next two years.

19.18. AI RESEARCH CENTRE IN SHOOLINI VARSITY

- A **centre for research on extended reality (XR) and artificial intelligence (AI)** was inaugurated at **Shoolini University** recently.
- The students would have an opportunity to work on live, cutting-edge projects during their course of study through collaborations with industry partners.

19.19. STATE'S FIRST WEB-3 METAVERSE EVENT HELD

- The state's **first Education Web-3 Metaverse event** was organised at **Government Senior Secondary School, Kaloh, in Una district** wherein students from 15 nearby schools were given a hands-on experience of the **technology used in virtual reality (**VR).
- The event was held **under the aegis of the district administration and two technical agencies** — **Cruise Fare** and **ICP India Hub**.
- **Metaverse**, a vision of the computer industry, will be the next iteration of the Internet, which will be **single, shared, immersive and have a 3D virtual space**.
- The **technology requires interfacing different hardware**, including **computer, Internet, augmented reality (AR) glasses, virtual reality (VR) headset, gloves and wristbands**.

19.20. KANGRA TEA

- Himachal Pradesh's unique **Kangra tea** has become the **second product of the country to get registered** with the **European Commission (EC) as a protected Geographical Indication (GI)**, paving the way for its sale in European countries.
- The registration was an important **tool to recognise the quality, genuineness, and reputation of the product** in the European markets.
- It would boost the sale of Kangra tea and would eventually **benefit tea growers in Palampur, Baijnath, Kangra, and Dharamshala in Kangra district, Jogindernagar of Mandi district and Bhattiyat area of Chamba district.**
- The **Kangra tea** — known for its unique taste and fragrance, attributed to its **abundant pyrazine contents** — was **given GI status in the year 2005** by the **Registrar of Geographical Indicators, Chennai**.

19.21. GOA STUDENTS VISIT TEMPLES IN MANDI

- A delegation of 45 students of various higher education institutions from Goa state, including IIT Goa, visited different temples like **Bhutnath temple, Trilokinath temple, Panchavakra temple** and a in the town as part of the second phase of the government's ambitious cultural and educational endeavour **'Ek Bharat Shreshtha Bharat YuvaSangam' programme**.
- The nodal institute of Goa **is IIT Goa**, while the nodal institute of Himachal Pradesh is **IIT Mandi.**
- The programme gives an opportunity to the students of different states to know about the culture and tradition of different states where they visit under this programme.

19.22. BANTONY CASTLE

- The heritage **structure of Bantony Castle** is all set to become a major tourist attraction as the Department of Language, Art and Culture today **started a light-and-sound show**, detailing the historical importance of the state capital, **Shimla**.
- The **125-year-old Bantony Castle complex**, located on the road connecting The Mall to the Kalibari temple, was the **summer palace of the erstwhile Maharaja of Sirmaur**.

19.23. HAR SHIKHAR TIRANGA

- ❖ **Mountaineers of the National Institute of Mountaineering and Adventure Sports (NIMAS) in Dirang** in Arunachal Pradesh are on **a unique expedition named Har Shikhar Tiranga**.
- ❖ The mission is **to hoist the national flag on the highest point of every state of India for the first time**.
- ❖ It is a campaign **under the aegis of the Azadi Ka Amrit Mahotsav** to take the tricolour to all the states of the country and hoist it on the summits to mark the 75th year of independence and to commemorate India's G20 presidentship.
- ❖ The team summited **Mt Purgyal or Reo Purgyal (6,816 m) in Himachal Pradesh** recently.
  - ✓ It is located in **Kinnaur district.**
- ❖ It is **at the LAC** and has **been climbed for the first time in May**.
  - ✓ The peak is **usually climbed in July or August when snow is less**.

19.24. SHANAN PROJECT

- ❖ An inter-state dispute is imminent between HP and Punjab Government regarding Punjab Government's Shanan project in Mandi.
- ❖ **HP govt**. says that the **99-year-old lease of the project and its assets** given **to Punjab** by the then **ruler of Mandi, Raja Joginder Singh Bahadur**, was to **come to an end on March 2, 2024**.
- ❖ **Punjab government** on the other hand says that **hydro project was given to Punjab as per Section 48, sub-clause 1 of the Punjab Reorganisation Act**.
- ❖ The ending of 99-year-old lease that HP Government is referring to, becomes null and void after Independence.
- ❖ The **lease was made in the year 1935** before India became an independent nation. This is an already settled issue with the Government of India admitting on two occasions that the project belongs to Punjab.

ABOUT THE PROJECT

- ❖ The Shanan project (**Uhl river hydroelectric project**) is believed to be worth Rs 1,600 crore and it generates **110 MW of power**.
- ❖ When it was **built in 1932**, it had **an installed capacity of 48 MW**.
- ❖ This was **enhanced by the Punjab Government in 1982**.

19.25. CENTRE OKAYS 57.10 HECTARES FOR CUHP CAMPUS IN DHARAMSALA

- ❖ The empowered committee of the **Union Ministry of Environment and Forest has cleared the transfer of 57.10 hectares of forestland** in **Jadrangal area of the Dharamsala Assembly constituency** for the construction of the **north campus** of the **Central University of Himachal Pradesh (CUHP)**.

19.26. INTERPRETATION CENTRE AT GREAT HIMALAYAN NATIONAL PARK

- ❖ An **Interpretation Centre** has been developed in the **Sainj valley of the Great Himalayan National Park (GHNP) at Sainj Ropa**.
- ❖ It gives **information about the flora and fauna** found in the GHNP.
- ❖ It will **focus on orchids and medicinal plants, along with birds and beautiful locations**.
- ❖ All **four state symbols** — the **state bird, Western tragopan**; **state animal, snow leopard**; **state flower, pink rhododendron**; and **state tree, deodar** — have been **showcased** with their descriptions.
- ❖ **All four state symbols are found in this UNESCO World Heritage Site.**

19.27. HP HIGH COURT GETS NEW CHIEF JUSTICE

❖ **Justice Mamidanna Satya Ratna Sri Ramachandra Rao** was sworn in as the **Chief Justice of the Himachal Pradesh High Court** recently.

❖ **Governor Shiv Pratap Shukla administered him the oath of office** at the Raj Bhawan here in the presence of Chief Minister Sukhvinder Singh Sukhu.

❖ The Chief Secretary conducted the proceedings of the oath-taking ceremony and read out the **Warrant of Appointment issued by the President of India**.

19.28. Piplu fair inaugurated

❖ The three-day district-level **Piplu fair** in **Kutlehar Assembly of Una** was inaugurated.

❖ The fair is organised **on the occasion of Nirjala Ekadashi**.

❖ Devotees from Una, Hamirpur, Kangra and Bilaspur district **pay reverence to Nar Singh deity** at the temple located in Piplu village.

❖ They also offer a part of their agriculture produce to the deity, seeking blessings for good health and prosperity.

CivilsTap Himachal

PAID INITIATIVES

HPAS Offline/Live Batch
18th May 2023
Fee 65,000/-

HPAS Online Course
26th April 2023
Fee 25,000/-

NT/Allied Offline/ Live Batch
13th May 2023
Fee 38,000/-

HP TGT Non-Medical Online Course
22nd May 2023
Fee 6000/-

HP TGT Medical Online Course
22nd May 2023
Fee 6000/-

HP TGT Arts & Commerce Online Course
22nd May 2023
Fee 5000/-

HP Patwari Online Course
23rd April 2023
Fee 3000/-