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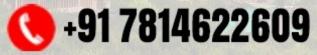
CivilsTap Himachal

Current Affairs

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For HPAS & other Competitive Exam in Himachal Pradesh

Prelims

NEWS

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1. POLITY

1.1   16TH FINANCE COMMISSION

❖ The **Government**, with the **approval of the President of India**, has constituted the **Sixteenth Finance Commission**, in pursuance to **Article 280(1) of the Constitution**.

❖ **Former NITI Aayog vice chairman and Columbia University professor Arvind Panagariya** has been appointed as the **chairman of the Sixteenth Finance Commission.**

❖ **Ritvik Ranjanam Pandey**, former joint secretary in the Department of Revenue, is appointed as the **panel's secretary.**

❖ **31st October 2025** is the **deadline set** for the **Commission to submit its recommendations**, so that they can be **incorporated in the Budget exercise for 2026-27.**

❖ As per the **terms of reference of the Sixteenth Finance Commission**, apart from **recommendations on the tax sharing formula between the Centre and the States** for the **five-year period beginning April 2026**, it has been **tasked with-**
  ✓ **reviewing the present arrangements for financing Disaster Management initiatives** and
  ✓ **mooting measures to augment States' consolidated funds** in order to **supplement resources available with Panchayats and Municipalities.**

ABOUT FINANCE COMMISSION

❖ Finance commissions are **independent constitutional bodies** with a key role to play in the **division of the Centre's net tax proceeds** between Central and state governments keeping in mind the fiscal needs of the states.

❖ **All central taxes other than those meant for states** and the **specific surcharges and cesses levied by the Centre form part of this divisible pool of tax revenue**.

❖ The **finance commissions** decide the **extent of the Centre's revenue to be shared with the states** and the **formula** for dividing it among states.

❖ The commission is a **key pillar of fiscal federalism.**

1.2   STATE DAY AND STATE SONG FOR WEST BENGAL

❖ The West Bengal government has declared **'Poila Boisakh'**, the **first day of the Bengali New Year,** which usually falls on April 14 or 15, as the **State Day.**

❖ The State Day will be called **'Bangla Divas'.**

❖ Also **'Banglar Mati Banglar Jal'**, written by **Nobel laureate Rabindranath Tagore** as the **State Song.**

1.3   REGISTERED UNRECOGNIZED POLITICAL PARTIES

❖ The **Election Commission of India** has revised **rules for allocating common symbols to Registered Unrecognized Political Parties**, subject to certain conditions.

❖ ECI announced that **RUPPs which have**

> ECI allots symbols to political parties under the Election Symbols (Reservation and Allotment) Order, 1968.

  ✓ **submitted their contribution reports and audited annual accounts for the past three financial years,**
  ✓ as well **as election expenditure statements** for their last two contested elections,
  ✓ will be **eligible for 'concession of common symbol allotment'.**

❖ A **newly registered party**, a **political group that has not attained a certain vote percentage or general elections to be recognised as a state/national party**, or one that has **not contested elections since its registration, are considered RUPPs.**

NOTE

- ❖ The **Election Commission of India** (ECI) **registers political parties for the purpose of elections** and grants them **recognition as national or state parties on the basis of their poll performance.**
- ❖ The **other parties** are **simply declared as registered-unrecognised parties.**

1.4   DISQUALIFICATION OF MLAS

- ❖ **Maharashtra Assembly Speaker** Rahul Narwekar **rejected disqualification petitions filed against 30 Shiv Sena MLAs from both factions** citing a **lack of valid grounds.**

ANTI DEFECTION LAW

- ❖ The anti-defection law punishes **individual Members of Parliament (MPs)/Members of the Legislative Assembly (MLAs) for leaving one party for another.**
- ❖ It was added to the Constitution by **Constitution (52nd Amendment) Act** as the **Tenth Schedule in 1985** in order to **bring stability to governments by discouraging political defections.**
- ❖ **Grounds of Disqualification**
  - ✓ If an **elected member voluntarily gives up his membership of a political party** or If he **votes or abstains from voting in such House contrary to any direction issued by his political party** and such act has **not been condoned by the party within 15 days.**
  - ✓ If any **independently elected member joins any political party.**
  - ✓ If any **nominated member joins any political party** after the **expiry of six months from date on which he takes seat.**
- ❖ However, the law **allows a political party to merge with or into another party** provided **at least 2/3rd of its legislators is in favour (by 91st Amendment Act).**
- ❖ The **decision on questions as to disqualification on ground of defection** are referred to the **Chairman or the Speaker of such House who has absolute power in deciding such cases.**
  - ✓ However the **Speaker's decision under anti-defection law is subject to Judicial review (Kihoto Hollohan** case)

1.5   NORTHEASTERN COUNCIL (NEC)

- ❖ **The 71st plenary session of the North Eastern Council (NEC) was recently held in Shillong.**

ABOUT NORTH EASTERN COUNCIL

- ❖ NEC is **not a constitutional body**, but a **statutory organization established under the North Eastern Council Act, 1971**, as amended in 2002.
- ❖ It is the **nodal agency for the social and economic development** of the **North Eastern Region in India consisting** of the 8 States of **Assam, Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Sikkim, Nagaland and Tripura.**
- ❖ The Council comprises **Governors and Chief Ministers of constituent States** and **three members nominated by the President.**
- ❖ It works under the **administrative purview of the Ministry of Development of the North-Eastern Region (MDoNER).**
- ❖ **Chairman- Union Home Minister**
- ❖ **HQ- Shillong**

1.6   FOUNDATION DAY OF 3 NORTH EASTERN STATES

- ❖ Three northeastern states-- **Tripura, Meghalaya and Manipur** celebrated **their 52nd Statehood Day.**
- ❖ With the **introduction of North-East Area (Re-organisation) Act 1971**, **Tripura, Manipur and Meghalaya attained statehood on January 21, 1972.**

1.7	ANDHRA PRADESH CASTE CENSUS

- ❖ The **Andhra Pradesh government** has started **"caste survey"**, aimed at **creating a comprehensive caste-based database of people**.
- ❖ The comprehensive caste census is **scheduled for 10 days in one phase** and if needed, it **will be extended by four or five days.**
- ❖ **Andhra Pradesh** has become **the second state after Bihar to take up the caste census.**
- ❖ During the **'caste survey'**, **volunteers will visit every home** to **collect the caste details**, which will be **relayed to the village secretariat system.**
- ❖ A **mobile application** has been **created to collect details of individuals instantaneously** during the visit of village and ward secretariat staffers to the households.

1.8	SUPREME COURT'S DIAMOND JUBILEE

- ❖ The Prime Minister inaugurated the **Diamond Jubilee celebration of the Supreme Court of India on 28 January at the Supreme Court auditorium.**
- ❖ He also **launched citizen-centric information and technology initiatives** that include-
    - ✓ The **Digital Supreme Court Reports (SCR)** will make **Supreme Court judgments available to the citizens** of the country **free of cost and in electronic format**. The key features of digital SCR are that **all 519 volumes of the Supreme Court reports** since 1950, **covering 36,308 cases**, shall be **available in a digital format, bookmarked, user-friendly, and with open access.**
    - ✓ **Digital Courts 2.0 application** is a **recent initiative** under the **e-Courts project** to make court **records available to the Judges of the district courts in electronic form**. This is coupled with the use of artificial intelligence (AI) for transcribing speech to text on a real-time basis.
    - ✓ The Prime Minister also **launched the new website of the Supreme Court which will be** in **bilingual format in English and Hindi** and has been **redesigned with a user-friendly interface.**

ABOUT SUPREME COURT

- ❖ The **Supreme Court** is the **apex judicial body** under the **Constitution of India.**
    - ✓ **Article 124** of the **Constitution** states that **"there shall be a Supreme Court of India".**
- ❖ It **came into existence** on **January 26th, 1950 with coming of Constitution in force.**
    - ✓ The **Supreme Court was inaugurated** two days later, on January 28th, 1950.
- ❖ The **original Constitution of 1950** envisaged a **Supreme Court with a Chief Justice and seven puisne judges**, leaving it to the **Parliament to increase this number.**
    - ✓ The **Parliament increased the number of judges from eight in 1950** to 11 in 1956, 14 in 1960, 18 in 1978, 26 in 1986, 31 in 2009 and **34 in 2019 (current strength).**
- ❖ The Supreme Court **comprises the Chief Justice** and **not more than 33 other judges appointed** by the **President** of India.
- ❖ The Supreme Court has **original, appellate, and advisory jurisdiction** and it serves as the **final court of appeals** and the **final interpreter of the Constitution.**

2. ECONOMY

2.1   PIDF SCHEME EXTENDED

❖ The Reserve Bank of India (RBI) has **announced an extension** of the **Payments Infrastructure Development Fund (PIDF) scheme until December 31, 2025**.
❖ This **extension** aims to continue **fostering financial inclusion and supporting the country's payment infrastructure.**
❖ The **corpus** of PIDF stands at Rs 1026.4 crore as of November 30,2023.

ABOUT PIDF SCHEME

❖ **Launched in January 2021** for a **three-year period**.
❖ The PIDF scheme is designed to **offer financial aid to banks and non-bank financial companies (NBFCs) for** the **deployment of point-of-sale terminals and other payment acceptance infrastructure.**
❖ It promotes **digital payment infrastructure in tier-3 to tier-6 centers**, **northeastern states**, and the **UTs of Jammu & Kashmir and Ladakh.**
❖ B**eneficiaries of the PM Vishwakarma Scheme** nationwide **have been incorporated** as merchants eligible for deployment under PIDF.
❖ PIDF is **governed through an Advisory Council** and **managed and administered by RBI.**

NEW CHANGES

❖ **Sound Box devices** and **Aadhaar-enabled biometric devices** are now **eligible for subsidies** under the scheme.
❖ The **subsidy for specific focus areas**, including the **North Eastern states and Union Territories of Jammu & Kashmir and Ladakh, has been standardised at 90%** of the device cost, **irrespective of the device type**.

2.2   LITCHI CULTIVATION

❖ As per **National Research Centre on Litchi**, Litchi is being **cultivated for commercial purposes in 19 states**.
❖ More than **0.1 million hectares of land** are under litchi cultivation in India as per latest official data.

ABOUT LITCHI CULTIVATION

❖ The fruit **traditionally** grows in the **foothills of the Himalayas in Uttarakhand, Bihar, West Bengal and Jharkhand.**
❖ Litchi is a **sub-tropical fruit and thrives best under moist sub-tropical climate.**
❖ It **usually prefers low elevation** and **can be grown up to an altitude of 800 m.**
❖ It is **a rich source of Vitamin C** along with **B complex Vitamin**.
❖ Its **origin is from Southern China**.
❖ India is **second largest producer of litchi in the World after China.**
❖ **Climatic conditions**
   ✓ **Temperature- 25-35°C**
   ✓ **Rainfall- 1200mm**
   ✓ **Sowing Temperature- 25-35°C**
   ✓ **Harvesting Temperature- 25-30°C**
   ✓ **Soil- Deep, fertile, well drained, medium texture soil is suitable for litchi cultivation.**
      ➢ **pH of soil should be 7.5 to 8.**
      ➢ **Litchi crop cannot tolerate high pH and saline soils.**

2.3   REVERSE FLIPPING

❖ Startups like **Pine Labs and Udaan** have been planning for **Reverse Flipping**.

WHAT IS REVERSE FLIPPING?

❖ It is a **term used to describe the trend of overseas start-ups shifting their domicile to India** and **listing on Indian stock exchanges.**

❖ Here, **start-ups that once relocated their holding companies outside India** are now **considering a strategic move back to India.**

❖ **Reasons for Reverse Flipping-**
  ✓ **to capitalise on India's large and growing economy,**
  ✓ access to **deeper pools of venture capital,**
  ✓ **favourable tax regimes,**
  ✓ better **intellectual property protection,**
  ✓ **young and educated population,** and
  ✓ **favourable government policies.**

2.4   KOCHI LAKSHADWEEP SOFC PROJECT

❖ PM recently inaugurated **Kochi-Lakshadweep Islands Submarine Optical Fibre Connection.**

ABOUT THE PROJECT

❖ The KLI-SOFC project will lead to an **increase in internet speed unlocking new possibilities & opportunities.**

❖ For the **first time since independence, Lakshadweep will be connected through Submarine Optic Fibre Cable.**

❖ It will include **cable connectivity** from **Mainland (Kochi)** to **eleven Lakshadweep Islands namely, Kavaratti, Agatti, Amini, Kadmat, Chetlet, Kalpeni, Minicoy, Androth, Kiltan, Bangaram and Bitra.**

❖ Specifics
  ✓ Total link distance: **1,868 kilometres.**
  ✓ Total cost of project : **Rs 1072 crore plus taxes.**

❖ The project is **funded by Universal Services Obligation Fund (USOF)**, Department of Telecommunication.

❖ **Bharat Sanchar Nigam Limited** (BSNL) is the **Project Executing Agency**.

❖ The **major activities related to the project** include **Marine Route Survey, Submarine Cable laying, Civil Construction of CLS stations, Installation, Testing and Commissioning of End Terminals (SLTE).**

❖ The dedicated submarine OFC will **ensure a paradigm shift in communication infrastructure in the Lakshadweep islands**, enabling **faster and more reliable internet services, telemedicine, e-governance, educational initiatives, digital banking, digital currency usage, digital literacy etc.**

2.5   JHARKHAND REDUCES AGE OLD-AGE PENSIONS TO 50

❖ Jharkhand Chief Minister recently declared that the **qualifying age for old-age pension** will be **reduced from 60 to 50 for Dalits and tribals.**

❖ Also, **75% of jobs will be reserved for locals in companies that set up offices in the state.**

2.6   MOU BETWEEN QCI AND KVIC

❖ The **Quality Council of India (QCI)** and **Khadi and Village Industries Commission (KVIC)** signed an **initial pact to enhance quality of the KVIC's products, train artisans and introduce 'Made in India' label for khadi.**

❖ It is **aimed at enhancing the overall quality of the khadi ecosystem**, ensuring that khadi retains its timeless appeal and becomes a global symbol of quality and sustainability.

ABOUT KVIC

❖ It is **a statutory body established** under the **Khadi and Village Industries Commission Act, 1956.**

❖ It functions under **the Ministry of Micro, Small and Medium Enterprises.**

❖ The KVIC is charged with the **planning, promotion, organisation and implementation of programmes** for the **development of Khadi and other village industries in the rural areas** in coordination with other agencies engaged in rural development wherever necessary.

❖ At the **state level**, **Khadi & Village Industries Boards** were set up to effectively implement the schemes of KVIC in their respective states.

ABOUT QCI

❖ Quality Council of India (QCI) was established as a **National body for Accreditation** on recommendations of **Expert Mission of EU after consultations in Inter-ministerial Task Force, Committee of Secretaries and Group of Ministers through a Cabinet decision in 1996**.

❖ Accordingly, QCI was **set up through a PPP model** as an **independent autonomous organization** with the support of **Government of India** and the **Indian Industry represented by the three premier industry associations-**

- ✓ **Associated Chambers of Commerce and Industry of India (ASSOCHAM)**,
- ✓ **Confederation of Indian Industry (CII)** and
- ✓ **Federation of Indian Chambers of Commerce and Industry (FICCI).**

❖ QCI is a **non-profit organization registered under the Societies Registration Act XXI of 1860.**

❖ The **Department of Industrial Policy and Promotion, Ministry of Commerce and Industry is designated as the nodal point** for QCI.

2.7	GI TAGS AWARDED RECENTLY

❖ **17 products** from **four States and 1 UT bagged the coveted Geographical Indication tag** recently.

❖ These are

❖ **Odisha**
- ✓ Lanjia Saura paintings,
- ✓ Dongaria Kondh shawl,
- ✓ Khajuri Guda,
- ✓ Dhenkanal Magji,
- ✓ Similipal Kai Chutney,
- ✓ Nayagarh
- ✓ Kanteimundi Brinjal,
- ✓ Koraput Kalajeera Rice

❖ **Arunachal Pradesh**
- ✓ Handmade Carpets,
- ✓ Wancho Wooden Craft,
- ✓ Adi Kekir (Ginger)

❖ **West Bengal**
- ✓ Tangail Saree,
- ✓ Garad Saree,
- ✓ Korial Saree,
- ✓ Kalonunia Rice,
- ✓ Sundarban Honey

❖ **Gujarat**
- ✓ Kachchhi Kharek

❖ **Jammu and Kashmir**
- ✓ Ramban Anardana

ABOUT GI TAGS

❖ A **GI** is a **sign used on products** that have a **specific geographical origin and possess qualities** or a **reputation that are due to that origin.**

❖ It ensures that **only the authorised users or those residing in the geographical territory are allowed to use the popular product name.**

❖ A GI tag is **covered under Paris Convention for the Protection of Industrial Property.**

❖ **In India, it is issued by the Department of Industry Promotion and Internal Trade, Ministry of Commerce and Industry.**

❖ A registered GI is **valid for 10 years**.

2.8	UREA GOLD

❖ The government has decided to fix price of new **sulphur coated urea "Urea Gold"** at ₹266.5 per bag.
❖ However, the **net weight per bag Urea Gold has been fixed at 40 kg** against **45 kg in case of conventional urea.**

ABOUT UREA GOLD

❖ Urea Gold is created **by infusing urea with sulfur**, creating a **composite fertilizer with 37% nitrogen (N) and 17% sulfur (S).**
  ✓ For this**, preheated urea granules** are coated with **molten sulphur.**
❖ It is **developed by Rashtriya Chemicals and Fertilizers Ltd (RCF).**
❖ Sulphur-coated urea **facilitates a gradual release of nitrogen**, thereby **enhancing its availability and uptake by crops.**
❖ The inclusion of **humic acid** in Urea Gold further **extends its lifespan as a fertilizer.**
❖ It also **reduces overall urea usage** consumption **by 25% a**s per Indian Council of Agricultural Research (ICAR) study.
❖ Sulphur-coated Urea is **expected to play a pivotal role in enhancing soil health, optimizing nutrient release, and ensuring improved crop yields**.

2.9	VIBRANT GUJARAT SUMMIT

❖ Prime Minister Narendra Modi inaugurated the **tenth edition of Vibrant Gujarat Global Summit** at **Mahatma Mandir in Gandhinagar on 10th Jan 2024.**
❖ The **theme** of the tenth edition of the Vibrant Gujarat Global Summit **is 'Gateway to the Future'.**
❖ There are **34 Partner countries and 16 Partner organizations for this year's Summit.**
❖ It was **conceptualised in the 2003.**
❖ Vibrant Gujarat Global Summit **over the years has emerged as a key tool of Paradiplomacy.**
  ✓ Paradiplomacy, also **known as 'state diplomacy' or 'subnational diplomacy,'** denotes the ability of **subnational governments to engage in international relations.**
  ✓ It enables the **regional governments to establish business networks, share knowledge, and form strategic partnerships.**

2.10	INDUS FOOD 2024

❖ Union Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution and Textiles, Shri Piyush Goyal **inaugurated the 'Indus Food 2024'**, exhibition to showcase **India's vibrant and diverse food ecosystem**, being held in India Exposition Mart, **Greater Noida**.

SOME FACTS

❖ There has been **150% growth in processed food exports over the past nine years**, with India's agricultural exports reaching approximately US$ 53 Billion.
❖ India's has diverse agro-climatic zones, **158 food and agri Geographical Indications**, and **708 unique food items under the One District One Product initiative.**

2.11	GREEN RUPEE TERM DEPOSIT (SGRTD) SCHEME

❖ **State Bank of India (SBI)**, the **country's largest Bank has launched a special fixed deposit (FD) scheme.**
❖ It has introduced **SBI Green Rupee Term Deposit (SGRTD) scheme** to **mobilise funds to support environment friendly initiatives and projects**.

- ❖ This deposit scheme is **open to resident individuals, non-individuals, and NRIs.**
- ❖ SGRTD **offers investors the flexibility to choose from three distinct tenors**: **1,111 days, 1,777 days, and 2,222 days**.
- ❖ **Senior Citizens/ Staff/ Staff Senior Citizens** are **eligible for an additional interest rate over the applicable rate for the public.**
- ❖ **Pre-mature withdrawal** is **allowed.**
- ❖ **Loan/ overdraft facility is also available** against the deposit.

ABOUT GREEN DEPOSITS

- ❖ **Green deposit** means **an interest-bearing deposit, received by the regulated entities (RE)** for a **fixed period the proceeds** of which are **earmarked for being allocated towards green finance**
- ❖ The deposits raised under the framework are **covered by the Deposit Insurance and Credit Guarantee Corporation.**

2.12	MUMBAI TRANS HARBOUR LINK

- ❖ The **Mumbai Trans Harbour Link (MTHL),** also known as the **Atal Bihari Vajpayee Sewri Nhava Sheva Atal Setu,** was inaugurated recently.
- ❖ MTHL, **India's longest sea bridge covering 21.8 km out of which 16.5 km is over the sea,** is expected to see the **movement of more than 70,000 vehicles every day.**
- ❖ It is a **twin-carriageway six-lane bridge over the Thane Creek** in the **Arabian Sea.**
- ❖ It connects **Sewri in the island city of Mumbai** to **Chirle in Raigad district on the mainland.**
- ❖ The project is **expected to facilitate greater economic integration of Navi Mumbai with Mumbai,** with benefits extending **to Panvel, Alibaug, Pune, and Goa.**

2.13	PANGANUR COW BREED

- ❖ PM Modi was **seen feeding several Punganur cows** at his residence in New Delhi.
- ❖ The **rare breed**, native to a **village by the same name in Andhra Pradesh**, is **diminutive** - that it **can even be bred in an apartment**.
- ❖ It is **among the world's dwarfest cattle breeds** but **yields highly nutritional milk.**
- ❖ It has **high resilience to drought** and **can adapt to low-quality feed.**
- ❖ Many temples of **Andhra Pradesh**, including the famous Tirupati Thirumala Temple, use the milk of a Punganur cow for **Ksheeraabhishekam (milk offering to the deity).**
- ❖ It is known for its **high-fat content A2 milk**, rich in nutrients such as **Omega fatty acids, calcium, potassium, and magnesium**, which are essential for maintaining good health.
- ❖ A Punganur cow **can give around 1 to 3 litres a day**, and the milk **fat content is 8 per cent as compared to 3 to 4 per cent in other native breeds.**
- ❖ The **higher the value of the feed, good genetics, and maintenance**, the **better the quality of milk produced.**

2.14	'ONE VEHICLE, ONE FASTAG' INITIATIVE

- ❖ **National Highways Authority of India** (NHAI) has launched the **'One Vehicle, One FASTag' initiative.**
- ❖ The move aims to **enhance the efficiency** of the **Electronic Toll Collection system** and provide seamless movement at the Toll Plazas.
- ❖ The new arrangement Of **'One Vehicle, One FASTag'** has also been **introduced to discourage user behaviour** of **using single FASTag for multiple vehicles** or **linking multiple FASTags to a particular vehicle.**
- ❖ With a **penetration rate of around 98 per cent** and **over eight crore users,** FASTag has revolutionized the **Electronic Toll Collection system in the country.**

ABOUT FASTAGS

- ❖ FASTag is a **device that employs Radio Frequency Identification (RFID) technology** for **making toll payments directly while the vehicle is in motion**.
  - ✓ RFID is a **method of wireless communication involving electromagnetic waves**.
  - ✓ It utilises the **principle of inductive coupling.**
  - ✓ It has **two components, tags and readers** which <u>**do not need to be**</u> **in line of sight** to share information.
- ❖ FASTag (RFID Tag) is **affixed on the windscreen of the vehicle** and **enables a customer to make the toll payments directly from the account which is linked to FASTag.**

2.15   WINDFALL TAX

- ❖ India recently has **cut its windfall tax on petroleum crude to 1,700 rupees ($20.53) a tonne** from **2,300 rupees a tone.**

ABOUT WINDFALL TAX

- ❖ It is a **higher tax levied by the government** on **specific industries** when they **experience unexpected and above-average profits.**
- ❖ **Imposing of tax**
  - ✓ When the government notices **a sudden increase in an industry's revenue** which **cannot be linked to anything the company actively pursued**, such as **its business strategy or expansion**, it impose this tax.
  - ✓ A Windfall Tax is imposed on **an industry's profits when it experiences a sharp increase in revenue due to unrelated external events.**

2.16   C4IR

- ❖ **World Economic Forum** has **agreed to set up its Centre for Fourth Industrial Revolution (C4IR)** in the **Hyderabad**, state capital of Telangana.
- ❖ It will be **an autonomous, non-profit organisation** with a **thematic focus on healthcare and life sciences.**
- ❖ The **three pillars on which C4IR work** are-
  - ✓ **4IR technologies** such as artificial intelligence, the internet of things, blockchain and others.
  - ✓ **Public-private cooperation**- for example India recently announced drone services, an area where C4IR work with the Centre and several state governments.
  - ✓ **Multi-stakeholder partnership**- C4IR collaborates with various sectors —government, industries, start-ups, civil society, and consumers — for inclusiveness.

WHAT IS FOURTH IR?

- ❖ **Industry 4.0**—also called the **Fourth Industrial Revolution or 4IR**—is the **next phase in the digitization of the manufacturing sector**, driven by disruptive trends including **the rise of data and connectivity, analytics, human-machine interaction, and improvements in robotics.**
- ❖ The term **4IR** was coined by **Klaus Schwab, executive chairperson of the WEF, in 2016.**

2.17   TCS- SECOND MOST VALUABLE IT SERVICES BRAND

- ❖ The country's largest IT services company **Tata Consultancy Services (TCS)** has been rated as the **second most valuable IT services brand in the world** in the **2024 Global 500 IT Services Ranking by Brand Finance.**
- ❖ **Accenture** has **topped the global list** whereas **Infosys stood at the third place**.
- ❖ **HCLTech** has emerged as the **fastest-growing IT services brand with 15.9% YoY growth in brand value.**

2.18   WINGS INDIA 2024

- The **largest event in the Civil Aviation sector in Asia**, the **four-day "Wings India 2024"** extravaganza, kickstarted at **Begumpet Airport** in **Hyderabad**.
- Spanning across commercial, general, and business aviation, the **theme** for the show is **"Connecting India to the World in Amrit Kaal: Setting the Stage for India Civil Aviation @2047"**.

2.19   GOA- FIRST STATE TO LAUNCH REGENERATIVE TOURISM

- Goa has become **India's first state to launch Regenerative Tourism.**
- The Goa government has introduced a **new model for regenerative tourism**, a **scheme which will revolve around 11 spiritual sites** or **Ekadasha Teertha**.
- The state's tourism strives to utilise **the potential of its history and heritage by involving the local communities.**

2.20   INDIA OVERTAKES HONG KONG AS WORLD'S 4TH LARGEST STOCK MARKET

- The **combined value of shares listed on Indian exchanges reached $4.33 trillion**, versus **$4.29 trillion for Hong Kong**.
- That makes **India the fourth-biggest equity market globally.**
- **Top three stock** markets **are the US, China, and Japan**

2.21   NATIONAL FINANCIAL REPORTING AUTHORITY

- The National Financial Reporting Authority (NFRA) is going to inspect the Big Four audit firms (Deloitte Haskins & Sells BSR & Co (EY), SRBC & Co (KPMG) and Price Waterhouse Chartered Accountants, Walker Chandiok and Co) as well as other top auditors of large listed entities in 2024.

ABOUT NFRA

- It is the country's sole independent audit regulator.
- Constituted in 2018, under the Companies Act, 2013.
- It comes under the purview of Ministry of Corporate Affairs.
- Its goal is to enhance the country's financial statement quality and consistency and to guarantee that businesses and financial institutions report accurate and fair information.
- It has the same powers as are vested in a civil court under the Code of Civil Procedure, 1908, while trying a suit.
- The Chairperson is a Chartered Accountant and a person of eminence having expertise in accountancy, auditing, finance or law (appointed by the Central Government) and a maximum of 15 members.
- All the members, including the chairperson, who are in full-time employment, should not be associated with any audit firm (including related consultancy firms) during their term of office and 2 years after their term.
- **Functions include-**
    - Recommend accounting and auditing policies and standards to be adopted by companies for approval by the Central Government;
    - Monitor and enforce compliance with accounting standards and auditing standards;
    - Oversee the quality of service of the professions associated with ensuring compliance with such standards and suggest measures for improvement in the quality of service;
    - Perform such other functions and duties as may be necessary or incidental to the aforesaid functions and duties.
- For inspection, the NFRA adheres to the regulations outlined in the Companies Act, 2013 meant for auditors to follow, and the audit standards and guidelines established by the Institute of Chartered Accountants of India.
    - These include the Code of Ethics, which enumerates potential threats such as those associated with self-interest, self-review, advocacy, familiarity, and intermediation.

2.22   KRUTRIM IS NOW A UNICORN

❖ Ola founder Bhavish Aggarwal has revealed that his **artificial intelligence startup Krutrim** has raised $50 million in funding **at a $1 billion valuation**.
❖ Krutrim has now become **India's first AI stratup to reach the unicorn status.**
   ✓ A **'unicorn,'** is a privately-owned **startup valued at $1 billion or more**.
❖ Krutrim, which means **"artificial"** in Sanskrit, is also in the **process of developing data centres across the country**, aiming **to create supercomputer ecosystem for AI development in India.**
❖ Krutrim is a **large language model (LLM)** which **has been trained on more than 2 trillion 'tokens'**; these tokens are **sub-words used in conversations**.
❖ The AI platform is also set to have two classifications-
   ✓ **Krutrim** introduced in December 2023 while
   ✓ **Krutrim Pro** is set for release this year, with advanced capabilities for problem-solving and task execution.
❖ This **LLM uses a custom tokenizer** to **interpret the languages and scripts**.

2.23   EPFO REMOVES AADHAAR AS VALID PROOF

❖ The **Employees' Provident Fund Organisation (EPFO)** will **no longer accept Aadhaar card** as a **valid proof for date of birth.**
❖ EPFO has followed a directive from **the Unique Identification Authority of India (UIDAI).**
❖ As per a recent UIDAI's directive, Aadhaar was **being considered as proof for date of birth by several beneficiaries**.
❖ Aadhaar, while **a unique identifier**, was **not recognized as proof of date of birth** according to the Aadhaar Act, 2016.
❖ In its directive, **UIDAI emphasized that Aadhaar was a proof of identity, not proof of birth.**

ABOUT AADHAAR

❖ Aadhaar is **a 12-digit individual identification number** issued by the **Unique Identification Authority of India**.
❖ The Aadhaar programme **was launched in 2009 by the UIDAI.**
❖ UIDAI is a **statutory authority established under the Aadhaar Act, 2016.**
❖ It serves **as proof of identity and address, anywhere in India.**
❖ The Aadhaar number is **unique for each individual** and **will remain valid for life time** and **is linked to the individual's biometric and demographic information.**
❖ Aadhaar number **helps the residents** to avail **various services provided by banking, mobile phone connections and other govt and Non-govt services.**

ABOUT EPFO

❖ It is a **statutory body** that came into existence under the **Employees' Provident Fund and Miscellaneous Provisions Act, of 1952.**
❖ The EPFO administers the **mandatory provident fund, a basic pension scheme, and a disability/death insurance scheme.**
❖ The **Act and Schemes** framed there under are administered by a **tri-partite Board known** as the **Central Board of Trustees**, Employees' Provident Fund, consisting of **representatives of Government (Both Central and State), Employers, and Employees.**
❖ It is **one of the world's largest organizations** in terms of **clientele and the volume of financial transactions undertaken by it.**
❖ The EPFO is under the purview of the **Ministry of Labour and Employment.**

3. GEOGRAPHY

3.1   NATIONAL CENTRE FOR SEISMOLOGY

- **National Centre for Seismology** recently reported an **earthquake of 3.9 magnitude , with its epicenter near Kishtwar in J&K.**
- There were **no reports of any loss of life or damage** to property.

ABOUT NATIONAL CENTRE FOR SEISMOLOGY

- National Center for Seismology (NCS) is the **nodal agency of the Government of India for monitoring earthquake activity in the country**.
- It is **an attached office of the Ministry of Earth Sciences (MOES).**
- NCS **maintains the National Seismological Network of 155 stations** each having **state of art equipment and spreading all across the country.**
- NCS monitors earthquake activity all across the country through **its 24x7 around-the-clock monitoring center**.
- NCS **also monitors earthquake swarm and aftershock** by deploying a **temporary observatory close to the affected region.**

FACT

- The **first seismological observatory of the country** was established **at Alipore (Calcutta) on 1 December 1898** after the **great Shillong plateau earthquake of 1897.**
- **Earthquake measurement-** The earthquake events are measured either according to the **magnitude or intensity of the shock**.
- The **magnitude scale is known as the Richter scale** which **relates to the energy released during the quake**. The magnitude is **expressed in absolute numbers, 0-10.**
- The **intensity scale** is named after **Mercalli**, an Italian seismologist. The intensity **scale takes into account the visible damage caused by the event**. The **range of intensity scale is from 1-12.**

3.2   LAKE VICTORIA

- India-based think tank **Centre for Science and Environment** (CSE) and **National Environment Management Council (NEMC), Tanzania** conducted a multination stakeholder consultation to decide on strategies to restore the **Lake Victoria**.
- It is **world's second-largest** and the **largest freshwater lake in Africa.**
    - ✓ **Largest freshwater lake in the world is Lake Superior.**
- **Three countries** share the **lake's borders and resources for fisheries, freshwater and transportation: Tanzania, Uganda and Kenya.**
- Lake Victoria and its flora and fauna **support the livelihoods of about 45 million people**.
- **Lake Victoria touches the Equator in its northern side.**
- It covers a **total area of 68,800 sq. km** and with **a maximum depth of 80 m.**

3.3   ALPENGLOW

- An astronaut stationed at the **International Space Station** has shared some **breathtaking images** of the **mesmerising 'alpenglow' phenomenon** near the **Hindu Kush mountain range in India.**

ABOUT ALPENGLOW

- Alpenglow refers to the **indirect sunlight reflected or diffracted by the atmosphere before sunrise or after sunset**, giving a **horizontal reddish glow near the horizon opposite the Sun.**

- Alpenglow **occurs** when **direct sunlight around sunrise or sunset** is **reflected off airborne precipitation**, ice crystals or particulates in the lower atmosphere, as the **sunlight has no direct path to reach a mountain**.
    - After sunset, **if there are no mountains** the **aerosols in the eastern sky can be lit up by the remaining red light scattered above the edge of Earth's shadow**.
    - It produces **a pinkish band on the opposite side of the Sun's direction**, named the **Belt of Venus.**
- It typically **occurs in the range** of colors between **red, pink, and orange.**

ABOUT HINDU KUSH

- The **Hindu Kush mountain range** is **geographical feature that stretches over 800 kilometres** and **winds through Afghanistan, reaching into Northern Pakistan and Tajikistan.**
- It constitutes the **western expanse of the Hindu Kush Himalayan region.**
- The **Hindu Kush Himalayan region spans eight countries, including Afghanistan, Bangladesh, Bhutan, China, India, Nepal, Myanmar, and Pakistan**.
- It is referred to as **"the third pole" of the earth** as it has **largest concentration of frozen water on Earth after the North Pole and South Pole.**

4. ART AND CULTURE

4.1   WORLD RECORD FOR SIMULTANEOUS SURYA NAMASKAR

- **Gujarat** set a **Guinness World Record** on January 1st after **more than 50,000 people performed 'Surya Namaskar' simultaneously at 108 venues.**
    - **Surya Namaskar or sun salutation** is an **ancient Yogic practice of paying respect to the rising sun** and **comprises different postures or Asanas.**

4.2   SIKKI GRASS

- Sikki artisans **suffer livelihood losses amid climate change** & **state apathy.**

ABOUT SIKKI GRASS

- Sikki, also known as 'Kaincha'or **'Golden Grass' for its colour**, belongs to the **zizanoides grass family.**
- Scientifically called Chrysopogon zizanioides, it **finds mention in ancient Sanskrit texts such as the Ramayana,** where it is referred to **as viran, sugandhimool, ushir and nalad.**
- This grass **grows indigenously in the Tarai regions of Uttar Pradesh and Bihar.**
- It has an **average height of 3-4 feet**.
- Uses
    - While the **stem is used to make artefacts**, the **roots are used for extracting oil that is used both for perfumery and medicinal purposes.**
    - In the hilly terrains, it is **also now grown to arrest soil erosion**.
    - However, what **Sikki is most known for is its handicraft**.
    - It is **used to make traditional items** such as **multipurpose baskets, ornaments, show pieces and many more utility items** that are still considered valuable in rural India.
- Sikki craft is a **labour and time intensive craft**.
- Sikki got the **geographical identification tag in 2018.**
- **Issues**
    - **Lack of state patronage**
    - **climate change** has impacted the **quality of the grass.**

4.3   SOMNATH TEMPLE

❖ With an aim to attract devotees to the famous Somnath temple, the Shree Somnath Trust (SST) inaugurated **an exhibition at Tent City**, the **venue of the annual Rann Utsav, in Dhordo village in Kutch district.**
- ✓ Rann Utsav is the **annual desert carnival organised by the Gujarat government** in the Great **Rann of Kutch on the Indo-Pakistan border.**
- ✓ The carnival is very popular among tourists thanks to the vast White Desert or the salt desert and glorious views of the setting sun it offers.

❖ **Somnath temple** is **more than 500 km away from Dhordo** and thus the **famous temple and the White Desert form two different tourist circuits in Gujarat.**

ABOUT SOMNATH TEMPLE

❖ The Somnath temple, also called **Somanātha temple or Deo Patan**, is located **in Prabhas Patan, Veraval in Gujarat, India.**

❖ It is believed to be the **first among the twelve Jyotirlinga shrines of Shiva.**

❖ Somanth is **mentioned in Rigveda** and has been **reconstructed several times in the past after repeated destruction by several Muslim invaders and rulers i.e Mahmud Ghazni** (1024), attacked by **Delhi Sultanate** (1297 and 1394) and **Aurangzeb** (in 1706).

❖ Post independence, those ruins were demolished and the **present Somnath temple was reconstructed in the Māru-Gurjara style of Hindu temple architecture.**

❖ The first Home Minister of India, **SardarVallabhbhai Patel** was **instrumental in the construction of the present temple**.

❖ Renowned temple **architect Prabhaschandar designed it** and the **first President of India Dr. Rajendra Prasad installed the Jyotirling** in the new temple on May 11, 1951.

ABOUT MĀRU-GURJARA ARCHITECTURE

- MĀRU-Gurjara architecture or **Solaṅkī style**, is the **style of West Indian temple architecture** that originated **in Gujarat and Rajasthan** from the 11th to 13th centuries, under the **Chaulukya dynasty (also called Solaṅkī dynasty).**

4.4	SOHRAI PAINTNGS

❖ A **four-day workshop** on Sohrai mural art **was held in Konedoba**, a **quiet village in West Bengal**.

ABOUT SOHRAI PAINTING

❖ Sohrai painting is **practiced by indigenous communities**, particularly in the States of **Jharkhand, Bihar, Odisha, and West Bengal**, but it is the **region of Hazaribagh in Jharkhand that has received the GI tag for this art form.**

❖ Sohrai art is a **traditional form of mural painting** often **drawing inspiration from the ancient cave paintings in the region.**

❖ It is the **art of the women** of the **Kurmi, Santal, Munda, Oraon, Agaria, Ghatwal tribes**.

❖ Sohrai paintings are **distinctive for their vibrant colours, intricate patterns, and symbolic motifs.**

❖ There is a **Sohrai festival held every year**, marking the harvesting season and the arrival of winter.

4.5	CHANDUBI FESTIVAL

❖ **Assam** recently **hosted the famous Chandubi Festival in .**

ABOUT CHANDUBI FESTIVAL

❖ The **Chandubi Festival** is a **vibrant event** that **takes place near the picturesque Chandubi Lake in Assam's Kamrup district**.

❖ It is **organised every year for five days** starting from the **first day of the New Year.**

❖ The Chandubi Festival **is organized by the people of Rajapara village in the Kamrup district**, under the **Rabha Hasong Autonomous Council (RHAC).**

✓ They have been **organizing this festival for the past 14 years.**

❖ It is **a colourful display of Assamese culture and traditions** featuring a diverse range of **activities**, including **folk music performances, traditional dance shows, local handicraft exhibitions, and delicious Assamese cuisine stalls.**

ABOUT CHANDUBI LAKE

❖ Chandubi Lake is **a natural lake located in Kamrup district of Assam**.

❖ Situated at the **foothills of Garo hills**, it is one of the beautiful lakes in Assam.

❖ Chandubi Lake was **formed in 1897 during the devastating earthquake in Assam**.

❖ Chandubi is derived from **two words where Chand means five** and **Dubi means sinking in Khasi language.**

❖ According to the locals, **Chandubi was a hilly area with five mountains before 1897**. The five mountains had sunken into the ground during the earthquake and form the lake.

4.6   BLACKFEET LANGUAGE

❖ **Lily Gladstone** recently became the **Golden Globes' first Indigenous winner of best actress in a drama**.

❖ She won for her role as **Mollie Burkhart** in Martin Scorsese's epic **Killers of the Flower Moon.**

❖ During her acceptance speech, she spoke to the live TV audience in the **Blackfeet language.**

✓ Blackfoot is **an Algonquian language** spoken in the **Blackfeet Nation in Montana in the USA**, and in the **Piikani, Siksika and Kainai Nations in southern Alberta in Canada**.

✓ As of **2016**, it had about **2900 native speakers**.

4.7   PRASADAM- NATION'S FIRST HEALTHY AND HYGIENIC FOOD STREET

❖ The **country's first Healthy and Hygienic Food Street 'Prasadam'** was inaugurated in **Neelkanth Van, Mahakal Lok, in Ujjain, Madhya Pradesh.**

❖ This street **will provide pure and clean food to the devotees.**

❖ The newly launched food street is designed to provide various **facilities including a kids' play area, drinking water facility, CCTV surveillance, parking, public conveniences and seating spaces.**

❖ Spread over an **area of 939 square metres with a total number of 17 shops**, 'Prasadam' offers **convenient and culturally rich dining options for the 1-1.5 lakh devotees who visit the Mahakaleshwar Temple.**

ABOUT MAHAKALESHWAR TEMPLE

❖ **Mahakaleshwar('Lord of time')**, refers to **Lord Shiva.**

❖ As per Hindu mythology, **the temple was constructed by Lord Brahma** and is presently **located alongside the holy river Shipra.**

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

❖ Mahakaleshwar Jyotirlinga in Ujjain is **one of the 12 jyotirlingas considered the most sacred abodes of Shiva.**

❖ 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.**

❖ The temple **in its present form was built by the Maratha general Ranoji Shinde in 1734 CE.**

4.8   KATEEL YAKSHAGANA MELA

❖ The **over-a-century old Yakshagana mela**, the **Kateel Durgaparameshwari Prasadita Yakshagana Mandali**, in Dakshina Kannada **will revert to all-night shows from January 14**, after the **High Court of Karnataka gave the go-ahead** for it **subject to adherence to noise pollution rules.**

❖ The HC allowed the **mela to perform from dusk to dawn adhering** to the **Noise Pollution (Regulation and Control) Rules, 2000.**

ABOUT THE MELA

- ❖ It refers to a **traditional form of theater performance known as Yakshagana**, which is **predominantly found in the state of Karnataka, India.**
  - ✓ "Kateel" refers to the **town of Kateel in Karnataka**, which is **known for its own unique troupes or 'Melas' performing this art form**.
- ❖ It is mainly based on **stories from Hindu epics like the Ramayana and the Mahabharata.**
  - ✓ **Devi Mahatme** is the **most popular prasanga (episode) preferred by many.**
- ❖ They are **usually performed on open-air stages at night and can last up to several hours.**
- ❖ Most shows of the mela are **"harake" (hosting the Yakshagana show for God fulfilling a wish)** performances.
- ❖ The troupes **mainly tour in Dakshina Kannada, Udupi and Kasaragod (Kerala) districts.**

4.9   27TH NATIONAL YOUTH FESTIVAL

- ❖ The Prime Minister inaugurated the **27th National Youth Festival at Nashik, Maharashtra** on **12th January.**
- ❖ On the **occasion of 161st anniversary of Swami Vivekanand Ji, 27th National Youth Festival is being celebrated in Nashik, Maharashtra**.
- ❖ National Youth Day will be **celebrated by all field organisations of the Department of Youth Affairs in districts pan-India in collaboration with multiple Government departments**.
- ❖ Across **763 districts of the country**, a **district level mega program on National Youth Day 2024** began with a **reverent floral tribute to Swami Vivekananda.**

ABOUT NATIONAL YOUTH DAY

- ❖ **12th of January marks the birth anniversary of Swami Vivekananda,** and **is celebrated as National Youth Day.**
- ❖ The decision to celebrate Vivekananda's birthday as **National Youth Day was taken in 1984**, and it was **first marked on January 12, 1985.**

ABOUT SWAMI VIVEKANADA

- ❖ Swami Vivekananda was a **spiritual leader, philosopher, and social reformer** who made profound contributions to **India's cultural and spiritual landscape.**
- ❖ He was **born as Narendranath Datta on January 12, 1863**.
- ❖ He preached a **philosophy called "neo-Vedanta,"** which **interpreted Hinduism through a Western lens**. Vivekananda **believed in the harmony between spirituality and material progress.**
- ❖ He gained **global recognition for his remarkable speech** at the **World Parliament of Religions in Chicago in 1893.**
- ❖ As the **chief disciple of Ramakrishna Paramahansa**, Swami Vivekananda **established the Ramakrishna Mission in 1897.**
- ❖ He established many Mathas in India the most important being the **Belur Math in Belur, Howrah district.**

4.10   KALARAM MANDIR

- ❖ **Prime Minister** recently visited the **Kalaram Mandir** on the banks of the **Godavari in the Panchavati area of Nashik**.

ABOUT THE TEMPLE

- ❖ The **Kalaram temple** derives its name from a **black statue of the Lord — Kala Ram** translates literally to "Black Ram".
- ❖ The **sanctum sanctorum** has **statues of Ram, Sita, and Lakshman**, and a **black idol of Hanuman** at the main entrance.
- ❖ The temple was **built in 1792** with the **efforts of one Sardar Rangarao Odhekar.**
- ❖ It is said that **Sardar Odhekar dreamt of a black-coloured statue of Lord Ram in the Godavari**, and **recovered the statues from the river and built the temple**.

- The **place where statues were found** was named **Ramkund.**
- The **main temple has 14 steps**, which represent the **14 years of Lord Ram's exile.**
- It has **84 pillars**, which represents the cycle of **84 lakh species that one has to complete in order to be born as a human.**

IMPORTANCE OF PANCHVATI

- Panchavati has a **special place in the Ramayana and, therefore, in the Hindu religion.**
- **Ram**, along with **Sita and Lakshman**, spent the **first few years of their 14-year exile in Dandakaranya**, the dense forest in central India of which Panchavati was a part.
- The name **Panchavati comes from the existence of five banyan trees** in the area.
- According to the epic, **Lord Ram, Sita, and Lakshman set up a hut** here as the **presence of five banyan trees made this region auspicious.**
- It is from the **Panchavati region** that **Ravan**, the demon king of Lanka, **abducted Sita** after drawing her out of the secure zone created by Lakshman by deceit, and set off the chain of events that led to Ram's journey southward to Lanka, and the Ramayana war.

MODERN HISTORY

- In **1930, B R Ambedkar** and the Marathi teacher and social activist **Pandurang Sadashiv Sane**, known as **Sane Guruji**, led an **agitation to demand access for Dalits to Hindu temples.**
- The **satyagraha at the Kalaram temple** continued until **1935.**

4.11   CLASSICAL LANGUAGE

- West Bengal Chief Minister in a letter to Prime Minister has asked the **central government to officially list Bengali as a "classical language".**
- So far, the Government of India has **officially recognised six languages** as having classical status - **Tamil (2004), Sanskrit (2005), Telugu, Kannada (2008), Malayalam (2013), and Odia (2014).**
- As per the **Centre's guidelines**, a **language must meet some requirements** to be declared **"classical".**
- They include-
    - the **high antiquity of its early texts**;
    - recorded **history of over 1500-2000 years**;
    - a body of **ancient literature/texts**, which is **considered a valuable heritage by generations of speakers**;
    - a **literary tradition that's original and not borrowed from another speech community**; and
    - **being distinct from modern, without discontinuity between the classical language and its later forms or its offshoots.**

4.12   EXCAVATION AT VADNAGAR

- A consortium of scientists from **IIT Kharagpur, Archaeological Survey of India (ASI), Physical Research Laboratory (PRL), Jawaharlal Nehru University (JNU), and Deccan College** has found **evidence of cultural continuity in Vadnagar** even after the **Harappan collapse.**
    - **Vadnagar** is the **Prime Minister's native village.**
- The team has found **evidence of a human settlement** that is **as old as 800 BCE contemporary to late-Vedic/pre-Buddhist Mahajanapadas or oligarchic republics.**
- Vadnagar was a **multicultural and multireligious (Buddhist, Hindu, Jain and Islamic) settlement**.
- Excavation in several deep trenches revealed the **presence of seven cultural stages (periods)** namely, **Mauryan, Indo-Greek, Indo-Scythian or Shaka-Kshatrapas** (AKA 'Satraps', descendants of provincial governors of ancient Achaemenid Empires, **Hindu-Solankis**, **Sultanate-Mughal** (Islamic) to **Gaekwad-British colonial rule.**
- Characteristic **archaeological artefacts, potteries, copper, gold, silver and iron objects** and intricately designed bangles have been found.

❖ Coin moulds of the **Greek king Appollodatus** during the Indo-Greek rule have also been found at Vadnagar.

4.13	FARSI- NOW A CLASSICAL LANGUAGE

❖ In a significant move to deepen cultural ties, **External Affairs Minister S Jaishankar** announced that the **Government of India** has decided to **include Farsi (Persian)** as **one of the nine classical languages in India under the New Education Policy.**

❖ India recognizes **six languages as classical**, including **Tamil, Sanskrit, Kannada, Telugu, Malayalam, and Odia.**

❖ In addition to these classical languages **Pali, Persian, and Prakrit and their works of literature are to be preserved** according to India's National Education Policy-2020.

4.14	VEERBHADRA LEPAKSHI TEMPLE

❖ The PM recently visited the **Veerbhadra temple in Andhra Pradesh's Lepakshi** and **offered prayers**.

ABOUT THE TEMPLE

❖ Location- **Anantapur district of Andhra Pradesh.**

❖ The Veerabhadra Temple is **believed to have been built by two brothers, Virupanna Nayaka and Viranna**, who were **governors under the Vijayanagara Empire during the 16th century.**

❖ The temple is dedicated to **Veerabhadra, an incarnation of Lord Shiva.**

❖ Legend has it that **when Lord Shiva's wife, Sati, self-immolated** in her father's **yagna (sacrificial fire)**, he was **consumed with grief and unleashed his fury by creating Veerabhadra.**

❖ The shrine also has **great significance in Ramayana**.
  ✓ According to legend, **Lepakshi is believed to be the spot** where the **mythical vulture Jatayu landed** after sustaining severe injuries while trying to rescue Sita from the demon king Ravana, who had abducted her.

❖ The Lepakshi temple complex **also has idols of Lord Vishnu, Papanatheswara, Raghunatha, Rama** and **other deities**.

❖ Veerabhadra Temple's architecture **is a fusion of Vijayanagara and Chalukyan styles.**

❖ The temple complex comprises **three main shrines** - **Veerabhadra Temple, Papanatheshwara Temple, and Durga Temple.**

❖ It is **placed in UNESCO's tentative World Heritage Sites list.**

4.15	ASIAN BUDDHIST CONFERENCE FOR PEACE

❖ The 12th **General Assembly of the Asian Buddhist Conference for Peace** was recently held in **New Delhi.**

❖ The 12th ABCP General Assembly was held under the **theme: "ABCP - The Buddhist Voice of Global South."**

ABOUT ABCP

❖ Asian Buddhist Conference for Peace (ABCP) was **founded in 1970 at Ulaanbaatar, Mongolia** as a **voluntary movement of followers of Buddhism with both monastic (monks) and lay members.**

❖ It is **currently headquartered at the Gandanthegchenling Monastery** in **Ulaanbaatar, Mongolia.**

❖ The Supreme Head of Mongolian Buddhists, **Most Venerable Khambo Lama of Gandan, Gabji Demberel Choijamts** is the **ABCP President.**

❖ Striving to disseminate and implement the teachers of the Lord Buddha - the Enlightened One, on peace and harmony, compassion and loving kindness for all sentient beings, ABCP aims to-
  ✓ **Bring together efforts of Buddhists** in support of consolidating **universal peace, harmony and cooperation among peoples of Asia,**
  ✓ Furthering their **economic and social advancement** and **promoting respect for justice and human dignity**, and,
  ✓ Disseminating the **Buddhist culture, tradition and heritage**.

4.16	BRU TRIBE

- The **Tripura government** has allocated **land for the rehabilitation of the last batch of Mizoram Bru refugees**, who were **granted permanent settlement in Tripura.**
- A total of **6,959 Bru (also known as Reang) tribe families comprising 37,136 persons**, were to be permanently settled in **12 different locations across four districts in the State.**

ABOUT BRU TRIBE

- The **Bru or Reang are an ethnic group** living in the northeastern states of India, **mainly in Tripura, Mizoram and Assam.**
- In Tripura, **they are recognised as a Particularly Vulnerable Tribal Group**.
- The tribe belongs to **Tibeto-Burman family**
- **Language- Kaubru**
- They are **still a nomadic tribe, majorly** involved in **Jhum Cultivation.**

4.17	GURUVAYUR TEMPLE

- **Prime Minister** recently visited and offered prayers at **Sreekrishna Temple, Guruvayur.**

ABOUT GURUVAYUR TEMPLE

- Guruvayur Temple is **one of the most famous religious spots in Kerala and in the country**.
- The temple attracts people from all over the world for its architectural beauty, and rich history.
- Set in the **Thrissur district**, this temple is **also known as the Dwarka of the South**.
- The temple, **dedicated to Lord Vishnu** and the **young form of Lord Krishna**, is **also known as Guruvayur Sree Krishna Temple**.
- The **statue** of **Lord Vishnu installed** here has **four arms**.
- One has the **conch Panchajanya**, another has a **discus Sudarshana Chakra**, the **third one** has the **mace Kaumodaki** and the **fourth** is holding **a lotus with a Holy basil garland.**
- The temple is also **known for its elephant festival**.
- It is also noted for being **home to a large population of captive male Asian elephants.**
- **Guruvayur Satyagraha** was a **non-violent protest** that **took place in 1931–32** in an effort **to allow entry for untouchables into the Guruvayur Temple.**
    - ✓ It was **led by K. Kelappan**, who undertook **a hunger strike for 12 days.**
    - ✓ It finally led to **Travancore Temple Entry proclamation in 1936.**

4.18	SAINT THIRUVALLUVAR

- Prime Minister recently commemorated Thiruvalluvar Day, honoring the memory of the great Tamil sage, Saint Thiruvalluvar.

ABOUT SAINT THIRUVALLUVAR

- Thiruvalluvar, also known as Valluvar, holds a significant place in Tamil culture, standing as one of its most distinguished literary figures.
- Living during the Sangam era of Tamil classical culture, Thiruvalluvar is revered as a poet, philosopher, and a wise man.
    - ✓ The Sangam era, known for its eminent poets, witnessed the emergence of the earliest Tamil literature, which has endured for over 2,000 years.
    - ✓ , his masterpiece, consists of couplets covering various aspects of life, including morality, politics, the economy, and love.
    - ✓ It contains 1330 couplets (kurals) that are divided into 133 sections of 10 couplets each.

✓ Widely regarded as a unique and highly esteemed piece of Tamil literature, Thirukkural is considered one of the greatest works on ethics and morality, known for its universality and secular nature.

4.19   JAGANNATH TEMPLE

❖ Odisha Chief Minister recently unveiled a **sprawling heritage corridor** around the **Jagannath Temple in Puri.**
❖ The **heritage corridor** is **one of the two major temple projects the State government has undertaken in recent years,** the **other being** the **renovation of the Maa Samalai Temple** at a **cost of ₹200 crore in western Odisha town of Sambalpur.**

ABOUT JAGANNATH TEMPLE

❖ The Jagannath temple located in **Puri, Odisha** is a **sacred temple devoted to Lord Jagannath (**a form of **Vishnu) along** with his **brother Lord Balabhadra** and **sister Devi Subhadra.**
❖ Constructed by- **Ananta Varman Chodaganga Deva** of **Eastern Ganga Dynasty** dating back to **12th century**.
❖ It is **known as the "White Pagoda"** and **one of the four pilgrimage sites of Char Dham Pilgrimage.**
❖ It is **also called as 'Yamanika Tirtha'** where, according to the Hindu beliefs, **the power of 'Yama'**, the god of death, has **been nullified in Puri due to the presence of Lord Jagannath.**
❖ Famous for **its Annual Ratha yatra, or chariot festival**, in which the **three principal deities are pulled on huge and elaborately decorated temple cars.**
❖ The temple is **built in the Kalinga style of architecture**, with the **Pancharatha (Five chariots) type** consisting of **two anurathas, two konakas and one ratha.**
❖ Jagannath temple is **a pancharatha with well-developed pagas.**
❖ It is **enclosed by a high wall with four gates**, each facing a cardinal direction.
❖ This is the **first temple in the history of Kalinga temple architecture** where **all the chambers like Jagamohana, Bhogamandapa and Natyamandapa** were **built along with the main temple.**

4.20   'MOH-JUJ' FIGHTS

❖ The **Assam Government** revived the **traditional buffalo fight (Moh-Juj)**, **nine years after it was stopped** following the **Supreme Court's ban on Tamilnadu's Jallikattu and bullock cart races in Maharashtra.**
❖ On December 8, 2023, the **state cabinet approved traditional buffalo fights under strict SOP.**
❖ It is said that Moh-Juj was **introduced to Assamese culture by 30th Ahom king Swargadeo Rudra Singha** nearly **200 years ago.**

4.21   STATUE OF SOCIAL JUSTICE

❖ The **Andhra Pradesh government** has unveiled the **world's tallest statue Dr BR Ambedkar.**
❖ The statue has been **erected at Swaraj Maidan grounds in Vijaywada**.
❖ Andhra government has called it the, **"Statue of Social Justice".**
❖ In comparison to Sardar Vallabhai Patel's Statue of Unity (597 feet tall), the **height of BR Amdekar's statue is 206 feet.**
❖ The Ambedkar statue that is **125-foot on an 81-feet pyramidical base** making the statue complex **206-foot tall.**
❖ The project **incurred a cost of ₹404.35 crore and is spread over 18.81 acres.**
❖ Alongside the statute, there will be **six water bodies in the forecourt, a musical water fountain in the centre, and 3 sided peripheral waterbody for the pedestal building and greenery**.

BRIEF ON DR B R AMBEDKAR

❖ Born on **April 14, 1891**, Dr Bhim Rao Ambedkar - popular among his followers as **Babasaheb** - was the **chairman of the Constituent Assembly's most crucial Drafting Committee** that earned him the moniker **Architect of the Indian Constitution**.

❖ He **died on December 6, 1956**, **months after he embraced Buddhism** on October 14 that year.

4.22 SRI RANGANATHASWAMY TEMPLE

❖ Prime Minister Narendra Modi' s visit to **Srirangam Sri Ranganathaswamy Temple** is the **first by a serving Prime Minister**, according to the temple priests.

ABOUT SRI RANGANATHASWAMY TEMPLE

❖ It is **one of the most illustrious Vaishnava temples in South India**.
❖ It has been mentioned in **Sangam era literature**.
❖ Ranganathaswamy Temple is **home to Lord Ranganatha**, a **form of Lord Vishnu in a reclining pose.**
❖ It is constructed in the **Dravidian architectural style**, and **temple is glorified in the Naalayira Divya Prabhandam**.
  ✓ It is **a collection of 4,000 Tamil verses composed by the 12 Alvars**.
  ✓ It was **compiled in its present form by Nathamuni during the 9th–10th centuries.**
❖ It is **known by several names** such as **Thiruvaranga Tirupati, Bhoologa Vaikundam, Periyakoil, Bhogamandabam.**
❖ This temple **lies on an island formed by twin rivers Cauvery and Kollidam**.
❖ It is **considered foremost** among the **108 Divya Desams, sacred shrines dedicated to Lord Vishnu.**
❖ Often referred to as the **world's largest functioning Hindu temple spread over a155 acres complex**, it is also **home to the tallest gopuram or temple tower across all South India.**

4.23 MADHIKA LANGUAGE

❖ The **Chakaliya community** in Kannur, Kerala is grappling with the **imminent loss of its unique language Madhika**.
❖ There are **only 2 last fluent living speakers of Madhika.**
❖ Madhika, a **language spoken by the Chakaliya community** that **migrated from Karnataka centuries ago**, is **fast becoming extinct with the younger generation opting for Malayalam.**
❖ Madhika is **a blend of Telugu, Tulu, Kannada, and Malayalam**.
❖ Though Madhika is **a blend of different languages**, it is **largely influenced by Havyaka Kannada**, an **old form of Kannada**.
❖ The language **has no script.**

ABOUT CHAKALIYA COMMUNITY

❖ Chakaliya community was **considered untouchables**, and they **were not allowed to participate in feasts associated with marriages and funerals in the past.**
❖ The community was **nomadic and worshippers of Thiruvenkatramana and Mariamma**.
❖ The community **in northern Malabar migrated from the hilly regions of Karnataka centuries ago.**
❖ Initially recognised as Scheduled Tribe, it **was later included in the Scheduled Caste category in Kerala.**

4.24 RAM MANDIR AT AYODHYA

ALL THE FACTS

❖ Prime Minister Narendra Modi led the **consecration of Ram Lalla**, at the holy temple, culminating **a 500-year quest**.
❖ Total cost **Rs 1,800 crore**
❖ **Architecture**- The **3-storey temple**, built in the **traditional Nagara style**, stands tall with **pink sandstone from Mirzapur and the hills of Bansi-Paharpur**.
❖ **Chandrakant B Sompura, 81**, and his son **Ashish, 51**, designed the **temple complex in Nagara style architecture.**
❖ The **temple covers an expansive 71 acres, showcasing the architectural marvel.**

- Spanning **250 feet in width and 161 feet in height**, the **main temple area covers 2.67 acres**, boasting
  - ✓ **390 pillars,**
  - ✓ **46 doorways, and**
  - ✓ **5 mandaps- Nritya Mandap, Rang Mandap, Gudh Mandap, Kirtan Mandap, and Prarthana Mandap.**
- The **main Garbh Griha** holds the **idols of Ram Lalla.**
  - ✓ The idol of **five-year-old Ram Lalla**, crafted by **Mysuru sculptor Arun Yogiraj**, stands at **51 inches.**
- Devotees **enter the temple after climbing 32 steps through Singh Dwar.**
- A **21ft-high plinth**, constructed **using granite, safeguards against ground moisture, ensuring the temple's durability.**
- **Constructed using traditional and indigenous technology**, the temple emphasizes environmental conservation, leaving **70% of the 71-acre area green.**
- With **16-28 idols of deities on each of the 390 pillars**, the temple showcases **intricate carvings of mythological figures, maintaining consistency through exclusive craftsmanship.**
- Remarkably, **no iron has been used in the temple's construction**, designed to **endure for at least a millennium**.
- The **surrounding rectangular parikrama, Parkota**, houses **temples dedicated to various deities, emphasizing cultural richness.**
- The Mandir complex has a **sewage treatment plant, water treatment plant, water supply for fire safety and an independent power station.**

| 4.25 | **RUSOMA ORANGE FESTIVAL 2024** |

- The **fourth edition** of the **annual Orange Festival began** at **Local ground Rusoma village** in Kohima, Nagaland.
- Theme of the two-day festival is **"Organic Orange".**

| 4.26 | **MARATHA MILITARY LANDSCAPES** |

- As per Ministry of Culture, **'Maratha Military Landscapes'** representing **extraordinary fortification and military system envisioned** by the **Maratha rulers** will be **India's nomination for inclusion in the UNESCO World Heritage List** for the **2024-25 cycle.**
- The 'Maratha Military Landscapes of India' **was included in the Tentative List of UNESCO World Heritage Sites in 2021.**
- The **twelve components of this nomination** are— **Salher Fort, Shivneri Fort, Lohgad, Khanderi Fort, Raigad, Rajgad, Pratapgad, Suvarnadurg, Panhala Fort, Vijay Durg, and Sindhudurg in Maharashtra,** and **Gingee fort in Tamil Nadu.**
- This extraordinary network of forts, **varying in hierarchies, scales and typological features**, is a result of **integrating the landscape, terrain and physiographic characteristics** distinctive to the **Sahyadri mountain ranges, the Konkan Coast, Deccan Plateau and the Eastern Ghats in the Indian Peninsula.**
- There are **more than 390 forts in Maharashtra**, out of which only **12 forts are selected under the 'Maratha Military Landscapes of India'**, and **eight of these forts are protected by the Archaeological Survey of India (ASI).**
- The **inception** of the Maratha military ideology dates back to the **17th century during the reign of Maratha King Chhatrapati Shivaji Maharaj by 1670** and **continued through subsequent rules until Peshwa rule till 1818.**
- **'Maratha Military Landscapes' nomination** is in the category of **cultural property.**

OTHER FACTS

- At present, there are **42 World Heritage Sites in India**, out of which **34 are cultural sites, seven are natural sites** whereas **one is mixed site.**

- ❖ In Maharashtra, six sites have a UNESCO tag— **five cultural** and **one natural**.
- ❖ These are
    - ✓ **Ajanta Caves,**
    - ✓ **Ellora Caves,**
    - ✓ **Elephanta Caves,**
    - ✓ **Chhatrapati Shivaji Maharaj Terminus (formerly Victoria Terminus),**
    - ✓ **Victorian Gothic and Art Deco Ensembles of Mumbai**, and
    - ✓ **Western Ghats of Maharashtra, Karnataka, Tamil Nadu and Kerala is serial property in natural category.**

5. SCIENCE AND TECHNOLOGY

5.1   DIRECT TO MOBILE (D2M) TECHNOLOGY

- ❖ **Indian telecom operators** have asked the **government to auction the spectrum** that will be **used for direct-to-mobile (D2M) services.**
- ❖ The government is also **considering to reserve 526-582 MHz spectrum for D2M services.**
- ❖ Telecom operators consider **this spectrum to be "precious"** as they are **already being identified by the International Telecommunication Union (ITU) for mobility services.**
- ❖ The **science** behind D2M is **similar to that of an FM** radio, where a **receiver within the device can tap into different radio frequencies**.
- ❖ This **new-age technology is a combination of broadband and broadcast** that uses **mobile phones to capture territorial digital TV signals**.
- ❖ Using D2M, **multimedia content, including live TV matches**, can be **streamed to phones directly without using the internet.**
- ❖ Other advantages
    - ✓ **Emergency Alerts are delivered directly, reliably** and **without dependence on internet/cellular networks.**
    - ✓ **Targeted Disaster Management audio content**

5.2   FOG PASS DEVICE

- ❖ The **North Western Railway** is taking **proactive measures to ensure the safe operation of trains amidst challenging visibility conditions.**
- ❖ The Indian railways have installed **Fog PASS device.**

ABOUT FOG PASS DEVICE

- ❖ It is a **GPS based navigation device** which **helps the loco pilot to navigate during dense fog conditions.**
- ❖ It provides **on-board real-time information** (Display as well as voice guidance) to **Loco Pilot** regarding **Location of fixed landmarks such as Signal, Level Crossing gate (Manned & Unmanned), Permanent Speed Restrictions, Neutral Sections.**
- ❖ It is **suitable for train speeds up to 160 KMPH** and has built-in **rechargeable battery back-up for 18 hours.**
- ❖ It is **portable, compact in size, light in weight** (not more than 1.5 Kg including battery) and of **robust design.**
- ❖ It is **suitable for all types of locomotives and sections** like **single line, double line, electrified as well as non electrified sections.**
- ❖ It will **remain unaffected by weather conditions like fog or rain.**

5.3   REJUPAVE TECHNOLOGY

- In order to improve operational capacity of the defence forces in the high-altitude areas along the IndoChina border, the **Border Roads Organisation (BRO)** will **build bituminous roads** using an **indigenous technology**, "Rejupave".
- It has been **developed by CSIR-Central Road Research Institute (CSIR-CRRI), India's oldest and premier road research organisation.**
- The 'Rejupave' technology has been successfully utilised by the BRO to produce **low-temperature bituminous mixes** for the **construction of bituminous roads at Sela tunnel and LGG-Damteng-Yangste (LDY) road** site at **an altitude of 14,000 feet and 18,000 feet.**

ABOUT REJUPAVE TECHNOLOGY

- The indigenous technology's **asphalt modifier** is **a bio oil-based product**
- It is **developed as a Bio-based eco-friendly product with 100% biooil.**
- It **brings down the production and rolling temperature of bituminous mixes** by 30 degrees Celsius to 400 degrees Celsius
- **It also assures negligible heat loss in the bituminous mix** during transit, despite long haulage time amid snowfall.
- Using 'Rejupave' asphalt modifier **in cold climatic regions** will have **improved long-term durability and better resistance to thermal cracking** under low-temperature conditions.
- It also **eliminates the problem of increasing road levels due to overlay.**

5.4   GRAPHENE

- Researchers from the **Georgia Institute of Technology** have created the **world's first functional semiconductor made from graphene,** that is compatible with conventional microelectronics processing methods.

ABOUT GRAPHENE

- Graphene is an **allotrope of Carbon.**
- Graphene was **discovered in 2004 by Andre Geim and Konstantin Novoselov,** who received the **Nobel Prize in Physics for this in 2010.**
- It is a **one-atom-thick sheet of carbon atoms** arranged in a **honeycomb-like pattern.**
- It is the **thinnest, most electrically and thermally conductive material** in the world.
- It is almost perfectly transparent, as it **absorbs only 2% of light**.
- It is **stronger than steel and diamond.**
- Uses
  - ✓ It can be **used to enhance the strength of other materials.**
  - ✓ It is a great material **for making heat-spreading solutions**, such as heat sinks or heat dissipation films.
  - ✓ Since it is also **world's thinnest material**, it also has an **extremely high surface-area-to-volume ratio**, which makes graphene a **viable material for use in batteries and supercapacitors.**

5.5   ANEEL FUEL

- **Clean Core Thorium Energy**, the Chicago-based company has **developed (and patented) a fuel**, which is a **mix of Thorium and Uranium of a certain level of enrichment**, called **HALEU (High Assay Low Enriched Uranium)**.
  - ✓ HALEU is **Uranium enriched to more than 5 per cent** but **less than 20 per cent.**
- It is being called **ANEEL (Advanced Nuclear Energy for Enriched Life)** — named in honor of **India's foremost nuclear scientists, Dr Anil Kakodkar.**

ADVANTAGE FOR INDIA

- India has the **world's largest reserves of Thorium**, estimated at **1.07 million tones.**

- ✓ Thorium is **derived from minerals** like **monazite (containing 10% thoria and 0.3% urania) and thorianite.**
- ❖ If **India uses this Thorium**, it can then **produce enough green energy and easily turn net-zero by its target date of 2070.**
  - ✓ But, **Thorium is a fertile material** and **not a fissile material**.
  - ✓ This means, it **must be paired with Uranium-235 or Plutonium-239 to be used as fuel in a reactor**.
  - ✓ As **neutrons from these fissile materials bombard Thorium, it mutates into Uranium-233, which is also a fissile material**. So, to use the Thorium in India, you need sufficient stocks of Uranium-235 (which India has very little of), or Plutonium-239 (which is produced using Uranium-235).
- ❖ This is where ANEEL fuel can be a game changer for india

ABOUT ANEEL FUEL

- ❖ **ANEEL** can be **used in the existing Pressurized Heavy-Water Reactors (PHWRs)**, an **indigenous reactor system that is the workhorse of India's nuclear fleet**.
- ❖ India has **18 PHWR reactors of a total capacity of 4,460 MW** and **is building ten more of 700 MW each.**
- ❖ The ANEEL fuel bundle **lasts much longer and burns more efficiently**.
  - ✓ Its burn-up is **60,000 MW-days per tonne**, compared with the **7,000 MW-days per tonne of the conventional natural uranium fuel in PHWRs.**
- ❖ It also **leads to significant reduction in waste generation** and **cost savings.**
- ❖ Due to the **inherent benefits of using thorium**, the **spent ANEEL fuel cannot be used for weapons.**

5.6   CAMPTOTHECIN

- ❖ Researchers at the **Indian Institutes of Technology Madras and Mandi** have **metabolically engineered plant cells** to increase **production of anti-cancer drug camptothecin (CPT).**
  - ✓ It is **an important anti-cancer drug lead molecule** for **high-value drugs like Topotecan and Irinotecan.**
  - ✓ Camptothecin is a molecule **procured from nature** and **then (in a) one-step derivative it is produced as drug.**
- ❖ The **allopathic medicine** is produced **using Nathapodytes nimmoniana**, a **native, endangered plant**.
- ❖ It requires **nearly 1,000 tonnes of plant material to extract 1 tonne of CPT**.
- ❖ Camptothecin is **majorly produced in southeast Asian region**, with the **plant being largely found only in China and India.**
  - ✓ The **Chinese variety (Camptotheca acuminata)** of the plant used to extract the cell is listed as **critically endangered**. There are **only 4,000 of the species left.**
  - ✓ In India the plant (**Nothapodytes nimmoniana**) is a **native of western ghats** (also found in Assam and Jammu and Kashmir) and in the **last decade there was a 20% decline in population.**

5.7   LIGHT EMITTING DIODES

- ❖ **Light-emitting diodes (LEDs)** have succeeded the incandescent bulbs and fluorescent lamps of previous centuries as the **world's light-source of choice**.

WHAT IS A DIODE?

- ❖ A **diode** is **an electronic component about 5 mm wide**.
- ❖ It has **two points of contact, or terminals**, called **its anode and cathode**.
- ❖ A **diode's primary purpose** is **to allow current to flow in only one direction**.
- ❖ It achieves this **using a p-n junction**.
  - ✓ A p-n junction is made **of two materials laid next to each other**.
  - ✓ One material is a **p-type material: its primary charge-carriers are holes**.
  - ✓ The other is **an n-type material**: its **primary charge-carriers are electrons**.

ABOUT LEDS

- An LED is **a diode that emits light**.
- Inside the **diode's p-n junction**, the **electrons have more energy than the holes**.
- When an electron meets and occupies a hole, it **releases energy into its surroundings.**
- If the **frequency of this energy is in the visible part of the electromagnetic spectrum**, the diode **will be seen to emit light.**
- The overall phenomenon is called **electroluminescence.**
- Since **LEDs can produce all three primary colours** – **red, green, and blue** – different **LEDs** can be combined on a **display board to produce a large variety of colours.**
- LEDs have **several applications** in industry, **consumer electronics, and household appliances**: from **smartphones to TV screens, from signboards to 'feeding' plants light in greenhouses, from barcode scanners to monitoring air quality**.

5.8	INDIA INTERNATIONAL SCIENCE FESTIVAL

- The **Department of Science and Technology (DST)**, Govt. of India is organizing the **9th edition of IISF** and its autonomous organization **National Innovation Foundation**-India is the **coordination and implementation body of IISF 2023.**
- This time, **22 countries** are **also participating at IISF 2023**.
- The **central theme** is **"Science and Technology Public Outreach in Amrit Kaal."**
- The **India International Science Festival (IISF)** is a **collaborative endeavour** between **Ministry of Science and Technology**, **Ministry of Earth Sciences**, **Department of Space and Department of Atomic Energy** in partnership with **Vijnana Bharati - a science movement spearheaded by scientists of the nation with swadeshi spirit.**
- **Organised** since **2015.**

5.9	INDIA'S FIRST GRAPHENE CENTRE

- India's **first Graphene Centre "India Innovation Centre for Graphene (IICG)** has been **established at Makers Village Kochi by** Ministry of Electronics and Information Technology (**MeitY**), and Govt**. of Kerala** alongwith **Tata Steel Limited.**
- It **aims** to **foster R&D, product innovation and capacity building in the area of Graphene and 2D material systems.**
- It will also support **MeitY 's Graphene-Aurora program** which **aims to fill the gap between R&D and commercialization** by **providing a complete facility to startup and industry.**

5.10	DISTRESS ALERT TRANSMITTER-SECOND GENERATION

- **Indian Space Research Organisation (ISRO)** has developed an **improvised Distress Alert Transmitter (DAT)** with **advanced capabilities and features for the fishermen at sea to send emergency messages from fishing boats.**

WORKING

- The **first version of DAT has been operational since 2010,** using which **messages were sent through a communication satellite** and **received at a central control station (INMCC: Indian Mission Control Centre)**, where the alert signals are decoded for the identity and location of the fishing boat.
- The extracted information is then forwarded to **Maritime Rescue Coordination Centres (MRCCs) under the Indian Coast Guard (ICG).**
- Using this information, the **MRCC coordinates to undertake search and rescue operations to save the fishermen in distress.**
- **Till now, more than 20,000 DATs are being used.**

IMPROVEMENTS

- Taking advantage of **technological developments in satellite communication and satellite navigation**, ISRO has **improvised DAT with advanced capabilities and features evolving to Second Generation DAT (DAT-SG)**
- The DAT-SG has the **facility to send back acknowledgement to the fishermen who activate the distress alert from sea.**
- DAT-SG has the **capability to receive messages from control centres**.
  - ✓ Using this, **advance alert messages can be sent to the fishermen at sea** whenever there are events of bad weather, cyclone tsunami or any other emergencies.
- The information about **potential fishing zones are also transmitted to fishermen** using **DAT-SG** on regular intervals.
- The central control centre (INMCC) has a **web based network management system called Sagarmitra** which maintains a database of **registered DAT-SGs and helps MRCCs to access the information about boat, coordinate the boat in distress in real time.**
- DAT-SG can be **connected to mobile phones using Bluetooth interface** and the **messages can be read in native language using an App in the mobile.**
- The **services of DAT-SG has been declared operational on a 24 x 7 basis.**

5.11   NUCLEAR BATTERY

- **Betavolt**, a **Chinese startup**, has announced that it has **developed a revolutionary battery capable** of **powering smartphones for an impressive 50 years** without **requiring recharging**.
- Termed as the **world's first miniaturized atomic energy system**, this nuclear battery utilizes **Nickel-63 nuclear isotopes compactly arranged** within **a module smaller than a coin.**
- The technology **operates by converting the energy released from decaying isotopes into electricity.**
- The startup has **commenced pilot testing** and intends to **mass-produce the battery for various commercial applications, including smartphones and drones.**
- The **initial nuclear battery developed** by Betavolt delivers **100 microwatts of power and has a voltage of 3V**, while measuring **a tiny 15x15x5 cubic millimeters**.
- The **company plans to produce a battery with 1 watt of power by 2025**.
- The **small size of these batteries allows for multiple units to be connected, increasing the power output**.
- Additionally, the battery **can operate in a wide temperature range, from -60 degrees Celsius to 120 degrees Celsius.**
- The team developed **a thin single crystal diamond semiconductor**, only **10 microns thick**, and placed **a 2-micronthick nickel-63 sheet** between two diamond semiconductor converters.
- The **decay energy** of the **radioactive source is then converted into electrical current.**

5.12   MPEMBA EFFECT

- Researchers have conducted experiments which show **hot water freezes faster than cold water**, as per a **phenomenon known as Mpemba Effect.**
- It is **named after Tanzanian student Erasto Mpemba**, who **brought attention to this counterintuitive phenomenon in 1969.**
- According to it, **hot water evaporates more rapidly, reducing its mass and inducing a cooling effect**.
  - ✓ Possible causes include **microbubbles, evaporation, the presence of frost in cold water**, and the **effect of compounds precipitated by boiling.**
- When **heated, Hydrogen bonds in water break**, causing **water molecules to move apart and facilitating quicker freezing** due to energy loss.

5.13   C-BOT

- The **Goa-headquartered National Institute of Oceanography** (NIO) has launched a **coral monitoring autonomous underwater vehicle**, **Coral Reef Monitoring and Surveillance Robot, or C-bot.**
- It can **reach depths of 200 metres.**
- It will **help in maintaining surveillance over the coral reefs in the ocean.**
- C-bot will **also help the Indian Navy perform bathymetry studies** to help **plot navigation channels.**
- The robot will also help in **finding the active hydrothermal vents** which are **emitting a lot of elements into the ocean and active biology** which is going on in many places, like in many extreme environments where the temperature is 400-500 degrees Celsius.
- The vehicle **can send real time data and photographs,** which will help researchers in their studies.

6. DEFENCE

6.1   DRDO FOUNDATION DAY

- **Defence Research and Development Organisation (DRDO)** celebrated its **66th Foundation Day** recently on **January 1st.**

ABOUT DRDO

- DRDO was **formed in 1958** from the **amalgamation of the then already** functioning **Technical Development Establishment (TDEs) of the Indian Army** and the **Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).**
- **DRDO** is the **R&D wing of Ministry of Defence.**
- DRDO presently is a **network of around 41 laboratories and 05 DRDO Young Scientist Laboratories (DYSLs)** which are deeply engaged in developing **defence technologies like aeronautics, armaments, electronics, combat vehicles, engineering systems, instrumentation, missiles etc.**
- **DRDO motto- "Balasya Mulam Vigyanam"**
- Headquarters- **New Delhi**
- DRDO's major projects towards self-reliance and successful indigenous development
  - ✓ **Agni and Prithvi series** of missiles;
  - ✓ light combat aircraft, **Tejas;**
  - ✓ multi-barrel rocket launcher, **Pinaka;**
  - ✓ air defence system, **Akash;**
  - ✓ a wide range of **radars and electronic warfare systems** etc.

6.2   EXERCISE DEFENCE CYCLONE

- The **UAE Land Forces contingent** arrived in India to participate in the **1st edition of the India - UAE Joint Military Exercise 'DESERT CYCLONE'.**
- The Exercise is **scheduled to be conducted in Mahajan, Rajasthan.**
- The **UAE contingent comprising 45 personnel** is being represented by troops from the **Zayed First Brigade.**
- The **Indian Army contingent** comprising 45 personnel is being represented mainly by **a Battalion from the Mechanised Infantry Regiment.**
- The Exercise **will enhance cooperation and interoperability** between both the sides **during Peace Keeping Operations.**

6.3   MARCOS

- **MARCOs commandos** rescued **all 21 crew members,** including **15 Indians,** from **Liberian-flagged vessel MV Lili Norfolk** after boarding it from a warship.
- The Navy **deployed a warship, maritime patrol aircraft P-8I,** helicopters and MQ9B Predator drones to assist the **vessel MV Lila Norfolk.**

ABOUT MARCOS

- Marine commandos , abbreviated to **Marcos** and **officially** called the **marine commando force (MCF)** , was **formed in 1987.**
- They are among the **country's mighty commando forces**, including the **National Security Guard, Garud, Para commandos, Force One, and others.**
- These comprise **the toughest soldiers who undergo rigorous training to conduct swift and stealthy responses.**
- MARCOs are **modelled on the US Navy SEALS.**
- MARCOS **can operate across diverse environments**, encompassing **sea, air, and land**.
- They **also engage in collaborative efforts with the Indian Army to conduct operations in areas such as Kashmir.**
- **'The few The fearless'** is the **MARCOs' motto**.
- The force has earned recognition for its remarkable performance in **Cactus, Leech, Pawan, and Cyclone operations.**
- Notably, their valour and courage **came to prominence during their involvement in the 26/11 Mumbai attacks.**

6.4   DGSP/IGSP CONFERENCE

- The 58th DGsP/IGsP Conference 2023 was inaugurated by the union Home minister at **Rajasthan International Centre, Jaipur.**
- The **three-day conference**, held in a **hybrid mode**, brought together **top law enforcement officials physically from Jaipur and over 500 police officers from various ranks participating through video conferencing from across the country.**

6.5   IDEX

- **Innovations for Defence Excellence- Defence Innovation Organization** (iDEX-DIO) is **all set to participate in the tenth edition of the Vibrant Gujarat Summit 2024.**

ABOUT IDEX

- **iDEX** (**Innovations for Defence Excellence**), the **flagship scheme of the Ministry of Defence**, was launched in **2018**.
- The **objective** of the scheme is to **cultivate an innovation ecosystem in the Defence and Aerospace sector by collaborating with startups, innovators, MSMEs, incubators, and academia**.
- iDEX offers **grants and support for R&D** with **significant potential for future adoption in Indian defence and aerospace.**
- It is **currently engaged with around 400+ Startups and MSMEs**, till now procurement of 31 items worth over Rs 2000 Cr. has been cleared.
- iDEX has also **received the PM Award for Innovation in the defence sector.**
- iDEX is **funded and managed by a "Defence Innovation Organisation (DIO)"** formed as a **"not for profit" company** as per Section 8 of the Companies Act 2013 for this purpose.

6.6   SKY DEW

- The Israeli airforce has **revived a massive radar blimp**, now set to **patrol the Israel-Lebanon border amid rising tensions.**
- The **"Tal Shamayim," or "Sky Dew"** is one of the **largest high-altitude observation balloons of its kind.**
    - ✓ It acts as a **detection radar blip for small unmanned aircraft and cruise missiles.**
- The **High Availability Aerostat System** is a **collaborative project** of the US and Israel, developed by the **Israel Ministry of Defense and the US Missile Defense Agency.**

❖ **Manufactured** by the **US company TCOM**, the reconnaissance **balloon can carry 7,000 pounds and operates at an altitude of about 10,000ft.**

❖ The **radar** on the balloon is capable of **observing at 250 km** and **tracking multiple targets, including low-altitude ones and those in valleys.**

6.7	UGRAM

❖ The **Armament Research and Development Establishment (ARDE), Pune**, with the help of **Hyderabad-based Dvipa Armour India Private Limited (DAIPL)**, has developed **an indigenous assault rifle** named **'Ugram' aka the fierce one.**

   ✓ The ARDE is **one of the laboratories of the Defence Research and Development Organisation (DRDO)** that is primarily concerned with **research, design, and development in the field of conventional armaments for** defence services.

ABOUT UGRAM RIFLE

❖ It is a **completely indigenous rifle**.

❖ The rifle is a **7 to 15 mm assault rifle** that was **developed within 100 days** for both the **Indian Army and paramilitary forces**.

❖ This rifle has a **20-round magazine that fires robust and full auto mode**.

❖ The rifle is **effective for 500 metres** and the **weight of the rifle including the magazine is less than 4 kg**.

6.8	INS KABRA

❖ Indian Navy's **Fast Attack Craft INS Kabra** arrived at Colombo, Sri Lanka recently.

❖ The visit strengthens the **bilateral cooperation and camaraderie between the two Navies in keeping with the Prime Minister's vision of SAGAR.**

ABOUT INS KABRA

❖ INS Kabra is a naval vessel **named after an island of the Andaman and Nicobar archipelago.**

❖ It belongs to the **Car Nicobar class of high-speed offshore patrol vessels** which are **built by Garden Reach Shipbuilders and Engineers (GRSE) for the Indian Navy**.

❖ Kabra was **eighth in a series of 10 Fast Attack Crafts**.

❖ The vessels are designed as a **cost-effective platform for patrol, anti-piracy and rescue operations** in **India's Exclusive Economic Zone.**

6.9	EXERCISE SEA DRAGON

❖ The Indian Navy has deployed a **P-8I aircraft at Guam, USA** for **navy's participation in the fourth edition** of **Ex Sea Dragon 24.**

❖ The Sea Dragon is **an annual, multinational anti-submarine warfare (ASW) exercise** conducted by the **United States Navy.**

❖ Ex Sea Dragon 24 **fosters collaboration and interoperability** among the **navies of the US, Australia, South Korea, Japan, and India.**

❖ The **annual exercise launched in 2014.**

6.10	DRISHTI 10 STARLINER

❖ Chief of Naval Staff Admiral R Hari Kumar flagged off the **first indigenously manufactured Drishti 10 'Starliner' Unmanned Aerial Vehicle (UAV) for the Navy.**

ABOUT DRISHTI 10 'STARLINER'

- Drishti 10 'Starliner' is **an advanced Intelligence, Surveillance and Reconnaissance (ISR) platform with 36 hours endurance**.
- It has a **450 kgs payload capacity**.
- It is the **only all-weather military platform with STANAG 4671 certification**, and **clear to fly in both segregated and unsegregated airspace.**
- The Drishti 10 Starliner UAV has been manufactured by **Adani Defence and Aerospace.**
- The **sophisticated**, **state-of-the-art UAV marks a significant step** towards **strategic autonomy and technological leadership in high-endurance, combat-proven, and indigenized advanced aerial systems.**

6.11   D4 SYSTEM

- The **Drone Detect, Deter and Destroy system (D4S)** is the **first indigenously developed anti-drone system to be inducted into the Indian Armed Forces.**
- Developed by- **Defence Research and Development Organisation (DRDO).**
- Manufactured by- **Bharat Electronics Limited (BEL).**
- Features include-
  - ✓ It **can detect, track and identify rouge drones within 4 km range.**
  - ✓ D4 system **can instantly detect and jam micro drones (Soft kill)** and use **a laser-based kill mechanism to terminate targets (Hard kill).**
  - ✓ It can **lase a target 1-1.25 km far depending on the wattage of the laser weapon.**
- It uses **DRDO's RF/Global Navigation Satellite System (GNSS)** to **detect the frequency which is being used by the controller and the signals are then jammed.**

6.12   MILAN 24

- Indian Navy's **multi-national exercise, MILAN 24** is all set to be held in **Visakhapatnam** in Feb '24.
- **MILAN 24** exercise would comprise two phases - **'Harbour phase' and 'Sea phase'.**
- The **harbour phase**, aims to promote **cultural sharing amongst the participating Nations** and the **Sea phase** includes ships with **Maritime Patrol aircraft and submarines of Friendly Foreign Countries.**
- MILAN is a **biennial multi-national naval exercise** which started in **1995** with participation of **four foreign countries (Indonesia, Singapore, Sri Lanka, Thailand)** in consonance with India's **'Look East policy'.**

6.13   AKASH- NG MISSILE

- **Defence Research and Development Organisation (DRDO)** conducted a **successful flight-test of the New Generation AKASH (AKASH-NG) missile** from the **Integrated Test Range (ITR), Chandipur** off the coast of **Odisha.**
- It has validated the **functioning of the complete weapon system consisting of the missile with indigenously developed Radio Frequency Seeker, Launcher, Multi-Function Radar and Command, Control & Communication system.**

ABOUT AKASH-NG

- **New Generation Akash is a Surface to Air Missile (SAM).**
- It is a **short-range surface-to-air missile** developed by **India's Defence Research and Development Organisation (DRDO).**
- It has capability of **intercepting highspeed, agile aerial threats in a range of around 80 km.**
- It is driven by a novel engine — **a dual pulse motor.**
  - ✓ This **allows the Akash to vary its speed and conserve fuel for a final furious burst towards the threat.**

6.14	ASTRA MISSILE

- The **indigenously developed and manufactured Astra Missiles** were recently supplied to the **Indian Air Force.**

ABOUT ASTRA

- Astra is a **beyond visual range (BVR) air-to-air missile.**
- It has been **indigenously developed by DRDO** and **manufactured by BDL for the IAF**.
- **Astra Weapon System** is **said to be the best in its class weapon systems in the world** in the category of **Air-to-Air missiles.**
- The missile has a **range of 100 plus km.**
- It is **designed to engage** and **destroy highly manoeuvrable supersonic aerial targets**.

6.15	EXERCISE 'EX-AYUTTHAYA'

- The **Indian Navy** and **Royal Thai Navy (RTN)** conducted a **maiden bilateral exercise**, named **'Ex-Ayutthaya'.**
- The **Indo-Thai Bilateral Exercise 'Ex-Ayutthaya'** translates to **'The Invincible One' or 'Undefeatable'**, and "**symbolises** the significance of **two of the oldest cities, Ayodhya in India and Ayutthaya in Thailand**, the **historic legacies, rich cultural ties and shared historical narratives dating back to several centuries.**
- The Indian Naval ships **Kulish and IN LCU 56** participated in the inaugural edition of the exercise.
- The Royal Thai Navy side was represented by **His Thai Majesty's Ship (HTMS) Prachuap Khiri Khan.**

6.16	PINAKA WEAPON SYSTEM

- The **Defence Research and Development Organisation (DRDO)** is developing **Pinaka multi-barrel rocket launchers** that would be **able to strike targets at 120 km and 200 km.**
- **Two South American countries have shown interest in the Pinaka multi-barrel rocket launchers.**

ABOUT PINAKA MBRL

- The Indian-made Pinaka weapon system is **named after the bow of God Shiva** and has been **developed by the DRDO**.
- The present rockets **can strike targets at up to 75-80 Kms**.
- It has been **designed by the Armament Research and Development Establishment (ARDE).**
- Pinaka MBRL can launch **12 high explosive rockets in 44 seconds.**
- The **Pinaka MBRL** has been **one of the success stories in the indigenous weapon systems** developed by the **DRDO in partnership with private and public sector units**.
  - ✓ While the **launcher vehicles are made by the Tata Group and Larsen and Toubro**, the **rockets are made by the Solar Industries and the Munitions India Limited**.
- It consists of **a multi-tube launcher vehicle**, a **replenishment-cum-loader vehicle**, a **replenishment vehicle**, and **a command post vehicle.**
- **Pinaka regiments** of the **Indian Army** include **launchers with automated gun aiming and positioning systems and command posts.**

6.17	BUREAU OF POLICE RESEARCH AND DEVELOPMENT (BPRD)

- The **Bureau of Police Research and Development (BPRD)** has warned **users of different scams perpetrated through messaging platform WhatsApp**.

ABOUT BPRD

- Set up in **1970** by **replacing the Police Research and Advisory Council.**
- Nodal ministry - **Ministry of Home Affairs**

- ❖ The Bureau was **initially started with 2 divisions: Research, Publication & Statistics Division & Development Division.**
  - ✓ In **1973** the **Training Division was added** on the recommendation of the **Gore committee** (1971) on police training.
  - ✓ In **1995**, the Government decided to entrust issues relating to **Correctional Administration Work** to the BPR&D.
    - ➢ Thus BPRD has to ensure the implementation of **prison reforms** as well.
  - ✓ In **2008** the **National Police mission was added**, and the Development Division was restructured as a modernisation division.
- ❖ It **has been publishing the data on police organisations since 1986.**
- ❖ It has also been **mandated to keep abreast of the latest developments in the fields of science and technology**, both in India and abroad, with a view to **promoting the use of appropriate technology in police work.**
- ❖ It is also assists the **States in modernization of the State Police Forces and Correctional Administration.**

6.18   EXERCISE KHANJAR

- ❖ The **11th edition of India-Kyrgyzstan joint Special Forces exercise 'Khanjar'** commenced recently at the **Special Forces Training School in Himachal Pradesh's Bakloh.**
- ❖ The exercise, **an annual event conducted alternatively in both countries is scheduled to be conducted from January 22 to February 3**.
- ❖ The **Indian Army contingent**, comprising 20 personnel, is being represented by **troops from The Parachute Regiment (Special Forces)** and the **Kyrgyz contingent, comprising 20 personnel**, is represented by personnel of **its Scorpion Brigade**.
- ❖ The **aim** of the exercise is **to exchange experiences and best practices in counter-terrorism and Special Forces operations.**

6.19   OPERATION SARAVSHAKTI

- ❖ **Indian Army** has launched a **robust attempt to combat terrorism through an operation titled "Operation Sarvashakti"**.
- ❖ The **aim of the operation is to put an end to the terrorist activities backed by Pakistan** in the **state of Jammu and Kashmir** especially along the **mountain ranges of Pir Panjal in the Union Territory**.
- ❖ The **Indian Army, state agencies, and intelligence agencies** will be working actively in **close coordination with each other** to "thwart Pakistani designs".

6.20   EXERCISE CYCLONE

- ❖ The **Indian Army contingent comprising 25 personnel reached Egypt** to take part in the **2nd edition of India-Egypt Joint Special Forces Exercise CYCLONE.**
- ❖ The Exercise will be **conducted at Anshas, Egypt.**
- ❖ The **Indian contingent is being represented by troops from The Parachute Regiment (Special Forces)** and **Egyptian contingent comprising 25 personnel is being represented by Egyptian Commando Squadron and Egyptian Airborne Platoon.**
- ❖ Exercise CYCLONE is **designed to develop bilateral military cooperation and strengthen bond** between two armies through conduct of discussions and rehearsal of tactical military drills.
- ❖ Aim of the Exercise is to **acquaint both the sides with each other's operating procedures in the backdrop of Special Operations in desert/ semi desert terrain under Chapter VII of United Nations Charter.**

6.21   VIJAY RAGHAVAN COMMITTEE

- ❖ Professor **Vijay Raghavan committee**, a high-level committee **set up to revamp the Defence Research and Development Organisation** has submitted its reports and recommendations.
- ❖ The committee, which **had three senior military officials** in it, has recommended that
    - ✓ the DRDO have **two secretaries**, **one to look after defence research and development** and the **other to look into defence technology and innovations.**
    - ✓ M**erger of existing over 50 laboratories into around 10 larger ones**,
    - ✓ **Reducing the number of directors and removing the role of the cluster Director generals.**
    - ✓ Setting up a **Defence Technology Commission**, headed by **PM**.
    - ✓ I**ncrease in the role of academia and private sector in defence research and development.**

6.22   EXERCISE DESERT KNIGHT

- ❖ **Indian Air Force** recently conducted **Exercise Desert Knight** along with **French Air and Space Force** and **United Arab Emirates Air Force** over the **Arabian Sea** against the backdrop of the **rising global concerns over Houthi militants targeting several commercial vessels** in the strategic waterways in the region.
- ❖ The main focus of Exercise Desert Knight was **on enhancing synergy and interoperability** between the three Air Forces.

6.23   BRAHMOS MISSILE

- ❖ India is set to **export BrahMos supersonic missile systems** to **Philippines in next 10 days.**
- ❖ The **venture**, valued at **USD 375 million**, marks **DRDO's largest-ever defence contract with a foreign nation.**

ABOUT BRAHMOS MISSILE

- ❖ The BrahMos supersonic cruise missile is a **joint venture between DRDO and Russian Federation's NPO Mashinostroyeniya, who together have formed BrahMos Aerospace.**
- ❖ **It is named after the rivers Brahmaputra (India) and Moskva (Russia).**
- ❖ It can be **launched from land, sea, and air.**
- ❖ BRAHMOS is a **two-stage missile** with a **solid propellant booster engine as its first stage** which **brings it to supersonic speed and then gets separated.**
- ❖ The **liquid ramjet or the second stage** then takes the missile **closer to 3 Mach speed in cruise phase.**
- ❖ **Stealth technology and guidance system** with **advanced embedded software provides the missile with special features.**
- ❖ It operates on **'Fire and Forget Principle'.**
- ❖ Its **cruising altitude could be up to 15 km and terminal altitude is as low as 10 meters.**
- ❖ The missile has flight **range of up to 290-km with supersonic speed all through the flight.**
    - ✓ The **extended-range variant of the missile can strike land and sea targets** at a maximum range of **400 to 500 kilometers**
- ❖ It is said to be **one of the most successful missile programs in the world**.
- ❖ The **Indian Army has integrated multiple BrahMos regiments into its arsenal since 2007.**

6.24   EXERCISE STEADFAST DEFENDER 2024

- ❖ NATO recently launched its **biggest military exercise since 1988- 'Exercise Steadfast Defender'**
- ❖ Some **90,000 troops from the United States and fellow NATO allied nations** are due to **join the Steadfast Defender 2024 drills that will run through May.**
- ❖ More than **50 ships from aircraft carriers to destroyers will take part**, as well as more than **80 fighter jets, helicopters and drones and at least 1,100 combat vehicles including 133 tanks and 533 infantry fighting vehicles.**

ABOUT NATO

- ❖ The North Atlantic Treaty Organization (NATO) is **an intergovernmental military alliance** based on the **Washington treaty**, **which was signed in 1949.**
- ❖ **Headquarters- Brussels, Belgium**
- ❖ **Members- 31 Countries**
- ❖ NATO remains the **principal security instrument of the transatlantic community and expression of its common democratic values.**
    - ✓ **Article 5** of the Washington Treaty — that **an attack against one Ally is an attack against all** — is at the core of the Alliance, a promise of **collective defense**.
    - ✓ **Article 4** of the treaty ensures **consultations among Allies on security matters of common interest.**

6.25   EXERCISE SADA TANSEEQ

- ❖ In a major boost of **ties the militaries of India and Saudi Arabia** are conducting their **first Joint Military Exercise named as Sada Tanseeq.**
- ❖ The **inaugural edition of India-Saudi Arabia Joint Military Exercise 'Sada Tanseeq'** commenced at **Mahajan, Rajasthan**.
- ❖ The **Saudi Arabian contingent comprising 45 personnel is being represented by Royal Saudi Land Forces.**
- ❖ The **Indian Army contingent also comprising 45 personnel** is being represented by a Battalion from the **Brigade of the Guards (Mechanised Infantry).**

6.26   INS SUMITRA

- ❖ The **Indian Navy's INS Sumitra** safely rescued **fishermen hijacked by pirates along the East coast of Somalia and the Gulf of Aden.**

ABOUT INS SUMITRA

- ❖ INS Sumitra is an **indigenous Offshore Patrol Vessel.**
- ❖ Sumitra, is the **fourth of the Saryu class ships**, based on an **indigenous design and constructed by M/s Goa Shipyard Ltd, India.**
- ❖ Since **commissioning in 2014**, the **ship has been deployed for multiple operational tasks.**
- ❖ **It is propelled by two diesel engines.**
- ❖ The ship has a **range of 6,500 nautical miles** and is **capable of embarking one Dhruv/ Chetak helicopter.**
- ❖ Measuring about **105 metres in length, 13 metres in breadth and displacing 2,200 tonnes**, the ship can achieve **speed of 25 knots.**
- ❖ The **primary role** of the ship is to **undertake surveillance of the country's exclusive economic zone (EEZ)** besides other operational tasks such as **anti-piracy patrols, fleet support operations, maritime security of offshore assets and escort operations of high value naval platforms.**

7. SPACE

7.1   ISRO LAUNCHES XPOSAT

❖ **Indian Space Research Organisation** (ISRO) put its **first polarimetry mission X-ray Polarimeter Satellite (XPoSat)** in a precise **circular orbit of 650 km** with **six-degree inclination.**

❖ It was **launched by PSLV-C58** along with **10 other payloads** from **Satish Dhawan Space Centre in Sriharikota.**

ABOUT XPOSAT

❖ **XPoSat** is the **world's second satellite-based mission dedicated to making X-ray polarimetry measurements after NASA's Imaging X-ray Polarimetry Explorer (IXPE), launched in 2021.**

❖ X-ray Polarimeter Satellite (XPoSat) is **India's maiden mission** dedicated to **analysing the polarisation of X-rays** emanating from **bright celestial sources in the medium frequency band.**

❖ XPoSat will observe two kinds of sources — **persistent sources** (targeted and known sources) and **transient sources** (pulsars, active galactic nuclei, magnetars).

❖ XPoSat comprises two payloads- **Indian X-ray Polarimeter (POLIX)** and **X-ray Spectroscopy and Timing (XSPECT).**

❖ **POLIX**: It is the **world's first instrument designed to operate in the medium X-ray of 8 to 30 kilo electron Volt (keV) energy band**.
   ✓ It will **observe a few tens of astronomical sources.**
   ✓ It was conceived, designed, and built at **Raman Research Institute**.

❖ **XSPECT**: It is **designed to conduct fast timing** and **high spectroscopic resolution in a soft X-ray energy band** (0.8-15 keV).
   ✓ It will **observe a variety of sources like X-ray pulsars, black hole binaries, low-magnetic field neutron stars, active galactic nuclei or AGNs** and **magnetars.**

7.2   SQUARE KILOMETER ARRAY PROJECT

❖ The **Union Cabinet** recently approved **India's participation in the Square Kilometre Array (SKA) project**, along with **a financial commitment of Rs 1,250 crore.**

ABOUT SKA PROJECT

❖ **SKA will be a group of radio telescopes operating out of South Africa and Australia in two different ranges of radio frequency.**
   ✓ The **South-African array** will scan for **mid-frequency signals, between 350 MHz and 15.4 GHz**, while the **Australian telescope will work in the low-frequency range of 50-350 MHz.**

❖ **Its headquarters are at the Jodrell Bank Observatory in the UK.**

❖ **Once constructed, the SKA will be the most powerful telescope ever built.**

❖ **Scientific Objectives**
   ✓ SKA will **observe and map galaxies at the edge of the observable universe**, going back in time.
   ✓ The telescope will study **magnetism and radiation from distant galaxies and map them** as well.
   ✓ SKA will also aim to **detect and understand the role of dark matter and dark energy** in the universe.
   ✓ It will **aid in the search for life beyond the Earth** by looking for planets that orbit stars in habitable zones.

❖ Founded in **2019**, the Square Kilometre Array Observatory (SKAO) has **16 consortium members — Australia, South Africa, Canada, China, India, Japan, South Korea, the UK, Spain, Portugal, Switzerland, France, Germany, the Netherlands, Sweden, and Italy.**

❖ The **Indian Pathfinder research partner** for the **SKA project** is **Pune's Giant Metrewave Radio Telescope**, operated by the **National Centre for Radio Astrophysics (NCRA) of Tata Institute of Fundamental Research (TIFR).**

7.3	GSAT 20

❖ **New Space India Limited (NSIL)** will launch **GSAT-20 (renamed as GSAT-N2)**, on-board **SpaceX's Falcon-9 during the second quarter of 2024.**

ABOUT GSAT-20

❖ The **GSAT-20** is a **high- throughput Ka-band Satellite** (HTS) which will be **fully owned, operated and funded by NSIL.**

❖ GSAT-20, weighing 4700 kg, **offers Ka-Ka band HTS capacity** with **32 beams having Pan-India coverage including Andaman and Nicobar and Lakshadweep islands.**

❖ The satellite offers an **HTS capacity of nearly 48Gpbs.**

❖ It has been **specifically designed to meet the demanding service needs of remote and unconnected regions.**

ABOUT FALCON 9

❖ Falcon 9 is a **reusable, two-stage rocket designed and manufactured by SpaceX**, the Elon Musk-founded company, for the **reliable and safe transport of people and payloads into Earth orbit and beyond.**

❖ Falcon 9 is the **world's first orbital class reusable rocket.**

ABOUT NSIL

❖ NSIL is a **Central Public Sector Enterprise** under the **Department of Space.**

❖ It is **commercial arm of ISRO.**

❖ NSIL was **mandated** to **build, launch, own and operate satellites in "Demand-driven mode" to meet service needs of the user.**

7.4	ADITYA L1 REACHES SOLAR ORBIT

❖ India's solar observation mission, **Aditya-L1**, has **entered the sun's orbit after a four-month journey.**

❖ ISRO is **only the third space agency to station a spacecraft at the L1** after **NASA and the European Space Agency.**

❖ The latest mission by ISRO is the **first by any country in Asia to be placed in orbit around the sun.**

❖ Aditya, named after a Hindu sun deity, has **travelled 932,000 miles (1.5m km) from Earth** – still **only 1% of the distance between Earth and the sun**.
   ✓ Aditya-L1 **was launched** in 2023 with **PSLV C57.**

❖ It is **now at a point called Lagrange point L1.**
   ✓ **These are the points where the gravitational forces of both celestial bodies cancel out, allowing it to remain in a stable halo orbit around the sun. (Lagrange point)**
   ✓ There are **five Lagrange points**.

OBJECTIVES

❖ It will **study coronal mass ejections,**
   ✓ CMEs- **periodic phenomenon** in which **huge discharges of plasma and magnetic energy are released from the sun's atmosphere**. These bursts are so powerful they can reach the Earth and disrupt the operations of satellites.

❖ The mission **also aims to shed light on the dynamics of several other solar phenomena** like **Solar wind distribution** and **temperature anisotropy etc. by imaging and measuring particles in the sun's upper atmosphere.**

❖ **It is carrying 7 payloads-**
   ✓ **4 remote sensing payloads**
   ✓ **3 in-situ payloads**

Type	Sl. No.	Payload	Capability
Remote Sensing Payloads	1	Visible Emission Line Coronagraph(VELC)	Corona/Imaging & Spectroscopy
	2	Solar Ultraviolet Imaging Telescope (SUIT)	Photosphere and Chromosphere Imaging- Narrow & Broadband
	3	Solar Low Energy X-ray Spectrometer (SoLEXS)	Soft X-ray spectrometer: Sun-as-a-star observation
	4	High Energy L1 Orbiting X-ray Spectrometer(HEL1OS)	Hard X-ray spectrometer: Sun-as-a-star observation
In-situ Payloads	5	Aditya Solar wind Particle Experiment(ASPEX)	Solar wind/Particle Analyzer Protons & Heavier Ions with directions
	6	Plasma Analyser Package For Aditya (PAPA)	Solar wind/Particle Analyzer Electrons & Heavier Ions with directions
	7	Advanced Tri-axial High Resolution Digital Magnetometers	In-situ magnetic field (Bx, By and Bz).

7.5 PROBA 3 MISSION

❖ India will launch the **European Space Agency's (ESA) pioneering Proba-3 mission in September 2024.**
❖ The **launch vehicle of choice** for this mission is the reliable **PSLV-XL rocket, operated by the Indian Space Research Organisation (ISRO).**
❖ **It will be deployed in a high Earth orbit.**

ABOUT PROBA-3

❖ This ambitious project marks the **world's first precision formation flying mission**, with **a pair of satellites designed to operate in unison as a 'large rigid structure' in the vastness of space.**
❖ Much like the moon passes in front of the sun during a solar eclipse, the two satellites — **an occulter and a specialized instrument called a coronagraph** — will mimic a **natural solar eclipse by lining up 144 meters (472 feet) apart, such that the former blocks out the sun's glaring disk for the latter.**
❖ **Maintaining formation throughout the orbit is difficult due to high fuel costs.**
  ✓ Therefore, each **orbit will be divided between 6 hours of formation flying manoeuvres at apogee** and the **rest of the orbit** in **passive safe drifting.**
❖ Thus, it will **mimic an artificial eclipse in space, providing a continuous view of the corona.**

7.6 LUNAR GATEWAY STATION

❖ The **UAE** is set to contribute a **critical piece of infrastructure — an airlock module** — to the **Artemis Lunar Gateway.**
❖ The UAE is the **fifth partner in this project** after **USA, Japan, Canada and the European Union.**
❖ The Artemis Lunar Gateway is **designed to be a pivotal outpost for long-term lunar exploration** and **research**, providing a **habitat for astronauts and serving as a staging point for missions to the Moon's surface.**
❖ It is **humanity's first lunar-orbiting space station.**
❖ The station will **double as a space laboratory**, enabling a range of **scientific and technical experiments**, and will have **a minimum lifespan of 15 years, which is subject to extension.**

❖ The **Artemis program**, underpinned by the **Artemis Accords — a set of principles guiding cooperative lunar exploration** — aims to **return humans to the Moon, landing the first woman and the first person of colour on its surface.**

7.7 VIPER ROVER

❖ **NASA** has invited **people to send their names to the surface of the Moon aboard** the agency's **first robotic lunar rover VIPER** – short for **Volatiles Investigating Polar Exploration Rover.**

❖ In its **mission to the lunar South Pole**, the rover **will study the Moon's water and understand the environment** where it **plans to land the first woman and first person of color under its Artemis program.**

❖ In late 2024, **Astrobotic Technologies' Griffin Mission One** is scheduled **to deliver VIPER to the lunar surface** after **launching aboard a SpaceX Falcon Heavy from Cape Canaveral Space Force Station in Florida.**

❖ Once there, VIPER will **rely on its solar panels and batteries for its roughly 100-day mission** to **survive extreme temperatures and challenging lighting conditions**, while powering a suite of science instruments designed to gather data about the **characteristics and concentrations of lunar ice and other possible resources.**

❖ NASA will use the data the rover collects to show where the Moon's ice is most likely to be found and easiest to access, making **VIPER the first-ever resource mapping mission on another celestial body.**

7.8 THIRTY METER TELESCOPE (TMT) PROJECT

❖ An **official delegation from the Department of Science and Technology** visited Hawai'i in the United States, to discuss "challenges" to the **Thirty Meter Telescope (TMT) project.**

ABOUT TMT PROJECT

❖ The TMT has been **conceived as a 30-metre diameter primary-mirror optical and infrared telescope** that will enable observations into deep space.

❖ It is **proposed** as a **joint collaboration involving institutions in the U.S., Japan, China, Canada, and India.**
   ✓ Indian participation in the project was **approved by the Union Cabinet in 2014.**

❖ **It will be installed on Mauna Kea**, an **inactive volcano** on the island of Hawaii.

❖ TMT's **light-collecting primary mirror** will be the **largest in the Northern Hemisphere**.

❖ Its **30 meter mirror** will be **composed of 492 individual 1.4 meter hexagonal segments aligned to form a single light collecting surface**.

❖ TMT will **support a state of the art adaptive optics facility** and supporting suite of instruments to **process and analyze the light coming from its impressive primary mirror.**

❖ It will **observe wavelengths ranging from ultraviolet to mid-infrared** with up to **80 times more sensitivity of today's largest telescopes.**

❖ **India's Role**
   ✓ India is **a Founder-Member country** for this project **at about 10% level**.
   ✓ India's **in-kind contributions towards the project** include **Hardware (Segment Support Assemblies, Actuators, Edge Sensors, Segment Polishing and Segment Coating), Instrumentation (First Light Instruments) and Software (Observatory Software and Telescope Control Systems).**

7.9 SLIM- SMART LANDER FOR INVESTIGATING MOON

❖ **Japan achieved a significant milestone** as its spacecraft, **Smart Lander for Investigating Moon** (SLIM), successfully **landed on the lunar surface,** making it the **fifth country in history to reach the moon**.
   ✓ The first four are- **India, USA, China and Russia.**

❖ SLIM's mission priority was to **achieve a pinpoint landing**, a technology promising greater control than previous moon landings.

- The **lightweight spacecraft**, about the **size of a passenger vehicle, utilized precision landing technology**, aiming for **a target of just 100 meters (330 feet).**
- The mission, nicknamed **"the Moon Sniper,"** was the **result of two decades of precision technology development by Japan Aerospace Exploration Agency (JAXA).**

8. ENVIRONMENT

8.1   INDIAN PANGOLIN

- The **project** launched to **protect pangolins has succeeded at Pench Tiger Reserve and Satpura Tiger Reserve** in MP as the **mammals have started to breed there**.
- The **pangolin conservation project has been launched with help of Wildlife Conservation Trust, Mumbai.**

ABOUT PANGOLINS

- Pangolins are **only known mammals** that have **scales made of keratin that cover their entire body.**
- When **threatened**, they **can roll into a ball to protect themselves.**
- **Also called Scaly Anteaters.**
- These are **nocturnal mammals** that **dig burrows and feed on ants and termites.**
- Pangolins, and play a vital role in ecosystem management, mostly in **aerating and adding moisture to the soil.**
- **Two Pangolin species** are found in **India-**
  - ✓ **the Indian Pangolin (Manis crassicaudata) and**
  - ✓ **the Chinese Pangolin (Manis pentadactyla).**
- **Protection status**
  - ✓ **IUCN Red list status**
    - ➢ **Indian Pangolin- Endangered**
    - ➢ **Chinese Pangolin- Critically Endangered**
  - ✓ In India, pangolins, both Indian and Chinese, are **protected under Schedule 1 of the Wildlife (Protection) Act 1972** that **prohibits its hunting, trade or any other form of utilisation.**
- **All pangolin species** are listed in **Convention on International Trade in Endangered Species (CITES) Appendix I.**

8.2   SNOW LEOPARD

- The **Snow Leopard** has now been declared the **national symbol of Kyrgyzstan**.

ABOUT SNOW LEOPARD

- Scientific Name- **Panthera uncia**
- **Habitat**
  - ✓ **Global- mountainous regions of central and southern Asia.**
  - ✓ **India- Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand and Sikkim and Arunachal Pradesh.**

> **The Hemis National Park in Ladakh** is called **Snow Leopard capital of the world.**

- They play a **key role as a top predator**, an **indicator of the health of their high-altitude habitat**, and, increasingly, an important **indicator of the impacts of climate change on mountain environments.**
- **Threats** include **poaching, habitat loss and declining prey, human-wildlife conflict and warming in the higher reaches.**
- **Protection status**

- ✓ **IUCN Red List – Vulnerable**
- ✓ **CITES- Appendix I**
- ✓ **WPA 1972- Schedule-I**

OTHER FACTS

❖ **Global Snow Leopard and Ecosystem Protection Programme (GSLEP)** is an alliance of **12 snow leopard range countries**, multi-lateral **institutions, NGOs, scientists** and **local communities**, working to save the specie.

❖ The 12 countries are -**Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Russia, Tajikistan, and Uzbekistan.**

8.3   RIVER DEVIKA PROJECT

❖ **North India's first river rejuvenation project 'Devika'** is in the **final stages** and it will be **soon dedicated to the nation.**

❖ Built **on the lines of 'Namami Ganga'**, the **project was launched by the Prime Minister in February 2019.**

❖ Besides a **Liquid Waste Management Project**, a **Solid Waste Management (SWM) project** will also be constructed under Devika Rejuvenation Project.

ABOUT DEVIKA RIVER

❖ Devika river is **considered the sister of the sacred river Ganga**, and it **has a great religious significance**.

❖ It originates from the **hilly Suddha Mahadev temple in the Udhampur district** of Jammu and Kashmir and flows down westward towards Pakistan, where it **merges with the Ravi River.**

❖ In the Nilmat Puran that was written in the 7th century by Nela Muni, it is mentioned that the **Devika River is a manifestation of the mother Goddess Parwati** herself to benefit the people of **Mader Desha** that **covers areas between river Ravi and Chenab.**

8.4   POLAR BEAR

❖ A **polar bear** has reportedly **died due to bird flu in Alaska as the H5N1 virus spreads across the globe.**

❖ It was the **first polar bear case reported who died due to bird flu.**

ABOUT POLAR BEERS

❖ **Scientific Name- Ursus maritimus**

❖ It is the **largest bear** and the **largest land carnivore** in the world.

❖ Polar bears are **primarily found in the Arctic region**, and **their habitat is closely tied to sea ice.**
- ✓ **Note- They are not found in the Antarctic.**

❖ They have a **thick layer of blubber and dense fur** that **insulates them from the cold.**

❖ Polar bears are **strong swimmers and divers** which enables them to **swim from one iceberg to another and to hunt seals in sea**. They can also swim underneath ice sheet in search of food.

❖ **Polar bears do not hibernate** like the brown and black bears do.
- ✓ Instead they **remain active throughout winter in spite of freezing cold.**

❖ **Protection status**
- ✓ IUCN Red List- **Vulnerable**

8.5   WETLAND CITY ACCREDITATION

❖ **Ministry of Environment, Forest, and Climate Change** has submitted **three nominations from India for Wetland City Accreditation (WCA)** under the **Ramsar Convention on Wetlands**.

❖ **Indore (Madhya Pradesh), Bhopal (Madhya Pradesh) & Udaipur (Rajasthan)** are the **first three Indian cities for which nominations have been submitted for WCA** based on the proposals **received from respective State Wetlands Authorities in collaboration with the Municipal Corporations.**

ABOUT THE CITIES

❖ **Indore**- Founded by **Holkars**, Indore is the **cleanest city in India and the recipient of India's Smart City Award 2023 for its best sanitation, water and urban environment.**
  ✓ **Sirpur Lake**, a Ramsar Site in the city, has been recognised as an important site for water bird congregation and is being developed as a Bird Sanctuary.
  ✓ A strong network of more than **200 wetland mitras** is engaged in bird conservation and sensitising local community to protect Sarus Crane.
❖ **Bhopal**- One of the cleanest cities in India that has proposed conservation zones around the wetlands in its draft City Development Plan 2031.
  ✓ **Bhoj Wetland**, Ramsar Site is the city's lifeline, equipped with the world-class wetlands interpretation centre, Jal Tarang.
  ✓ Additionally, the Bhopal Municipal Corporation has a dedicated Lake Conservation Cell. A network of more than **300 wetland mitras is engaged in wetland management and conservation of Sarus Crane.**
❖ **Udaipur**- Located in Rajasthan, the city is surrounded by **five major wetlands, namely, Pichola, Fateh Sagar, Rang Sagar, Swaroop Sagar, and Doodh Talai**.
  ✓ These wetlands are **an integral part of the city's culture and identity, help maintain the city's microclimate, and provide a buffer from extreme events.**

ABOUT WETLAND CITY ACCREDITATION (WCA)

❖ The **Ramsar Convention during COP12 held in the year 2015** approved **a voluntary Wetland City Accreditation system** under Resolution XII.10 which **recognizes cities which have taken exceptional steps to safeguard their urban wetlands.**
❖ It also seeks to encourage cities that are close to and dependent on wetlands to **develop and strengthen a positive relationship with these valuable ecosystems.**
❖ To be formally accredited, a **candidate for the Wetland City Accreditation** should **satisfy the standards used to implement each of the six international criteria** mentioned **Operational Guidance for WCA of the Ramsar Convention on Wetlands**.
❖ Since Ramsar COP13, **43 cities from 17 countries have been officially recognized as "Wetland Cities".**

8.6	PALLAS FISH EAGLE

❖ Pallas Fish Eagle was sighted in the Chilika lake after a gap of about 10 years.

ABOUT PALLAS FISH EAGLE (HALIAEETUS LEUCORYPHUS)

❖ Pallas's fish eagle, also known as Pallas's sea eagle or band-tailed fish eagle, is a large, brownish sea eagle.
❖ It breeds in the east Palearctic in Kazakhstan, Russia, Tajikistan, Turkmenistan, Uzbekistan, Mongolia, China, India, Nepal, Bangladesh, Myanmar and Bhutan.
❖ It is partially migratory, with Central Asian birds wintering among the southern Asian birds in northern India, and also further west to the Persian Gulf.
❖ Its diet consists primarily of large freshwater fish but they also regularly prey upon birds, especially water birds and other prey reportedly can include mammals, including leporids and rodents, frogs, reptiles, including snakes and terrapins, insects.
❖ The global population is estimated at less than 2,500 individuals.
❖ Threats- Direct persecution, habitat degradation, pollution, and draining or overfishing lakes.
❖ **IUCN Red List status-** Endangered.

8.7	EAGLE NEST WILDLIFE SANCTUARY

❖ Researchers at the Indian Institute of Science (IISc.) in Bengaluru have found that **logging and climate change pose a threat to montane birds.**

❖ The **IISc. team collected data from the Eaglenest Wildlife Sanctuary.**

> **Tropical montane forests** are **unique ecosystems** that can **start at about 150-200 metre elevation, and reach up to 3,500 metre high up** on mountains around the world. They are **critical centres of biodiversity.**

ABOUT EAGLENEST WILDLIFE SANCTUARY

❖ It is **a protected area in Himalayan foothills** located in **west kameng district in Arunachal Pradesh.**

❖ It is **situated in the biodiversity hotspot of Eastern Himalayas.**

❖ It is **accessible even during monsoon season.**

❖ A unique feature of this sanctuary is that **within itself** the **entire elevational range is covered containing all habitats and species i.e Coniferous Temperate Forest, Coniferous Subtropical Forest, Broadleaf Subtropical Forest, Tropical Wet Evergreen and Semi-evergreen Forest**

❖ **Fauna-**
  ✓ It is **home to over 500 bird species. E.g Blythe's & Temincks tragopan, beautiful nuthatch, rufous necked hornbill, shortwings(lesser & white browed), wren babbler(wedge billed), Wards trogon etc.**
  ✓ It is also home for many **species of amphibians, snakes & lizards, mammal species like Bengal Tiger,Clouded leopard, Red Panda, Arunachal Macaque, Gaur & endangered capped Langur.**

8.8 HOG DEER

❖ A hog deer has been **spotted for the first time** in the **Chilla Range of Rajaji Tiger Reserve**, being **captured recently by trap cameras.**

ABOUT HOG DEER

❖ **Scientific name- Axis porcinus**

❖ **Global** spread - **northern India, Pakistan and Southeast Asia.**

❖ **In India,** Hog Deer **inhabits the alluvial grasslands of the Terai forest right from Corbett to the forests of Assam.**

❖ They **feed** on **tender shoots and grasses in addition to flowers and fallen fruit.**

❖ Hog deer as named has a **peculiar habit of running like a hog with its head down without the traditional leaps of a deer.**

❖ Hog deer **live in open areas** and **avoid closed forests**.

❖ Males tend to be **territorial** and mark their territory with **glandular secretions**.

❖ Hog deer are **solitary animals**. However, they **may occasionally be observed feeding in small herds** in open terrains.

❖ **Protection status**
  ✓ **IUCN red list status - Endangered.**
  ✓ **Schedule I** of the Indian **Wild Life (Protection) Act, 1972**.

ABOUT RAJAJI TIGER RESERVE

❖ It is **spread across Uttarakhand's three districts - Haridwar, Dehradun and Pauri Garhwal.**

❖ It is **situated along the hills and foothills of the Shiwalik ranges.**

❖ It was named **after the famous freedom fighter C. Rajgopalachari**; popularly known as "Rajaji".

❖ It was **declared a Tiger Reserve in 2015** as the **48th tiger reserve of the country.**

❖ **Vegetation**- broadleaved deciduous forests, grasslands, scrub land and pine forests

❖ **Flora**- Amaltas, Rohini, Palash, Shisham, Sal, Sandan, Khair etc.

❖ **Fauna**- Elephants, Tigers, Jungle Cat, Leopard, Goral, Striped Hyena, Himalayan Black Bear, Sloth Bear, Jackal, Barking Deer, Sambhar, Wild boar etc

8.9	AFRICAN ELEPHANTS

- Nigeria recently destroyed **2.5 tonnes of seized elephant tusks valued at over 9.9 billion naira ($11.2 million)** in a **push to protect its dwindling elephant population from rampant wildlife traffickers.**
- **Thousands of elephants are killed each year** for their **tusks** despite a **1989 ban on the trade of ivory** by the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).**

ABOUT AFRICAN ELEPHANTS

- **African elephants are the largest land animals on Earth.**
   - ✓ They are **slightly larger than Asian Elephants.**
- **Characteristics**
   - ✓ African elephants have **much larger ears that look like the continent of Africa.**
   - ✓ They have **rounded heads.**
   - ✓ Both **male and female African elephants can have tusks.**
- **Elephants are matriarchal i.e. they live in female-led groups.**
- **Threats –Poaching, Habitat loss** because of **increasing human population, and conversion of land for agriculture and development etc.**
- **Classified into two types-**
   - ✓ **African Savanna (or bush) elephant**: They are larger animals that roam the plains of sub-Saharan Africa.
      - ➢ **IUCN Red List: Endangered**
   - ✓ **African Forest Elephants**: They are smaller animals that live in the forests of Central and West Africa.
      - ➢ **IUCN Red List: Critically Endangered**

8.10	HIMALAYAN WOLF

- The **Himalayan Wolf** has been **assessed for the first time** in the **International Union for Conservation of Nature (IUCN)'s Red List.**
- The animal has been categorised as **'Vulnerable'** on the **IUCN Red List**.
- The Assessment has also flagged **'continuing decline in area, extent and/or quality of habitat'** of Himalayan wolves.
- The study was based on **population size estimate of 2,275-3,792 mature individuals.**
   - ✓ India has **227-378 mature individuals** in its **section of the Himalayas.**
- The **Himalayan Wolf** is a **prominent lupine predator found across the Himalayas**.
- **Scientific name- Canis lupus chanco**
- Its habitat **consists of grasslands, rocky outcrops, and steep slopes.**
- It has **thick fur that varies from reddish to brown, grey and black in color.**
- They **typically hunt in small packs of up to six individuals.**
- **Threats**
   - ✓ It is **illegally hunted** for **trade in its fur and body parts** including **paws, tongues, heads, and other parts.**
   - ✓ **Increasing populations of feral dogs** also poses a growing challenge.
- **Protection status**
   - ✓ **IUCN's Red List: Vulnerable**
   - ✓ **WPA 1972: Schedule I**
   - ✓ **CITES: Appendix I**

8.11	INDIA'S FIRST DARK SKY PARK

- The **Pench Tiger Reserve** (PTR) has been **marked as India's first Dark Sky Park** and **the fifth such park in Asia** for **protecting the night sky and preventing light pollution**, making the facility ideal for astronomy enthusiasts.

❖ The certification was given by the **International Dark-Sky Association**, a global dark-sky movement to promote astronomy.

ABOUT PENCH TIGER RESERVE

❖ **Pench Tiger Reserve or Pench National Park** is one of the **premier tiger reserves of India** and the **first one to straddle across two states - Madhya Pradesh and Maharashtra.**

❖ The Reserve is located in the **southern reaches of the Satpura hills** in the **Seoni and Chhindwara districts in Madhya Pradesh** and **in Nagpur district in Maharashtra as a separate Sanctuary.**

❖ It is **25th tiger reserve of India**.

❖ The Pench Tiger reserve (PTR) which **derives its name from its lifeline - the River Pench** is spread over **741.41 Sq.km of area.**

❖ The **fictional works of Rudyard Kipling**, **The Jungle Book and The Second Jungle Book**, are set in the region.
  ✓ Kipling himself never visited the area, instead basing his descriptions on other locations in India.

❖ Vegetation ranges from **moist sheltered valley** to **an open, dry deciduous forest.**

❖ Flora includes **teak, saag, mahua, and various grasses and shrubs.**

❖ **Faunal species** include **tiger, leopard, sloth bear, Indian gaur, wild dog, wolf etc.**

A DARK SKY PRESERVE

❖ A **dark-sky preserve** is an **area, usually surrounding a park or observatory**, that **restricts artificial light pollution**.

❖ The **purpose** of the dark-sky movement is generally **to promote astronomy.**

❖ The **Indian Astronomical Observatory (IAO)**, a **high-altitude astronomy station** located in **Hanle**, and operated by the Indian Institute of Astrophysics, is **India's first dark-sky preserve**.
  ✓ Situated in the **Western Himalayas** at an **elevation of 4,500 meters (14,764 ft)**, the IAO is one of the **world's highest located sites for optical, infrared and gamma-ray telescopes.**

8.12 IMD LAUNCHES NATIONAL FRAMEWORK OF CLIMATE SERVICES

❖ The **National Framework of Climate Services** was launched by **India Meteorological Department** as celebrates **150th Year of its establishment and service to the nation.**
  ✓ It is **India's version** of the **Global Framework for Climate Services adopted by the UN in 2012.**

❖ It aims to **maximise utilisation of climate information**, as a part and parcel of all our activities, with **special emphasis on disaster risk reduction, water, health, energy and agriculture management.**

❖ It seeks to **build a platform for users of climate information and services** that will **strengthen the production, availability, delivery and application of science-based climate monitoring and prediction services.**

❖ It will also facilitate exchange of climatic information with **international and regional partners**, acting as **"soft diplomacy"** and establishing the **India Meteorological Department as a "regional leader" in climate information.**

OTHER LAUNCHES

❖ IMD's mobile app, **'Mausam'**, that integrates all services offered by the weather office, was also launched.

❖ **Weather Analysis and Forecast Enabling System (WAFES) Decision Support System** — a platform for visualising weather forecasts and climate models of the IMD in an integrated manner, was also launched.

❖ **Panchayat Mausam Sewa Portal** to help farmers in planning their agricultural activities.

ABOUT IMD

❖ It is the **National Meteorological Service** of the country and the principal government agency in all matters relating to meteorology and allied subjects.

❖ It is **an agency of the Ministry of Earth Sciences.**

❖ **Established- 1875**

❖ **HQ- New Delhi**

❖ It is **one** of the **six Regional Specialized Meteorological Centres of the World Meteorological Organisation.**

8.13	TIBETAN BROWN BEAR

- ❖ India has recorded its **first-ever confirmed record of a rare Tibetan Brown Bear**.
- ❖ The bear was **spotted in high altitudes of Northern Sikkim** thanks to the **camera traps installed by the Sikkim Forest Department and WWF-India**.
- ❖ With this discovery, the **nation's animal diversity has increased by one subspecies.**

ABOUT TIBETAN BROWN BEAR

- ❖ The Tibetan brown bear, also known as the **Tibetan blue bear**, is **one of the rarest subspecies of bears** in the world and **is rarely sighted in the wild.**
    - ✓ Only a few were sighted from Nepal, Bhutan, and the Tibetan plateau.
- ❖ It lives in **high-altitude alpine forests, meadows, and steppe above 4000 m.**
- ❖ The omnivore **mainly feeds on marmots and alpine vegetation**.
- ❖ The Tibetan brown bear is characterised by its **yellowish scarf-like collar that broadens from the shoulders to the chest**, very different from the more commonly found Himalayan black bear in appearance.
- ❖ **Protection status**
    - ✓ IUCN Red List- **Endangered** (**Least Concern** on global level)
    - ✓ WPA 1972- **Schedule I**
    - ✓ CITES- **Appendix 1**

8.14	PAKKE PAGA HORNBILL FESTIVAL

- ❖ The **9th edition** of the **Pakke Paga Hornbill Festival (PPHF)** commenced in the **town of Seijosa in Arunachal Pradesh's Pakke Kessang district** recently**.**
- ❖ This year's **theme**, **Domutoh Domutoh, Paga hum Domutoh**, translates to **'Let Our Hornbills Remain'** in Nyishi, emphasising the critical need to preserve the iconic birds.
- ❖ **Seijosa** is **located near the Pakke Tiger Reserve (PTR)**, which is **home to four species of hornbills**: **Wreathed, Great Indian, Oriental Pied and the endangered Rufous-necked.**
- ❖ The area is the **traditional homeland** of the **Nyishi people**, the **largest tribal group in Arunachal Pradesh**.
- ❖ The **first-ever PPHF was held on January 16-18, 2015**.
- ❖ PPHF was declared a **'state festival'** by then-**Arunachal Chief Minister Pema Khandu in 2019.**
- ❖ The aim was **to recognise the role played by the Nyishi in conserving hornbills in PTR.**
    - ✓ The Nyishi had **formerly hunted hornbills** and **used their bills to craft traditional headgear.**
    - ✓ They had **later turned hornbill conservationists.**

8.15	INDIAN VULTURE

- ❖ An **Indian vulture** was spotted in the skyline of Thane recently.
- ❖ A **vulture** has **not been spotted over two decades in the city.**

ABOUT INDIAN VULTURE

> India is home to 9 species of Vulture namely the Oriental white-backed, Long-billed, Slender-billed, Himalayan, Red-headed, Egyptian, Bearded, Cinereous and the Eurasian Griffon.

- ❖ Scientific name- **Gyps indicus**
- ❖ The **Indian vulture or long-billed vulture** is a **bird of prey native to the Indian subcontinent**.
    - ✓ Countries include- **India, Pakistan and Nepal**
- ❖ It is **an Old World vulture** belonging to the family of **Accipitridae**.
- ❖ It is **a medium-sized vulture** with a **small, semi-bald head with little feathers, long beak, and wide dark colored wings.**
- ❖ **Females of this species are smaller than males.**
- ❖ **Threat –Poisioning by feeding on carcasses of cattle administered Diclofenac (a veterinary drug)**
- ❖ **Protection status**

✓ **IUCN red list- Critically Endangered**

8.16 KUMKI ELEPHANTS

❖ The **Odisha government has sought assistance of Tamil Nadu** for making **kumki elephants and mahouts available in the wake of worsening human-elephant conflict** in Odisha.
❖ Kumkis are **trained captive elephants** used in operations **to trap, rescue and tranquilise wild elephants.**
❖ **Kumki elephants** can be **deployed strategically** to help **manage and drive wild elephants thereby reducing damage to crops, human habitations and the potential loss of both human and elephant lives.**

8.17 WORLD'S FIRST BLACK TIGER SAFARI

❖ **Odisha** CM recently announced that the **state will set up an exclusive Melanistic Tiger Safari**, which would be the **first of its kind in the world**.
❖ The Safari will be **set up near the Similipal Tiger Reserve (STR) in Mayurbhanj.**
Similipal Tiger Reserve is said to be the **only home for melanistic tigers in the wild in the world.**

8.18 INDIAN GREY WOLF

❖ Recently, an **Indian grey wolf** was sighted in **National Chambal Sanctuary**, which is its **first confirmed sighting in the region in about two decades.**
❖ The last wolf sightings were reported during **Operation Bhediya carried out between 1997 and 2000** to map the **canines' footprint in Chambal.**

ABOUT INDIAN GREY WOLF
❖ Scientific Name: **Canis lupus pallipes**
❖ **It is a subspecies of grey wolf that ranges from Southwest Asia** to the **Indian Subcontinent.**
❖ **Habitat** includes **scrublands, grasslands and semi-arid regions.**
❖ Indian wolves **generally live in smaller packs rarely exceeding 6-8 individuals.**
❖ They are also **relatively less vocal** and have **rarely been known to howl.**
❖ Indian wolves are **monogamous and mate for life.**
❖ They are **nocturnal and hunt from dusk to dawn.**
❖ **Threats** include **habitat loss, unregulated hunting, and loss of prey.**
❖ About **2,000-3,000 individuals are remaining** in India.
❖ **Protection status**
   ✓ IUCN Red list status - **Least Concern**
   ✓ WPA 1972- **Schedule I**
   ✓ CITES- **Appendix I**

9. POLICY AND PROGRAMME

9.1   NATIONAL TRANSIT PASS SYSTEM (NTPS)-'ONE NATION-ONE PASS'

❖ **Ministry for Environment, Forest and Climate Change** launched the **National Transit Pass System (NTPS) pan-India** to facilitate the **seamless transit of timber, bamboo, and other forest produce across the country.**
   ✓ **Currently**, the transit permits are issued for **transport of timber and forest produce based on state specific transit rules.**

ABOUT NTPS

❖ The **NTPS** is envisioned as **a "One Nation-One Pass" regime**, which will **enable seamless transit across the country**.
❖ This initiative will **streamline the issuance of timber transit permits by providing a unified, online mode** for **tree growers and farmers involved in agroforestry across the country**, contributing to the ease of doing business.
❖ Presently, **25 States and Union Territories have embraced the unified permit system**, streamlining interstate business operations for producers, farmers, and transporters.
❖ This move is expected **to provide a significant impetus to the agroforestry sector.**

FEATURES

❖ It is a **role based and work flow** based application available as **desktop based web portal as well as mobile application.**
❖ **Online registration** and **submission of the applications for Transit Permit (TP)** or **No Objection Certificate (NOC) through web-portal and mobile app**
❖ **Transit permits** will be **issued for tree species** which are **regulated**, while the **users can self-generate No Objection Certificates for exempted species.**
❖ **E-payment system**: Payment can be **made online through mobile app/web portal** before downloading T.P.

9.2   KNOW INDIA PROGRAMME

❖ The Valedictory Session of the **70th edition of the Know India Programme (KIP)** was held recently.
❖ The Know India Programme has **completed 20 years**, making it **one of the longest running diaspora engagement programmes** of Government of India.

ABOUT KNOW INDIA PROGRAMME

❖ Launched **in 2003.**
❖ The primary objective is of **fostering closer connections between Indian diaspora youth** and **their ancestral homeland**.
❖ Nodal ministry- **Ministry of External Affairs**
❖ The **three week programme** provides **diaspora youth exposure to India's history and cultural heritage, along with growth and development of modern India.**
❖ It is **open to Persons of Indian Origin (21-35 years)** from **all the countries**, with **preference given to youth from Girmitiya countries.**
❖ **Key elements** of programme
   ✓ visits to places of **historical and cultural importance**;
   ✓ familiarisation with **Yoga, Ayurveda**, and **classical** forms of **Music and Dance**;

> Girmitiya are those Indians who went abroad as indentured labourers under an agreement.
>
> Such individuals went to countries such as Mauritius, Fiji, Suriname, Trinidad & Tobago, Guyana, among others.

- ✓ visit to **institutions of democracy and governance** like **Parliament** of India, **Election Commission** of India, **Rashtrapati Bhawan**;
- ✓ interaction with **leading educational institutions**;
- ✓ exposure to **flagship economic and development schemes** like Digital India, StartUp India, and Make in India; and
- ✓ visits to **industrial sites, public and private firms** to highlight India's strength in Manufacturing & Service sector.

❖ The participants are **provided with return air tickets** (with participants bearing 10% of the cost of airfare), and **local hospitality** including **boarding/lodging and transportation, as part of the Programme.**

9.3   "PRITHVI VIGYAN (PRITHVI) SCHEME

❖ The Union Cabinet has sanctioned the **"Prithvi Vigyan (Prithvi)" scheme.**

ABOUT PRITHVI VIGYAN (PRITHVI) SCHEME

❖ It is a **comprehensive initiative of the Ministry of Earth Sciences.**
❖ With an **investment of Rs 4,797 crore earmarked for the period from 2021 to 2026**, this scheme is **set to revolutionise India's approach to earth science research and application.**
❖ The Prithvi scheme **integrates five existing sub-schemes**:
  - ✓ **Atmosphere & Climate Research-Modelling Observing Systems & Services** (ACROSS),
    - ✓ For Research and Development (R&D) of dynamical models and providing the forecast services.
  - ✓ **Ocean Services, Modelling Application, Resources and Technology** (O-SMART),
    - ✓ For technology development for oceanic applications, services including forecast and advisories and R&D activities in the marine and coastal environment.
  - ✓ **Polar Science and Cryosphere Research** (PACER),
    - ✓ Consisting the Antarctic program, Indian Arctic program, Southern Ocean program and Cryosphere and Climate program.
  - ✓ **Seismology and Geosciences** (SAGE),
    - ✓ 6 activities including Seismological monitoring and microzonation, and Setting up a facility for geochronology; and
  - ✓ **Research, Education, Training and Outreach** (REACHOUT)
    - ✓ to advance research, education, and training in the realm of Earth Sciences.
❖ **Objectives**
  - ✓ **Augmentation and sustenance of long-term observations** of the **atmosphere, ocean, geosphere, cryosphere and solid earth** to record the vital signs of the Earth System and change.
  - ✓ The **development of modelling systems** for understanding and predicting the weather.
  - ✓ To promote **exploration of polar and high seas regions of Earth**.
  - ✓ To promote **developing technology to explore harnessing oceanic resources for societal applications.**

9.4   SVAMITVA SCHEME

❖ **SVAMITVA Scheme** has been conferred with the **prestigious 1st Prize in the Innovation Sandbox presentation** for **"Digital Transformation Initiatives in Land Governance through SVAMITVA Scheme", during "Public Policy Dialogues" Conclave.**

ABOUT SVAMITVA SCHEME

❖ **SVAMITVA** stands for **survey of villages and mapping with improvised technology in village areas.**
❖ SVAMITVA Scheme is a **Central Sector Scheme** that has **significantly contributed to the empowerment of rural communities in India.**

- ❖ Nodal Ministry- **Ministry of Panchayati Raj**
- ❖ The SVAMITVA Scheme **aims to cover all villages in India over a five-year period, from April 2020 to March 2025.**
- ❖ It is implemented with the **collaborative efforts of the Ministry of Panchayati Raj**, **State Revenue Department**, **State Panchayati Raj Department** and **Survey of India**.
- ❖ By leveraging **cutting-edge drone surveys and GIS mapping technology**, the scheme **ensures accurate demarcation of land parcels**, thereby **mitigating disputes** and **providing individuals with property records of** rights i.e**. SVAMITVA Property Cards**.
    - ✓ These facilitate **monetization of properties, enabling bank loans and comprehensive village-level planning**.

STATISTICS

- ❖ **Drone survey** has been **completed in 2.90 lakh villages** and **1.66 crore property cards have been prepared for 1.06 lakh villages so far.**

9.5   SOLAR ENERGY SCHEME UNDER PM-JANMAN

- ❖ The Central government has launched **a new solar scheme worth Rs 515 crore** for **electrification** in **Particularly Vulnerable Tribal Groups (PVTG) habitations and villages** under the **Pradhan Mantri Janjati Adivasi Nyaya Abhiyan (PM-JANMAN) programme** during **2023-24 to 2025-26.**
- ❖ It will be **disbursed over three years**, starting with **Rs 20 crore in the current financial year, Rs 255 crore in 2024-25, and Rs 240 crore in 2025-26.**
- ❖ It **aims to cover** the **electrification of one lakh un-electrified households in PVTG areas** identified by the **Ministry of Tribal Affairs**.
- ❖ These areas are **spread across 18 states and Union Territories (UT): Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Odisha, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, and the UT of Andaman & Nicobar Islands.**
- ❖ **Components**
    - ✓ **Electrification of 1 Lakh PVTG households (HHs) through Off-grid solar power through**
        - ➢ **Solar Home Lighting Systems for scattered households**
        - ➢ **Solar Mini-grids for a cluster of households**
    - ✓ **Solarization of multi-purpose centers (MPCs)** by installation of **Off-grid Solar power pack with battery bank.**
- ❖ The **respective DISCOMs in PVTG area** will be the **implementing agency.**

9.6   PM E-BUS SEWA SCHEME

- ❖ The Union government has granted **an extension to the procurement deadline** for the **initial batch of 3,600 electric buses (e-buses)** under the **PM-eBus Sewa scheme**, setting the **new cutoff date to January 31.**

ABOUT THE SCHEME

- ❖ The **ambitious PM-eBus Sewa scheme**, which **was announced on August 16**, seeks to **introduce 10,000 e-buses across 169 cities**.
- ❖ This will be **done through a 10-year public-private partnership (PPP) arrangement.**
- ❖ The **Ministry of Housing and Urban Affairs is overseeing this endeavour.**
- ❖ While the scheme has a **total budget of Rs 57,613 crore**.
    - ✓ Of this, **Rs 20,000 crore will be allocated from the central government's budget**.
    - ✓ The **rest will be secured** through contributions from various **state governments**.
- ❖ Distinguishing itself from FAME-II, the **PM-eBus Sewa initiative empowers state governments to deploy electric buses in cities with a population of 300,000.**

- ✓ But **FAME-II** focuses on deployment of **e-buses in only nine cities with a population of over four million.**
- ❖ There are **two segments of the scheme**
    - ✓ **Augmenting the city bus services and Associated Infrastructure**: Under this segment, the scheme will augment city electric bus operations by **extending Central Assistance (CA) for 10,000 electric bus operation on Public Private Partnership (PPP) model**, bus depots and behind-the-meter power infrastructure.

Green Urban Mobility Initiatives (GUMI): Under this segment, the scheme will support the **implementation of GUMI projects** for **complementing bus services and demonstrating a reduction in Greenhouse Gas (GHG) emissions in urban areas.**

9.7	MUKHYAMANTRI MAHILA UDYAMITA ABHIYAN

- ❖ The **Assam** government has decided to launch the **Mukhyamantri Mahila Udyamita Abhiyan**, a **scheme that aims to promote entrepreneurship** among **3.9 million women members of self-help groups in the state**
- ❖ According to the scheme, in the first phase, **each applicant will be provided with a grant of ₹10,000** for the **first year to start any business** from **a list of 145 business plans prepared by the government.**
- ❖ The **total amount earmarked** by the scheme as **part of the state annual budget is ₹3,900 crores.**

9.8	MPLADS E-SAKSHI MOBILE APPLICATION

- ❖ **Ministry of Statistics and Programme Implementation (MoSPI)** recently launched the **MPLADS e-SAKSHI Mobile Application** for revised fund flow procedure under **MPLAD Scheme**.
- ❖ It was **launched for revised fund flow procedure** under **Members of Parliament Local Area Development Scheme (MPLAD) Scheme.**
- ❖ It would **offer convenience and accessibility, allowing MPs to propose, track, and oversee the projects at their fingertips.**
- ❖ This **real-time access enhances decision-making processes, enabling swift responses** to emerging needs or issues.

ABOUT MPLADS

- ❖ It is a **Central Sector Scheme** which was **announced in December 1993.**
- ❖ The **objective of MPLAD Scheme** is to enable the **Members of Parliament (MPs)** to recommend **works of developmental nature** with emphasis on the **creation of durable community assets based on the locally felt needs** in areas of **drinking water, primary education etc.**
- ❖ Each year, **MPs receive Rs. 5 crore in two instalments of Rs. 2.5 crore each.**
- ❖ **Funds** under **MPLADS are non-lapsable.**
- ❖ **Area of works**
    - ✓ **Lok Sabha MPs** have to recommend the **district authorities projects in their Lok Sabha constituencies**,
    - ✓ **Rajya Sabha MPs** have to spend it in the **state that has elected them to the House.**
    - ✓ **Nominated Members of both the Rajya Sabha and Lok Sabha** can recommend works **anywhere in the country.**
- ❖ **Recommendation by the MPs should be done annually** with works costing **at least 15 percent of the MPLADS entitlement for areas inhabited by Scheduled Caste population** and **7.5 percent for areas inhabited by the ST population.**
- ❖ **District authority** must inspect **atleast 10% of all work under implementation every year.**

9.9	MAHTARI VANDANA YOJANA 2024

- ❖ **The Chhattisgarh** government has introduced **Mahtari Vandana Yojana 2024**, aiming to **offer monthly economic assistance of ₹1000 to women**, totaling **an annual aid of ₹12,000**, thereby empowering women **through financial support.**
- ❖ The **amount received** under the scheme will be **directly deposited into the beneficiaries' bank accounts which** can be utilized for **health, personal expenses**, and **even starting small businesses**.

9.10   PM YASASVI SCHEME

- ❖ A total of ₹32.44 Crore has been released for **Pre-matric Scholarships and ₹387.27 Crore for Post-Matric Scholarships to States/Union Territories (UTs) under the PM YASASVI scheme in 2023.**

ABOUT PM YASASVI

- ❖ **It stands for PM- YOUNG ACHIEVERS SCHOLARSHIP AWARD SCHEME FOR VIBRANT INDIA FOR OBCs AND OTHERS (PM -YASASVI)**
- ❖ PM YASASVI is a **scholarship program designed for students belonging to Other Backward Class (OBC), Economically Backward Class (EBC), and Denotified Nomadic Tribes (DNT).**
- ❖ It **offers pre-matric scholarships for students in grades 9 and 10**, as well as **post-matric scholarships for higher education.**
- ❖ Exceptional students also have the **opportunity to receive scholarships for top-tier schools and colleges.**
- ❖ Additionally, **hostel facilities are provided for OBC students through a construction scheme.**
- ❖ **Nodal Ministry- Ministry of Social Justice and Empowerment.**
- ❖ **Eligibility**
  - ✓ The **annual income of parents/guardians from all sources should not exceed Rs. 2.5 lakhs.**
  - ✓ Students studying in **Class IX and Class XI identified Schools across India.**
- ❖ The Exam to select students- **Yasasvi Entrance Test** is conducted by **National Testing Agency (NTA)**
- ❖ **Entitlement**
  - ✓ **Upto Rs. 75,000 p.a. for Class 9/10, Rs. 1,25,000 p.a. for Class 11/12, covering the school tuition fee/hostel fee.**

9.11   ODISHA LAUNCHES LABHA SCHEME

- ❖ The **Odisha government** announced the **launch** of **LABHA ('Laghu Bana Jatya Drabya Kraya') Yojana, a 100% State-funded minimum support price (MSP) scheme** for **minor forest produce (MFP).**
- ❖ The decision is **likely to impact the State's large tribal population**, which **numbers close to one crore or 23% of Odisha's total population**.
- ❖ From now on, the **MSP of MFP will be determined every year by the State government**.
- ❖ Under the scheme, **a primary collector (a tribal person) will be able to sell the MFP**, collected at the **procurement centres** by the **Tribal Development Cooperative Corporation Limited of Odisha (TDCCOL), at the MSP.**

FACTS

- ❖ Odisha is **home to 62 distinct tribes**, including **13 Particularly Vulnerable Tribal Groups (PVTG)**, showcasing **one of the most diverse tribal landscapes in the country**.
- ❖ It ranks as the **third largest concentration of a tribal population, trailing behind Madhya Pradesh and Maharashtra.**

10.   INDEX AND REPORTS

10.1   UN WORLD ECONOMIC SITUATION AND PROSPECTS 2024 REPORT

❖ **UN World Economic Situation and Prospects 2024 report** was released recently by **UN's Department of Economic and Social Affairs (DESA).**

MAJOR FINDINGS

❖ A **lower forecast for global GDP growth**, to an estimated **2.4 percent in 2024** from 2.7 percent in 2023
❖ **Lingering risks and uncertainties** include **Russia-Ukraine war**, the conflict in **Palestine**, and the **decisions of several developed economies to keep interest rates higher**
❖ **Global inflation is projected to decline further**, from an estimated 5.7 per cent in 2023 to 3.9 per cent in 2024.

ABOUT INDIA

❖ **India** is projected to **grow at 6.2 per cent in 2024**, supported by **robust domestic demand and strong growth in the manufacturing and services sectors.**
❖ India remains the **fastest-growing large economy in the world.**
❖ In 2022, FDI (foreign direct investment) flows to India rose by **10 per cent**, making it the **third largest host country for announced greenfield projects.**

10.2   GLOBAL ECONOMIC PROSPECTS REPORT

❖ **World Bank** released its latest **"Global Economic Prospects 2024" report recently**.

MAJOR FINDINGS

❖ Global growth is **forecast to slow for the third year in a row in 2024, dipping to 2.4%** from 2.6% in 2023.
❖ Global **trade growth in 2024** is expected to **be only half the average in the decade before pandemic.**
❖ **Risks –**
   ✓ The recent **conflict in the Middle East**, **Russian Federation's invasion of Ukraine**, has heightened **geopolitical risks** which could lead to **surging energy prices, with broader implications for global activity and inflation**.
   ✓ Other risks include- **financial stress** related to elevated real interest rates, **persistent inflation, weaker-than-expected growth** in China, **further trade fragmentation**, and **climate change-related disasters.**

10.3   WORLD EMPLOYMENT AND SOCIAL OUTLOOK TRENDS 2024

❖ **The World Employment and Social Outlook Trends 2024** was recently **released by International Labour Organisation (ILO).**

MAJOR FINDINGS

❖ **Macroeconomic environment deteriorated** significantly over 2023.
❖ Despite slowdown, **global growth in 2023 was modestly higher than anticipated.**
❖ Global **unemployment rate is set to increase in 2024** while **growing social inequalities remain a concern.**
❖ **Real wages declined in the majority of G20 countries** as wage increases failed to keep pace with inflation.
   ✓ In India, **real wages are "positive"** compared to other G20 countries.

ABOUT ILO

❖ It was **created in 1919**, as part of the **Treaty of Versailles that ended World War I.**
❖ In **1946**, the **ILO became a specialized agency of the newly formed United Nations.**
❖ ILO is the **only tripartite UN agency with government, employer, and worker representatives.**

- ❖ Headquarters- **Geneva (Switzerland)**
- ❖ At present the **ILO has 187 Members.**
    - ✓ India is **a founder member of the International Labour Organization.**
- ❖ ILO has four strategic objectives
    - ✓ Promote and realize **standards and fundamental principles and rights at work**
    - ✓ Create **greater opportunities for women and men to decent employment** and income
    - ✓ Enhance the **coverage and effectiveness of social protection for all**, and
    - ✓ Strengthen **tripartism and social dialogue**
- ❖ The three organs of the ILO are
    - ✓ **International Labour Conferences**: - General Assembly of the ILO – Meets every year in the month of June.
    - ✓ **Governing Body**: - Executive Council of the ILO. Meets three times in a year in the months of March, June and November.
    - ✓ **International Labour Office**: - A permanent secretariat.

10.4	HENLEY PASSPORT INDEX 2024

- ❖ The **Henley Passport Index**, which ranks the **world's most travel-friendly passports, has released its list for 2024.**
- ❖ **Rankings**
- ❖ European nations of **France, Germany, Italy and Spain**, and Asia's **Japan and Singapore** share the **number one spot**.
- ❖ **Finland, Sweden and South Korea** shared the **second rank**, while **Austria, Denmark, Ireland and Netherlands** occupied the **third spot**.
- ❖ **India**, meanwhile, has **improved its ranking and moved up to the 80th position from the previous year's ranking of 84**.
    - ✓ Those holding an Indian passport have **visa-free access to 62 destinations.**
- ❖ Ranking lowest on the index are **Pakistan (101), Iraq (102), Syria (103) and Afghanistan (104).**

ABOUT HPI

- ❖ HPI was released by **Henley & Partners, a global leader in residence and citizenship planning.**
- ❖ It **covers 227 destinations and 199 passports.**
- ❖ The rankings are **based on data provided by International Air Transport Association.**

10.5	ANNUAL STATUS OF EDUCATION REPORT (ASER) 2023

- ❖ The **Annual Status of Education Report 2023** was released recently.
- ❖ The **ASER 2023 report**, released by the **NGO Pratham Foundation**, focuses on the **youth of the age group 14-18 years**.
- ❖ The report **titled " Beyond Basics"** carried out **an intensive survey in 28 districts across 26 states**, eventually interacting with **34,745 youngsters of the aimed age group.**

> ASER, initiated in **2005**, is a **citizen-led survey** offering **insights into rural India's children's education.**

- ❖ Unlike the usual country-wide ASER surveys, ASER 2023 is not large in scale; **only one or two rural districts in each state have been surveyed.**

MAJOR FINDINGS

- ❖ Overall, **86.8% of 14-18-year-olds are enrolled in an educational institution.**
    - ✓ Beyond Standard X, more than **half are enrolled in the Arts/Humanities stream (55.7%)**, followed by **STEM (31.7%)** and **Commerce (9.4%).**
    - ✓ A **mere 0.7% reported studying agriculture.**
- ❖ Only **5.6% of surveyed youth report** taking **vocational training** or other related courses currently.

- A **higher percentage of males (40.3%) than females** (28%) report **doing work other than household work for at least 15 days** during the preceding month.
- **95% of males** and **90% of females** know **how to use a smartphone.**
- About **25% of this age group** still **cannot read a Std II level text fluently in their regional language.**
- **45% of youth** in the age **group 14-18 have basic arithmetic proficiency.**
- **Building foundational literacy and numeracy** may be **needed for about a fourth of youth in the 14-18 age group.**

10.6   GLOBAL FIREPOWER'S MILITARY STRENGTH RANKINGS FOR 2024

- **Global Firepower's Military Strength Rankings for 2024** was released recently.
- It assesses **145 countries**, taking into **account more than 60 factors** such as the **number of troops, military equipment, financial stability, geographic location, and available resources.**
- These factors together determine a **PowerIndex score**, where **lower scores indicate stronger military capabilities.**
- The **United States** has the **most powerful military globally**, followed by **Russia and China in second and third place**, respectively.
- **India holds the fourth position.**
- **Pakistan is at number 9** while **Bhutan has the least powerful military in the world.**
- The report **includes 145 countries** and also **examines how each nation's ranking has changed from one year to the next.**

10.7   GLOBAL FIREPOWER'S MILITARY STRENGTH RANKINGS FOR 2024

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10.8   FUTURE OF GROWTH REPORT

- The **Future of Growth Report** was released by the **World Economic Forum at Annual Meeting 2024.**
- The report took a **holistic look at GDP alongside the quality of growth across 107 economies** in **four dimensions- Innovativeness, Inclusiveness, Sustainability, Resilience.**
- **High-income economies score high on innovation and inclusion**, while **lower-income economies on sustainability.**
- Among the **lower middle-income economies, India and Kenya scored high on sustainability**, **Jordan on innovativeness; Vietnam on inclusiveness;** and the **Philippines on resilience.**
  - ✓ **Common challenges** preventing a stronger balanced growth performance of this group included **technology absorption, lack of social safety nets, insufficient investment in renewable energy, and insufficient healthcare system capacity.**
- The report highlighted **a significant economic slowdown**, estimated to **fall to the lowest rate in three decades by 2030.**

- At an individual level, **none of the 107 economies covered by the report** attained a **score higher than 80 on any of the framework's four dimensions.**
- It has called for **a new approach to economic growth that balances efficiency with long-term sustainability and equity**, examining **speed and quality together**.

10.9   CORRUPTION PERCEPTIONS INDEX 2023

- **Transparency International** unveiled the **2023 Corruption Perceptions Index** (CPI), disclosing a **list of the world's most corrupt countries**.
- The report highlighted **minimal progress in addressing public sector corruption**, as the **global average for CPI remained stagnant at 43 for the twelfth consecutive year.**
- **Over two-thirds of the 180 ranked countries** scored **below 50** on the scale, indicating a prevalence of corruption.
- The CPI **evaluates nations** based on their **perceived levels of public sector corruption**, ranging from **zero (highly corrupt) to 100 (very clean).**
- Rankings
  - ✓ **Denmark secures the top position** on the index with a score of 90 due to its "well-functioning justice systems".
  - ✓ **Finland and New Zealand** hold the **second and third positions** with scores of 87 and 85, respectively.
  - ✓ Taking the **bottom spots in the index** are **Somalia (11), Venezuela (13), Syria (13), South Sudan (13), and Yemen (16).**
- In the CPI, **India secured the 93rd position** with a **score of 39**, according to the Transparency International report.
- **India's overall score** remained **relatively stable, as it was 40 in 2022**, securing the 85th position.

11.   INTERNATIONAL, SUMMITS

11.1   INTERNATIONAL COURT OF JUSTICE

- Amid international criticism of **Israel for its continued bombing of Gaza**, South Africa moved the **International Court of Justice (ICJ)**, for an **urgent order declaring that Israel** was in **breach of its obligations under the 1948 Genocide Convention.**
- As per the UN's Convention on the Prevention and Punishment of the Crime of Genocide, genocide means any of the following **acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group**, as such-
  - ✓ **Killing** members of the group;
  - ✓ **Causing serious bodily or mental harm** to members of the group;
  - ✓ Deliberately **inflicting on the group conditions of life calculated to bring** about its **physical destruction** in whole or in part;
  - ✓ Imposing **measures intended to prevent births within the group**;
  - ✓ **Forcibly transferring children of the group to another group.**

ABOUT ICJ

- It is a **United Nations platform for resolving disputes between states.**
- Also known as the **World Court**.
- Established- **June 1945** by the **Charter of the United Nations**
- The **seat of the Court** is at the **Peace Palace in The Hague (Netherlands).**
- It is **one of the six principal organs of the United Nations.**
- The **hearings** of the ICJ are **always public**.
- **Official languages** of the Court- **French and English**

- It is composed of **15 judges**, all from different countries, who are **elected for terms of office of nine years** by the **United Nations General Assembly (UNGA) and the Security Council (UNSC).**
  - ✓ **Elections** are held **every three years** when **one-third of the court judges retire.**
- The International Court of Justice **has no jurisdiction over individuals** who are accused of crimes against humanity and war crimes.
- It **cannot** take up **cases on will** and **has to be requested to do so by the States.**

| 11.2 | **EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT** |

- The **European Bank for Reconstruction and Development** (EBRD) has **approved a 4 billion euro capital increase** that will **enable the bank to double its Ukraine investments once reconstruction there begins.**

ABOUT EBRD

- The **European Bank for Reconstruction and Development (EBRD)** is an **international financial institution** created with the **aim to assist countries of the former Eastern Bloc in developing their private sector.**
- Established- **1991**
- Headquarters – **London, UK**
- The EBRD is **owned by 72 countries and** two EU institutions- **European Union** and the **European Investment Bank.**
  - ✓ **India** was inducted as **69th member of EBRD in 2018.**
- 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 also works with **public partners** to **support privatisation, restructuring and improvement of municipal services.**
- It **prioritizes support** for **countries in Central and West Asia, and North Africa**.

| 11.3 | **UNRWA- UNITED NATIONS RELIEF AND WORKS AGENCY FOR PALESTINE REFUGEES** |

- **India** has **provided US $ 2.5 million to the United Nations Relief and Works Agency for Palestine Refugees in the Near East or the UNRWA** for the welfare of Palestinian refugees.

ABOUT UNRWA

- Following the 1948 War, UNRWA was **established by United Nations General Assembly Resolution 302 (IV) of 8 December 1949** to carry out **direct relief and works programmes for Palestine refugees**. The **Agency began operations on 1 May 1950.**
- The Agency's services encompass **education, health care, relief and social services, camp infrastructure and improvement, microfinance and emergency assistance**, including in times of armed conflict.
- UNRWA is **funded almost entirely by voluntary contributions** from UN Member States.
- UNRWA **also receives some funding from the Regular Budget of the United Nations**, which is used mostly for international staffing costs.
- UNRWA **provides assistance and protection** to Palestine refugees in **Jordan, Lebanon, Syria, the Gaza Strip and the West Bank, including East Jerusalem.**
- It reports **only to the UNGA**.
- **UNRWA Headquarters** are located in **Amman, Jordan and in Gaza.**

| 11.4 | **BRICS EXPANSION** |

- The BRICS bloc has **expanded to include five new full members**.
- These are **Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates.**
- Russian President Vladimir Putin, as the **presiding head of BRICS**, confirmed the development.
- This signifies a **notable shift in the global landscape**, characterized by **increasing multipolarity and assertive middle powers challenging the established Western-led order.**

- ❖ The newly **expanded BRICS has a combined population of about 3.5 billion people**, with a **combined economy worth over $28.5tn or about 28% of the global economy.**

ABOUT BRICS

- ❖ The **BRICS bloc** was **established in September 2006**.
- ❖ The acronym BRIC was **coined in 2001 by then Goldman Sachs chief economist Jim O'Neill.**
  - ✓ It was originally named BRIC and included **Brazil, Russia, India, and China.**
- ❖ The **last expansion of the BRICS took place in 2010 when South Africa joined**, adding an "S" to the acronym a year after the bloc's inception.
- ❖ The **heads of state and government of the member nations** convene **annually** with each nation taking up a **one-year rotating chairmanship of the group.**
  - ✓ **India hosted** the **chair** for the **2021 BRICS Summit.**
- ❖ The bloc **operates by consensus.**

11.5   INDIA, PAKISTAN EXCHANGE LIST OF NUCLEAR INSTALLATIONS

- ❖ India and Pakistan recently exchanged the **list of nuclear installations and facilities through diplomatic channels in New Delhi and Islamabad**
- ❖ The exchange of information was held under the A**greement on the Prohibition of Attack against Nuclear installations and facilities between India and Pakistan**.
- ❖ The agreement was **signed on December 31, 1988** and **came into force on January 27, 1991.**
- ❖ It provides that **India and Pakistan inform each other of the nuclear installations and facilities** to be covered under the Agreement on the **first of January** of **every calendar year.**
- ❖ This is the **33rd consecutive exchange of such lists between the two countries**, the **first one having taken place on January 1, 1992.**

11.6   UN STATISTICAL COMMISSION

- ❖ India started its **four-year term** as a **member of the United Nations Statistical Commission** recently.

ABOUT UN STATISTICAL COMMISSION

- ❖ **Established in 1947**
- ❖ It is the **highest decision making body for international statistical activities**, responsible for **setting of statistical standards and the development of concepts** and methods, including their **implementation at the national and international level.**
- ❖ **Headquarters- New York, USA**
- ❖ The Commission consists of **24 member countries** of the United Nations **elected by the United Nations Economic and Social Council** on the **basis** of an **equitable geographical distribution. These include-**
  - ✓ **Five members** are from **African States**,
  - ✓ **four** from **Asia-Pacific States**,
  - ✓ **four from Eastern European** States,
  - ✓ **four from Latin American and Caribbean** States and **seven members from Western European and other States**

11.7   NADIA CALVINO IS EUROPEAN INVESTMENT BANK PREZ

- ❖ **Nadia Calvino** has been named the **new president of the European Investment Bank.**
- ❖ She is the **first woman** and the **first Spaniard to lead this prestigious institution.**

ABOUT EUROPEAN INVESTMENT BANK

- ❖ EIB is **long-term lending institution** of **European Union** owned by its **member states.**
- ❖ Founded in **Brussels in 1958.**

- ❖ It is now based in **Luxembourg (since 1968)**.
- ❖ It is also **engaged in multilateral financing** and **works closely with other EU institutions to implement EU policy.**
- ❖ While **almost 90% of EIB lending occurs within the EU**, most of the **remaining lending occurs in outside markets such as Southeast Europe and Iceland.**
- ❖ The organization is **funded by 27 member states** whose **contributions are based on their GDPs.**
- ❖ EIB's activities focus on four priority areas including-
    - ✓ **innovation and skills,**
    - ✓ **access to finance for infrastructure,**
    - ✓ **smaller businesses** and
    - ✓ **climate & environment.**

11.8 PALACE OF AIGAI REOPENS

- ❖ An **ancient palace, Palace of Aigai,** where **Alexander The Great was crowned King of Macedonia in 336 BC** reopened to the public recently after a **16-year, 20 million euro renovation aiming to restore its past glory.**
- ❖ The **4th century BC site** near Greece's **northern port city of Thessaloniki**, was built **more than 2,300 years ago.**
- ❖ **It spreads over 15,000 square meters** was **one of the most important in classical Greece alongside the Parthenon in Athens.**
- ❖ Aigai was **capital of the Macedonian kingdom**, the **dominant military power** of the time, and archeologists say the **palace was the kingdom's spiritual centre**.
- ❖ Built by **Philip II, the father of Alexander the Great**, the **tombs of Philip and other Macedonian kings are nearby**.
- ❖ It was **later destroyed by the Romans** and unearthed through **excavations beginning in the 19th Century.**

11.9 WORLD HERITAGE COMMITTEE

- ❖ In a historic milestone, **India is set to take the reins** as the **chair of UNESCO's World Heritage Committee for the very first time**.
- ❖ **New Delhi** will be the **epicenter of global discussions on heritage preservation**, as the **prestigious World Heritage Committee's 46th session in July 2024.**

ABOUT WORLD HERITAGE COMMITTEE

- ❖ The Committee is responsible for the **implementation of the World Heritage Convention**, defines the **use of the World Heritage Fund** and **allocates financial assistance upon requests from States Parties**.
- ❖ The **World Heritage Committee** plays a crucial role in **evaluating potential new additions to the prestigious list of UNESCO World Heritage Sites.**
- ❖ It also **oversees the implementation of conservation measures for existing sites facing challenges.**
- ❖ It has the **final say on whether a property is inscribed on the World Heritage List.**
- ❖ It also **decides on the inscription or deletion** of properties on the **List of World Heritage in Danger.**

ORGANIZATIONAL STRUCTURE

- ❖ The World Heritage Committee **meets once a year.**
- ❖ It consists of **representatives from 21 of the States Parties to the Convention** elected by their **General Assembly.**
- ❖ According to the World Heritage Convention, **a Committee member's term of office is for six years**, but **most States Parties choose voluntarily to be Members of the Committee for only four years**, in order to give other States Parties an opportunity to be on the Committee.
- ❖ **Bureau of the World Heritage Committee**
    - ✓ The Bureau consists of **seven States Parties elected annually by the Committee**: a Chairperson, five Vice-Chairpersons, and a Rapporteur.

11.10   GABRIEL ATTAL IS NEW FRENCH PM

❖ French President **Emmanuel Macron** has made a significant political move by **appointing Gabriel Attal** as the **new prime minister of France**.
❖ At 34 years old, Attal is the **the youngest prime minister in the country's history**
❖ He is also the **first openly gay official to hold this prestigious position.**
❖ Under the **French political system**, the **prime minister is appointed by the president** and is **held accountable to the parliament.**

11.11   GREEN FUEL ALLIANCE INDIA (GFAI)

❖ **Denmark** recently **unveiled the Green Fuels Alliance India (GFAI)**
❖ It is a **pivotal initiative under the Green Strategic Partnership (GSP) signed between India and Denmark in 2020.**
❖ **GFAI's primary objective** is to promote **sustainable energy growth in India** by establishing an **ecosystem** that **encourages collaboration among businesses, government entities, research institutions, and financial stakeholders** from both the **Indian and Danish sectors**.
❖ **Key features of the GFAI include-**
  ✓ featuring a **Steering Committee comprised of Danish businesses** and **coordinated by the Secretariat** at the **Danish Consulate in Bangalore**.
  ✓ **Advisory Board** comprising industry experts and thought leaders that will ensure the initiatives remain innovative and aligned with industry trends.
  ✓ Inspired by **Collaborative Initiatives** such as the India-Denmark Energy Partnership, the Nation Green Hydrogen Mission, and joint R&D efforts on Green Fuels, including Green Hydrogen

11.12   IIT MADRAS TO OPEN CAMPUS IN SRI LANKA

❖ Sri Lanka's Education minister Dr. Susil Premajayantha recently said that a **new campus of IIT Madras would be started in Kandy in Sri Lanka.**
❖ This **initiative aligns with Sri Lanka's vision** for educational advancement and strengthens India's internationalization efforts in the education sector.
❖ This venture **follows IIT Delhi's planned campus in Abu Dhabi** and **IIT Madras' existing presence in Zanzibar, Tanzania.**

11.13   INDIA ELECTED AS FIRST VICE CHAIR OF COFI

❖ India has been **elected as the First Vice Chair of the Food and Agriculture Organization FAO** COFI **Sub-Committee on Fisheries Management.**
❖ India will **serve as member of a FAO Fisheries Bureau** on **'Capture Fisheries'** for the **first time in 57 years**.
❖ Being **one of the top fishing nations with over 28 million inland and marine fishers**, India's role in this crucial subcommittee as the **representative of the Global South** would give much-needed **balance and perspective to the global narratives concerning fisheries governance and management** (especially for artisanal and small-scale fisheries).

ABOUT THE SUB-COMMITTEE ON FISHERIES MANAGEMENT

❖ It is a **forum for discussing fisheries management issues** at **national, regional and global levels.**
❖ It deals with technical and policy matters in line with **FAO's mission and actively collaborates** with **relevant regional and international organisations, countries, stakeholder groups, and non-governmental organisations (NGOs), forging new collaborations where needed.**

❖ The **primary functions of the Sub-Committee on Fisheries Management** are to provide **essential technical and policy guidance** on fisheries governance and management, with the aim of advancing the FAO Code of Conduct for Responsible Fisheries.

ABOUT COFI

❖ COFI is a **subsidiary body of Food and Agriculture Organization (FAO) Council**, was **established in 1965**.

❖ COFI is an **intergovernmental forum** that addresses issues on
   ✓ **International fishing and aquaculture**,
   ✓ **Providing policy guidance on fisheries management**,
   ✓ **Promoting collective solutions to ensure environmental**,
   ✓ **economic and social sustainability of fishing industry** etc.

❖ The Sub-Committee on Fisheries Management was established during the **Thirty-Fifth session of the FAO Committee on Fisheries (COFI)**, held in **Rome, Italy, from September 5 to 9, 2022.**

❖ The Sub-Committee **collaborates closely** with both the **Sub-Committee on Aquaculture** and the **Sub-Committee on Fish Trade**, further enriching the scope of its engagement in fisheries-related matters.

11.14   HAGUE APOSTILLE CONVENTION

❖ The Allahabad High Court held that the **Union Government is bound by the Convention of (5 October 1961)Abolishing the Requirement of Legalisation for Foreign Public Documents** (Apostille Convention) as **India is a signatory to the same**.

❖ The Court held that the **government cannot disbelieve Apostille documents issued by countries signatory to the Apostille Convention**.

❖ The **Apostille Convention** is intended to **simplify the procedure through which a document**, issued in **one of the contracting states**, can be **certified for legal purposes in the other contracting states of the Convention.**
   ✓ These **public documents** include **certificates of birth, marriage, and death, and educational documents among others.**

❖ A **certification under the Convention** is called **an apostille or Hague apostille.**

❖ **Non-member countries** of convention **require extra certification from the State of origin for document acceptance.**

11.15   G77 PLUS CHINA

❖ The **third South Summit** – the **decision-making body of the 134-country G77 and China was held in Kampala,Uganda**

❖ China is rallying the **Group of 77 developing countries** to push for **reform of the global governance system which** – according to some leaders in Africa, Asia and Latin America – **disproportionately favours the West**.

❖ **Uganda** assumed **chairmanship of the group at the meeting, taking over from Cuba.**

ABOUT G77 GROUPING

❖ It was **established on 15 June 1964** by **77 developing countries signatories** of the **"Joint Declaration of the Seventy-Seven Developing Countries" issued** at the end of the **first session of the United Nations Conference on the Trade and Development (UNCTAD)** in Geneva.

❖ The G-77 is the **largest intergovernmental forum of developing countries in the United Nations system**, and as such **provides the means for the countries of the South to articulate and promote their collective economic interests**.

❖ Members- **134 countries (including India)**

❖ A **Chairperson** who acts as a **spokesman, coordinates the Group's action in each Chapter**.

❖ The Chairmanship, which is the **highest political body within the organisational structure** of the Group of 77, **rotates on a regional basis** between **Africa, Asia-Pacific and Latin America and the Caribbean.**

11.16 JETCO WITH DOMINICAN REPUBLIC

- ❖ The Union Cabinet has **granted approval for the signing of a protocol** establishing a **Joint Economic and Trade Committee (JETCO)** between **India and Dominican Republic.**
- ❖ This committee **will bring together the Department of Commerce, Ministry of Commerce and Industry of the Republic of India**, and the **Ministry of Foreign Affairs of the Dominican Republic.**
- ❖ This collaborative effort **is expected to facilitate trade and industry interactions between the two countries.**
- ❖ India **predominantly imports gold from the Dominican Republic** while **exporting pharmaceuticals, marine products, motor vehicles, two and three-wheelers, among other items.**

ABOUT DOMINICAN REPUBLIC

- ❖ The Dominican Republic is a **nation on the island of Hispaniola**, part of the **Great Antilles archipelago between the Caribbean region and the North Atlantic Ocean.**
- ❖ It is **bordered by Haiti on the east** and **consists primarily of rugged mountains with fertile valleys.**

11.17 ECOWAS

- ❖ **Niger, Mali and Burkina Faso** have announced they are leaving the **Economic Community of West African States** (ECOWAS).
- ❖ The **junta-led countries** had **already been suspended from the bloc**, which has been **urging them to return to democratic rule.**
- ❖ Relations between the bloc and the three countries have been tense after **military coups took place in Niger in July, Burkina Faso in 2022 and Mali in 2020.**
- ❖ They were **also founding members of the bloc-ECOWAS.**
- ❖ The **three countries**, last year, formed a mutual defence pact called **The Alliance of Sahel States.**

ABOUT ECOWAS

- ❖ The **Heads of State and Government of fifteen West African Countries** established the **Economic Community of West African States (ECOWAS)** when they signed the **ECOWAS Treaty on the 28th of May 1975 in Lagos, Nigeria.**
- ❖ The ECOWAS region **spans an area of 5.2 million square kilometres**.
- ❖ The **Member States** are **Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Sénégal and Togo.**
- ❖ Considered one of the pillars of the African Economic Community, ECOWAS was set up to **foster the ideal of collective self-sufficiency** for its member states. As a **trading union**, it is also **meant to create a single, large trading bloc through economic cooperation.**
- ❖ In **2007, ECOWAS Secretariat was transformed into a Commission**.
- ❖ The Commission is headed by the **President, assisted by a Vice President**, **thirteen Commissioners** and the **Auditor-General of ECOWAS Institutions**, comprising experienced bureaucrats.
- ❖ The **headquarters of ECOWAS** is **in Abuja, Nigeria**.
- ❖ According to the Ecowas treaty, **member states wishing to withdraw must give written notice a year** in **advance**, and **continue to abide by its provisions during that year.**

12.   DAYS TO REMEMBER

12.1   GLOBAL FAMILY DAY- JANUARY 1ST

❖ Every year, **Global Family Day** is celebrated on **January 1st**.
❖ **Global Family Day** is also known as **World Peace Day** as it speaks of the **importance of bringing harmony and unity in diversity.**
❖ The **theme** for **Global Family Day 2024** is **"Embracing Diversity, Strengthening Families".**
❖ **Global Family Day** was **declared** an annual event by the **U.N. in 2001.**

12.2   WORLD BRAILLE DAY- JANUARY 4TH

❖ **January 4 is celebrated as World Braille Day annually** as a tribute to **Louis Braille, the visionary behind the braille system**.
❖ He was **born on this day in 1809 in France** and **became blind after birth due to an accident in childhood.**
❖ This day was **established by the United Nations General Assembly in 2018 and celebrated since 2019.**
❖ Braille is a **tactile representation of alphabetic and numerical symbols** using **six dots to represent** each **letter and number and even musical, mathematical and scientific symbols.**

12.3   WORLD DAY OF WAR ORPHANS – JANUARY 6TH

❖ **World Day of War Orphans is observed** every year on **January 6th** to highlight the **plight of children orphaned by wars and conflicts.**
❖ The day **aims to raise awareness about the trauma experienced by orphans and the social, psychological and physical obstacles they often need to overcome to lead a normal life.**
❖ This day was **proposed and started by the French organisation SOS Enfants en Detresses** who brought to the notice of the world the amount of suffering and trauma that war orphans go through.
❖ The **theme** for the 2024 World Day of War Orphans is **"Orphan Lives Matter."**

12.4   NATIONAL BIRDS DAY- JANUARY 5TH

❖ **National Birds Day** is celebrated **annually on January 5th** to raise **awareness about bird conservation and the importance of protecting their habitats.**
❖ The **Indian peacock**, with its majestic plumage and captivating dance, **is the national bird of India**.

12.5   PARVASI BHARATIYA DIWAS

❖ **Pravasi Bharatiya Divas**, also **known as NRI Day (Non-Resident Indian),** is celebrated on **January 9th**.
❖ It holds great significance **in recognising and honouring the Indian diaspora spread across the globe.**
❖ Pravasi Bharatiya Divas was **first introduced in 2003** by the then Prime Minister of India, Atal Bihari Vajpayee, to commemorate   the **return of Mahatma Gandhi from South Africa to India on January 9, 1915**.
❖ Since 2015, **Pravasi Bharatiya Diwas is celebrated at an interval of every two years.**
❖ It is the **flagship event of the Ministry of External Affairs**, with events held in different cities.

12.6   WORLD HINDI DAY- JANUARY 10TH

- ❖ **World Hindi Day**, also called the **Vishwa Hindi Diwas**, is **observed on January 10**.
- ❖ It is **marked to promote the language.**
- ❖ On this day in **1949**, **Hindi was spoken for the first time at the United Nations General Assembly.**
- ❖ With around **600 million speakers globally**, Hindi is one of the most widely spoken languages across the world.

12.7   NATIONAL HUMAN TRAFFICKING AWARENESS DAY- JANUARY 11TH

- ❖ **National Human Trafficking Awareness Day** is observed every year on **January 11ᵗʰ** to raise awareness about the **plight of the victims and the practices that can be regularised in order to save these lives.**
- ❖ In 2007, the **United States Senate** declared **January 11 as National Human Trafficking Awareness Day.**

12.8   INDIA ARMY DAY- JANUARY 15TH

- ❖ Indian Army Day is **celebrated every year on 15ᵗʰ January**.
- ❖ On **15 January 1949**, **Field Marshal K.M. Cariappa** became the **first Commander-in-chief of the Indian Army** and **took over the authority from the British Commander-in-Chief General Francis Butcher**.
- ❖ The **theme** of the **Indian Army Day 2024** is **"In Service of the Nation".**
- ❖ The capital city of Uttar Pradesh, **Lucknow**, hosted **a spectacular parade** to commemorate the 76th Army Day of the Indian Army.

12.9   PRAKARAM DIWAS- JANUARY 23RD

- ❖ The nation celebrates **Parakram Diwas on January 23ʳᵈ** to mark the **birth anniversary of Netaji Subhas Chandra Bose.**
- ❖ It aims to **inspire people of the country**, especially the youth, to **act with fortitude in the face of adversity as Netaji did, and to infuse in them a spirit of patriotic fervor.**
- ❖ **Ministry of Culture** in collaboration with its institutions such as the **Archaeological Survey of India, National School of Drama, Sahitya Akademi,** and the **National Archives of India** has decided to hold a comprehensive celebration at the **Red Fort.**

ABOUT SUBHAS CHANDRA BOSE

- ❖ Subhas Chandra Bose was born on 23ʳᵈ January 1897, in **Cuttack, Orissa Division of Bengal Province**.
- ❖ In **1920**, he **passed the civil service examination**, but **resigned in April 1921**, after **hearing of the nationalist turmoil in India.**
- ❖ **Deshbandhu- Chittaranjan Das**, was his political mentor.
- ❖ Bose **joined the Indian National Congress** and **actively participated in the Indian independence movement**.
- ❖ He was **also elected president of the INC** for **two consecutive terms** in 1938 (Haripura) and 1939 (Tripur) but **resigned from the post following ideological conflicts with Mahatma Gandhi.**
- ❖ After that in 1939, he formed the **Forward Bloc**, which was **an organization aimed at unifying all the anti-British forces in India.**
- ❖ He also formed the **Azad Hind Government in exile** with Japanes assistance, and **regrouped**, and **led the Indian National Army in battle against the allies at Imphal and in Burma.**

12.10   NATIONAL VOTER'S DAY- JANUARY 25TH

- ❖ The **National Voters' Day** is **celebrated every year in India on January 25** to encourage the **country's voters to participate in the electoral process**.
- ❖ This year, it **is the 14th edition** which is being celebrated.

- The **first-ever National Voters' Day was celebrated on January 25, 2011**, to encourage more young voters to take part in the electoral process.
- Dedicated to the voters, **NVD 2024 theme** - **'Nothing Like Voting, I Vote For sure'** is a continuation from last year's theme.

12.11 INTERNATIONAL DAY OF EDUCATION- JANUARY 24TH

- Every year, **International Day of Education** is observed **on January 24th**.
- In **2018**, the **United Nations General Assembly adopted the resolution to make January 24** as the **International Day of Education** to create awareness on the accessibility of education and why it is significant for everyone.
- The **resolution was authored by 59 member states**, and since then, January 24 has been observed as International Day of Education.
- The **theme** of the year 2024 is – **"Learning for lasting peace"**.

12.12 NATIONAL TOURISM DAY- JANUARY 25TH

- **National Tourism Day** in India is marked on **25th January every year**.
- The day is **celebrated to build awareness of the country's economic benefits from tourism.**
- **National Tourism Day** is said to have been **first observed by the Indian government in 1948.**
- In **2024**, the decided theme is **'Sustainable Journeys, Timeless Memories,'** promoting responsible and mindful travel.

12.13 NATIONAL GIRL CHILD DAY- JANUARY 24TH

- **National Girl Child Day** is observed annually on **January 24th** to **promote awareness about their rights and the importance of female education and health.**
- **On January 24 1966, Smt. Indira Gandhi** took her **oath as the first woman Prime Minister of India.**
- The **Ministry of Women and Child Development** launched this day **in 2008**.
- The government had also commemorates launching of its **flagship scheme, 'Beti Bachao Beti Padhao'** (Save daughters, educate daughters), on January 22nd **2015** to boost the **child sex ratio and empower girls through different measures.**

12.14 INTERNATIONAL CUSTOMS DAY- JANUARY 26TH

- Every year, **International Customs Day** is observed on **January 26th**.
- In the year **1953**, the **Customs Cooperation Council (CCC) confirmed this date** to be observed as **International Customs Day**.
- In **1994**, **CCC** was **renamed as World Customs Organisation** and it **currently consists of 182 member states across the world.**
  - ✓ WCO headquarters- **Brussels, Belgium**
- The **theme** of this year's International Customs Day is - **Customs Engaging Traditional and New Partners with Purpose.**

12.15 INTERNATIONAL DAY OF COMMEMORATION IN MEMORY OF THE VICTIMS OF THE HOLOCAUST- JANUARY 27TH

- January 27th is a **global day of Remembrance of the Victims of the Holocaust.**

- In **November 2005**, the **United Nations General Assembly designated January 27 as an "International Day of Commemoration in memory of the victims of the Holocaust"(Resolution 60/7).**
- It reaffirmed that **"the Holocaust, which resulted in the murder of one-third of the Jewish people, along with countless members of other minorities, will forever be a warning to all people of the dangers of hatred, bigotry, racism, and prejudice."**
- The date marks the **anniversary of the liberation of the Nazi Concentration and Extermination Camp of Auschwitz-Birkenau** by **Soviet troops on 27 January 1945.**
  - ✓ **Some 1.1 million people** were killed in **Auschwitz**, the vast majority (about 90%) of them Jews.
  - ✓ Auschwitz was just **one of many sites of persecution and mass murder in Europe established by Nazi Germany.**

12.16   INDIAN NEWSPAPER DAY- JANUARY 28TH

- **India's Newspaper Day** is **celebrated every year** on **28th January** to commemorate the **launch of the country's first newspaper in 1780.**
- **Hicky's Bengal Gazette**, also known as the **Calcutta General Advertiser**, was the **name of the first weekly publication.**
- **James Augustus Hicky** is known as the **"father of the Indian press".**
- The newspaper carried **articles criticising General Hastings** for **all his transgressions**.
  - ✓ It made a lot of noise about freedom of speech in India and was relentless in its criticism.
  - ✓ In **1782**, however, the **British decided to stop printing it.**

12.17   SHAHEED DIWAS

- Every year, the country observes Shaheed Diwas or Martyrs' Day on **January 30th.**
- On **January 30th 1948**, during **Mahatma Gandhi's evening prayer at Birla Bhavan, Delhi**, he was shot thrice by Nathuram Vinayak Godse.
  - ✓ As per historical records, Gandhiji succumbed instantly to his injuries.
- In November **1949, Godse was sentenced to death.**

OTHER FACT

- The **International Day of Non-Violence** is also **celebrated on Mahatma Gandhi's birth anniversary on 2nd October.**

12.18   WORLD LEPROSY DAY

- World Leprosy Day (WLD) is **celebrated on the last Sunday of January**.
- This year it falls **on Sunday, 28th January.**
- The **theme** for **World Leprosy Day 2024** is **"Beat Leprosy".**
- This theme **encapsulates the dual objectives of the day: to eradicate the stigma associated with leprosy** and to **promote the dignity of people affected by the disease.**
- In **1954**, **French Journalist Raoul Follereau** established the **World Leprosy Day** to be celebrated to **campaign to create awareness about this disease** and **explore the treatment options available.**

13.   PLACES IN NEWS

13.1   SALTON SEA

❖ Research analysts have found **promising prospects for lithium extraction** from **Salton Sea**.
❖ The analysis found **an estimated 18 million metric tonnes of lithium reserves** in the **depths of the Salton Sea**.
   ✓ Lithium is **an element that is essential for electric vehicle (EV) batteries and renewable energy storage systems**.
❖ Salton Sea is **a shallow, saline lake** located in the **lower Colorado Desert, southern California, USA.**

13.2   BELGOROD

❖ Russia said recently that **its military would do everything possible** to **stop the Ukrainian shelling of Belgorod**, a **border town where hundreds were evacuated after fatal bombardments.**
❖ Belgorod has **suffered an uptick in fatal shelling attacks in recent weeks** that prompted city officials to recently evacuate hundreds and extend a closure of schools.
❖ Itis located on the **Seversky Donets River**, approximately **40 kilometers north of the border with Ukraine.**

13.3   SAQQARA

❖ **Archaeologists in Saqqara, Egypt** have discovered a **series of tombs dating from about 1,800 to 4,800 years ago**, some of which **contain colorful mummy masks.**
❖ The **colorful mummy masks**, which **would have been worn by the dead, probably date to the Roman period (29 B.C. to A.D. 641).**
❖ The archaeologists also found a small statue showing **Harpocrates, a Greek god that looks like a child who is associated with silence**, riding a goose.
❖ The **goose** represents **"an evil spirit over which the Divine Child triumphs".**

ABOUT SAQQARA

❖ **Saqqara**, also spelled Sakkara or Saccara, is **an Egyptian village in the markaz (county) of Badrashin** in the **Giza** Governorate, that contains **ancient burial grounds of Egyptian royalty**, serving as the **necropolis for the ancient Egyptian capital, Memphis.**
❖ Saqqara contains numerous pyramids, including the **Pyramid of Djoser**, sometimes referred to as the **Step Tomb.**
   ✓ **Pyramid of Djoser** is the **oldest complete stone building complex known in history.**
❖ Saqqara covers an **area of around 7 by 1.5 km (4.3 by 0.9 mi).**

13.4   CABO VERDE

❖ The **World Health Organization (WHO)** has certified **Cabo Verde (also known as Cape Verde)** as a **malaria-free country**, becoming the **third country to acquire the status in the global health organisation's African region.**
❖ The country has **now joined Mauritius and Algeria, who were certified in 1973 and 2019, respectively.**
❖ Africa has the **highest malaria burden and accounted for roughly 95 per cent of global malaria cases** and **96 per cent of related deaths in 2021.**

ABOUT CABO VERDE

❖ **Cape Verde or Cabo Verde**, officially the Republic of Cabo Verde, is **an archipelago and island country** of **West Africa in the central Atlantic Ocean.**

❖ It consists of **ten volcanic islands** with a **combined land area of about 4,033 square kilometres**

13.5   WILLINGDON ISLAND

❖ The **Cochin Port Joint Trade Union Forum** has appealed to Prime Minister to revive **commercial activities on Willingdon Island.**
❖ **Kochi's iconic Willingdon Island** is **one of the largest man-made islands** in the country, created **(1920-1940) using dredged soil.**
❖ It is named after **the then British Viceroy of India, Lord Willingdon.**
❖ It once **served as a vital transportation centre**, accommodating both **Cochin Airport** and **the Harbour Railway terminus**.
❖ It is **also home to the Kochi Naval Base** of the Indian Navy and the **Central Institute of Fisheries Technology**
❖ The island is **connected to the mainland by the Venduruthy Bridge.**

13.6   LAKE RETBA- ON VERGE OF EXTINCTION

❖ **Lake Retba**, better known as Lac Rose (the **Pink Lake**), is located near **Dakar, Senegal (West Africa)**.
❖ It **sits in a depression with a shoreline 6.5 metres below sea level.**
❖ The lake is **isolated from the sea by about 1km of sand dunes**.
❖ Its **fresh water comes from the seasonal water table in the dunes**, which are higher than the lake.
❖ Thus the **sea provides most of the lake's water and all of its salt.**
❖ The lake's **waters are virtually devoid of life**, with the exception of a **few microscopic algae and bacteria.**
❖ The Pink Lake is one of the main tourist destinations in the Dakar region, primarily because of the **pink colour of its waters.**
   ✓ The pink coloration is due to the **proliferation of halophilic green algae** (living in a salty environment), **Dunaliella salina**, which contain **red pigments**.

13.7   WADGE BANK

❖ Residents of **Kanniyakumari district** have **objected** to the **Union government's plans for oil exploration under HELP (Hydrocarbon Exploration and Licensing Policy) off the Kanniyakumari coast**, as it could **severely impact the Wadge Bank Ecosystem.**
❖ Wadge Bank, a **10,000 square kilometre area of the sea south of Kanyakumari is rich in biodiversity** and **considered India's richest fishery resource.**
❖ **Low intensity of currents, waves and tides** make it **an ideal place for building a wealth of nutrients and fish food.**
❖ Wadge Bank was one among the handful of such rich biodiversity spots in the world and
❖ It is also the **mainstay of marine resources for fisherfolks** of the **southern districts adjoining Kanyakumari.**

13.8   UST LUGA PORT

❖ **Russian energy company Novatek** was **forced** to **suspend some operations at Ust-Luga**, a **huge Baltic Sea fuel export terminal and processing complex**, due to a **fire started by what Ukrainian media said was a drone attack.**
❖ The attack is the **third on Russia's large energy infrastructure facilities.**
❖ Ust-Luga is a **settlement and railway station in Kingiseppsky District of Leningrad Oblast, Russia**, near the **Estonian border**, situated on the **Luga River near its entry into the Luga Bay of the Gulf of Finland in Baltic Sea.**

14.   APPOINTMENTS

14.1   RECENT APPOINTMENTS BY APPOINTMENTS COMMITTEE

❖ **Appointments Committee of the Cabinet** (ACC) has approved the appointment of **Vivek Srivastava (IPS)** as **Director General** of **Fire Service, Civil Defence & Home Guards** under the **Ministry of Home Affairs.**

OTHER APPOINTMENTS

❖ **Anish Dayal Singh**, **has been appointed as the new Director General of the Central Reserve Police Force (CRPF).**

❖ Also, **Rahul Rasgotra**, currently holding the position of **Special Director at the Intelligence Bureau** (IB), is set to assume the **role of Director General of the Indo-Tibetan Border Police (ITBP).**

FACTS

❖ **Appointments Committee of the Cabinet** makes appointments to **higher offices like the Comptroller and Auditor General, Lokpal, Election Commissioners etc**.

❖ The committee is composed of the **Prime Minister of India (ex-officio Chairman**) and the Minister of Home Affairs.

14.2   JUDICIAL APPOINTMENTS

❖ **The President** recently nominated **Justice Sanjiv Khanna, the second senior-most judge of the Supreme Court, as Executive Chairperson of the National Legal Services Authority (NALSA).**
  ✓ As per convention, the **post of Executive Chairman of NALSA** is occupied by the **second-senior judge of the Supreme Court.**

❖ **Also Supreme Court judge, Justice BR Gavai** has been **nominated by the National Legal Services Authority as the Chairman of the Supreme Court Legal Services Committee.**

ABOUT SUPREME COURT LEGAL SERVICES COMMITTEE

❖ The Supreme Court Legal Services Committee, has been constituted **under Section 3A** of the Legal Service Authorities Act, 1987, for providing **free and competent Legal Services to the weaker sections of the Society** in the **cases** which **fall under the jurisdiction of Hon'ble Supreme Court of India.**

❖ The Committee consists of -
  ✓ A **sitting Judge of Hon'ble Supreme Court, who is the Chairman** and **9 members nominated by Hon'ble the Chief Justice of India.**

14.3   RASHMI SHUKLA IS MAHARASHTRA DGP

❖ **Smt. Rashmi Shukla, a 1988 batch IPS officer**, was appointed DGP by the Maharashtra Government recently.

❖ She has become the **first woman Director General of Police (DGP) of the Maharashtra Police.**

14.4   INDRA MANI PANDEY IS BIMSTEC'S SECRETARY GENERAL

❖ Ambassador **Indra Mani Pandey**, a senior diplomat of India, assumed the **position of Secretary General (SG) of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).**

❖ He succeeded **Tenzin Lekphell of Bhutan, is the 4th SG of BIMSTEC** and **will remain in office for a period of three years.**

ABOUT BIMSTEC

❖ The **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** is a regional organization that was **established on 06 June 1997** with the **signing of the Bangkok Declaration**.

- Initially known as **BIST-EC (Bangladesh-India-Sri Lanka-Thailand Economic Cooperation)**, the organisation is now known as **BIMSTEC** and comprises **seven Member States, with admission of Myanmar in 1997** and **Bhutan and Nepal in 2004.**
- The **BIMSTEC Secretariat** was established in **Dhaka, Bangladesh in 2014.**
- The BIMSTEC Charter was **signed and adopted during the Fifth BIMSTEC Summit held in virtual format in Colombo, Sri Lanka**, in 2022.

14.5   DALJIT SINGH CHAUDHARY IS NEW SSB CHIEF

- The Centre has recently appointed **senior Indian Police Service (IPS) officer Daljit Singh Chaudhary** as the **Director General of the Sashastra Seema Bal (SSB).**
- The **Appointments Committee of the Cabinet** (ACC) has **approved his appointment** for a **period up to November 30, 2025 i.e. the date of his superannuation.**
- SSB guards **India's frontiers with Nepal and Bhutan**.

15.   AWARDS AND HONOURS

15.1   M.S. SWAMINATHAN AWARD

- **Prof. B.R. Kamboj** has been **honoured with the prestigious M.S. Swaminathan Award.**
- He is **presently the Vice Chancellor of Chaudhary Charan Singh Haryana Agricultural University.**
- Prof Kamboj **has published about 300 research papers and articles** in national and international journals, books and technical magazines.
- M S Swaminathan Award was **instituted in 2004** with the **objective** to recognise the lifetime contributions of eminent persons who have made great impacts and outstanding contributions to agricultural research and development and to the overall food security and sustainability of agriculture, with special reference to India.

15.2   KUVEMPU RASHTRIYA PURASKAR

- Renowned Bengali writer **Shirshendu Mukhopadhyay** has been awarded the **2023 Kuvempu Rashtriya Puraskar.**
- He has **written more than 90 books, including travelogues and fiction for children.**
- The national award, named **in honour of the late Kannada poet Kuvempu**, celebrates **writers who have made significant contributions to any Indian language.**
- The esteemed award comes with a **cash prize of Rs 5 lakh, a silver medal, and a citation.**

15.3   SWACHH SURVEKSHAN AWARDS 2023

- The President of India conferred Swachh Survekshan awards 2023 at Bharat Mandapam, New Delhi hosted by the Ministry of Housing and Urban Affairs (MoHUA).
- 110 awards were bestowed during the ceremony.
- The theme for the year 2023 "Waste to Wealth".

MAJOR WINNERS AMONG DIFFERENT CATEGORIES

- The cleanest city award showcased joint winners- Port city Surat alongside Indore
- In the category of cities with a population of less than 1 lakh, Sasvad, Patan and Lonavala secured the top three spots.
- Mhow Cantonment Board in Madhya Pradesh was adjudged the Cleanest Cantonment Board.
- Varanasi and Prayagraj won the top two awards amongst the Cleanest Ganga Towns.

❖ Maharashtra, Madhya Pradesh and Chhattisgarh won the top three awards for Best Performing State.
❖ Chandigarh walked away with the award for the Best Safaimitra Surakshit Sheher.

15.4	RASTRIYA VIGYAN PURASKAR

❖ The Government of India has announced the **"Rastriya Vigyan Puraskar"** in the field of **Science, Technology and Innovation**.
❖ The **National Award** recognizes **outstanding and inspiring scientific, technological and innovation contributions of researchers, technologist and innovators.**
❖ **Nominations/Applications** are invited for the **Rashtriya Vigyan Puraskar (RVP) for individuals or in teams** in various fields of **science, technology and technology- led innovation.**
❖ The awards shall be given in **following four categories-**
   ✓ **Vigyan Ratna (VR)**: Maximum of **three awards** to be bestowed to recognize life time achievements & contributions made in given field of Science and Technology.
   ✓ **Vigyan Shri (VS)**: Maximum of **25 awards** to be given to recognize the distinguished contributions in given field of Science and Technology.
   ✓ **Vigyan Yuva**: Shanti Swarup Bhatnagar (VY-SSB) award: Maximum of **25 awards** to be given to recognize and encourage young scientists who made an exceptional contribution in given field of Science and Technology.
   ✓ **Vigyan Team (VT) award**: Maximum of **three awards** may be awarded to a team comprising of three or more scientists/researchers/innovators who have made an exceptional contribution working in a team in given field of Science and Technology.
❖ The **Rashtriya Vigyan Puraskar** shall be given in the **following 13 domains**, namely:
   ✓ Physics, Chemistry, Biological Sciences, Mathematics & Computer Science, Earth Science, Medicine, Engineering Sciences, Agricultural Science, Environmental Science, Technology & Innovation, Atomic Energy, Space Science and Technology, and Others.

15.5	PRADHAN MANTRI RASHTRIYA BAL PURASKAR

❖ For the year **Pradhan Mantri Rashtriya Bal Puraskar 2024**, **19 children have been selected** from **18 States and UTs** for their exceptional achievements.
❖ The awards were **conferred by the President of India at a ceremonial function.**
❖ **The children will also participate in the Republic Day parade on 26th January, 2024.**

ABOUT PRADHAN MANTRI RASHTRIYA BAL PURASKAR

❖ **Pradhan Mantri Rashtriya Bal Puraskar (PMRBP)** - is given to **children with exceptional abilities and outstanding achievements.**
❖ The awards are **given to children in the age group 5 – 18 years** for their **excellence in seven categories** for **Bravery, Art & Culture, Environment, Innovation, Science & Technology, Social Service and Sports** that deserve national recognition.
❖ **Each awardee** of PMRBP **is given a medal, certificate and a citation booklet.**
❖ The **awards are annually given** by the **Ministry of Women and Child Development.**
❖ **Only Indian citizens, residing in India are eligible.**

15.6	SUBHASH CHANDRA BOSE AAPDA PRABANDHAN PURASKAR

❖ For the year 2024, **60 Parachute Field Hospital, Uttar Pradesh**, in the **Institutional category**, has been **selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar-2024** for its **excellent work in Disaster Management.**

ABOUT THE AWARDS

- ❖ The Government of India has **instituted an annual award known as Subhash Chandra Bose Aapda Prabandhan Puraskar** to **recognize and honour the invaluable contribution and selfless service** rendered by **individuals and organizations in India** in the **field of disaster management**.
- ❖ The award is **announced every year on 23rd January, the birth anniversary of Netaji Subhash Chandra Bose**.
- ❖ The award **carries a cash prize of Rs. 51 lakh** and **a certificate in case of an institution** and **Rs. 5 lakh and a certificate in case of an individual.**

ABOUT 60 PARACHUTE FIELD HOSPITAL

- ❖ 60 Parachute Field Hospital, Uttar Pradesh, was **established in 1942**.
- ❖ It is the **sole airborne medical establishment of the Indian Armed Forces**, recognized for its exceptional service in various global crisis.
- ❖ The **primary mission** includes **Humanitarian Assistance and Disaster Relief (HADR) operations** during **natural calamities, nationally and internationally, both in time of peace and war.**

15.7	BHARAT RATNA

- ❖ The President has recently announced that the **late socialist leader, Karpoori Thakur**, will be **awarded the Bharat Ratna**, India's highest civilian award.

ABOUT KARPOORI THAKUR (JANUARY 24, 1924-FEBRUARY 17, 1988)

- ❖ Born on 24th January, 1924 in Samastipur, Bihar; he was the son of a **marginal farmer from the Nai (barber) community.**
- ❖ Named **Jannayak**, or **People's Leader**, Thakur was **a freedom fighter, incarcerated during the Quit India movement in 1942**, and has been seen as the architect of much of the social justice plank in Indian politics.
- ❖ The socialist icon went on to **serve twice as Chief Minister of Bihar** —
  - ✓ between December 1970 and June 1971 as part of the Bharatiya Kranti Dal and
  - ✓ between December 1977 and April 1979 from the Janata Party.
- ❖ Implemented the **'Karpoori Thakur Formula' in June 1970**, providing **26% reservation**, including **12% for OBCs, 8% for economically backward OBCs, 3% for women, and 3% for economically disadvantaged individuals from upper castes.**
- ❖ He was **part of the anti-Emergency movement**, along with another great socialist leader, **Jayaprakash Narayan.**

ABOUT BHARAT RATNA

- ❖ 'Bharat Ratna', the highest civilian Award of the country, **was instituted in the year 1954**.
- ❖ Any **person** without **distinction of race, occupation, position or sex is eligible for these awards**.
- ❖ It is **awarded in recognition of exceptional service/performance of the highest order** in **any field** of human endeavour.
- ❖ The **recommendations** for Bharat Ratna are **made by the Prime Minister himself to the President.**
- ❖ **No formal recommendations for this are necessary**.
- ❖ The **number of annual awards** is restricted to **a maximum of three in a particular year**.
- ❖ On conferment of the award, the **recipient receives a Sanad (certificate) signed by the President and a medallion**.
- ❖ The Award **does not carry any monetary grant.**

15.8	FREEDOM OF THE CITY OF LONDON AWARD

- ❖ **Ajit Mishra**, a prominent **India-born lawyer in the UK**, has been conferred the **prestigious "Freedom of the City of London Award"** for his **outstanding contribution to legal and public life.**
- ❖ The award, given by the **City of London Corporation**, dates back to the **13th century** and is **bestowed upon individuals** who make **outstanding contributions to London and public life.**

- ❖ Mishra is the **Founder and Chair of UK India Legal Partnership (UKILP).**
    - ✓ **UKILP**, founded by **Mishra**, is a **dynamic networking platform** which is **rapidly gaining prominence** as a leading hub for **senior lawyers fostering connections between the legal communities of India and the UK.**
    - ✓ Established with the **primary goal of enhancing understanding and collaboration within the common law system**, this platform stands out for its **inclusive ethos, actively dedicated to promoting the rights of women and young lawyers in the legal sector.**

15.9   REPUBLIC DAY PARADE AWARDS

- ❖ **Three panels of judges** were appointed for **assessing the performance of Marching Contingents** from three Services, Marching Contingents from Central Armed Police Forces (CAPF)/other auxiliary forces and tableaux from various States/Union Territories and Ministries/Departments.

RESULTS

- ❖ Best Marching Contingent among the three services – **Sikh Regiment Contingent**
- ❖ Best Marching Contingent among CAPF/other auxiliary forces – **Delhi Police Women Marching Contingent**
- ❖ Best three Tableaux (States/UTs)
    - ✓ First – **Odisha (Woman Empowerment in Viksit Bharat)**
    - ✓ Second – **Gujarat (Dhordo : A Global Icon Of Gujarat's Border Tourism)**
    - ✓ Third – **Tamil Nadu (Kudavolai System in ancient Tamil Nadu – Mother of Democracy)**
- ❖ Best Tableau (Ministries/Departments) - **Ministry of Culture – (Bharat : Mother of Democracy)**
- ❖ Special Prize - **Central Public Works Department (Central Vista -Viksit Bharat Ka Pratibimb)**
- ❖ Special memento to **'Vande Bharatam' – Dance Group**

In addition to the panel of judges, **an online poll** was conducted by **MyGov** for the **citizens to vote for their favourite Tableaux**

RESULTS

- ❖ Best Marching Contingent among the three services – **Rajputana Rifles Regimental Marching Contingent**
- ❖ Best Marching Contingent among CAPF/other auxiliary forces - **CRPF Woman Marching Contingent**
- ❖ **Best three Tableaux (States/UTs):**
    - ✓ First - **Gujarat** (Dhordo : A Global Icon Of Gujarat's Border Tourism)
    - ✓ Second - **Uttar Pradesh** (Viksit Bharat Samradh Virasat)
    - ✓ Third – **Andhra Pradesh** (Transforming School Education in Andhra Pradesh – Making Students Globally Competitive)
- ❖ Best Tableau (Central Ministries/Departments) – **Vibrant Villages** (Ministry of Home Affairs

16.   SPORTS

16.1   INDIAN OLYMPIC ASSOCIATION

- ❖ **Raghuram Iyer** has been appointed as the **CEO of Indian Olympic Association.**

ABOUT IOA

- ❖ The IOA was **established in the year 1927** with **Sir Dorabji Tata and Dr. A.G. Noehren** as the **Founding President and Secretary General respectively**.
- ❖ It is **registered as a Non-Profit Organisation under the Societies Registration Act of 1860.**
- ❖ **The Indian Olympic Association is the governing body for the Olympic Movement and the Commonwealth Games in India.**
- ❖ IOA is recognised by the **Ministry of Youth Affairs and Sports.**

- ❖ As an affiliated member of the **International Olympic Committee (IOC), Commonwealth Games Federation (CGF), Olympic Council of Asia (OCA) and Association of National Olympic Committees (ANOC)**, the IOA administers various aspects of sports governance and athletes' welfare in the country.
- ❖ The **Indian Olympic Association** is currently **governed by a 32-member Executive Council**, headed by **President**.
- ❖ The **election for the Executive Council** is held once in **every 4 years**.

OTHER FACTS

- ❖ India first **participated in the Olympics in 1900** in **Paris**.
- ❖ The country was **represented by Norman Pritchard, an Anglo Indian who was holidaying in Paris during that time.**

16.2	MARIO ZAGALLO

- ❖ Brazilians paid their last respects to **football legend Mario Zagallo, a four-time World Cup-winning player and coach** who died at age 92 recently.
- ❖ He was the **first ever footballer to win the FIFA World Cup trophy as both player and coach.**
- ❖ The **only other men** to win the **World Cup as both player and coach** are **Franz Beckenbauer of Germany** (1974 and 1990) and **Didier Deschamps of France** (1998 and 2018).

16.3	ROHIT SHARMA- FIRST MEN'S PLAYER TO PLAY 150 T20S

- ❖ **Rohit Sharma**, the captain of Team India, recently became the **first men's player to feature in 150 T20 International matches.**
- ❖ He **achieved the milestone** during the **second T20I against Afghanistan.**

16.4	KHELO INDIA YOUTH GAMES 2023

- ❖ The **6th edition of the Khelo India Youth Games** was inaugurated with great enthusiasm by Prime Minister in **Chennai, Tamil Nadu.**
- ❖ This is the **first time the event is being hosted in South India.**
- ❖ The Games will be **spread across four cities in Tamil Nadu – Chennai, Madurai, Trichy, and Coimbatore.**
- ❖ The **mascot** for the Games is **Veera Mangai**.
  - ✓ **Rani Velu Nachiyar**, fondly called Veera Mangai, was an Indian queen who waged a war against British colonial rule.
  - ✓ The mascot **symbolizes the valour and spirit of Indian women, embodying the strength of women power.**
- ❖ Over **5600 athletes** will be participating in this edition of Khelo India Youth Games, spread **across 13 days in 15 venues** with **26 sporting disciplines**, over **275 competitive events** and **1 demo sport**.
  - ✓ The 26 sporting disciplines are a diverse mix of **conventional sports such as football, volleyball, badminton etc.** and **traditional sports such as kalaripayattu, gatka, thang ta, kabaddi and yogasana**.
  - ✓ **Silambam**, a traditional sport of **Tamil Nadu**, is being **introduced as a demo sport for the first time in the history of Khelo India Youth Games.**

16.5	ROHAN BOPANNA ETCHES HISTORY

- ❖ Indian tennis star Rohan Bopanna has made history by **becoming the oldest player to claim the No. 1 spot in the men's doubles rankings at the age of 43.**

❖ He achieved this remarkable feat following his **quarter-final victory at the 2024 Australian Open, alongside Australia's Matthew Ebden.**

❖ He surpasses the **previous record held by American tennis player Mike Bryan**, who was **41 years and 76 days old when he was ranked World No. 1 in men's doubles in 2019.**

16.6   AUSTRALIAN OPEN 2024

WINNERS

❖ **Italy's Jannik Sinner** scripted a **sensational come-from-behind win**, against **Daniil Medvedev** to claim his maiden Grand Slam trophy at the 2024 Australian Open.

❖ **Rohan Bopanna** and **Matthew Ebden** beat Italians Simone Bolelli and Andrea Vavassori 7-6 (7-0) 7-5 in men's doubles final.

❖ **Aryna Sabalenka of Belarus** secured her second Grand Slam title by defeating **Zheng Qinwen(Chian) in the Australian Open final.**

❖ **Taiwan's Hsieh Su-Wei** and **Belgium's Elise Mertens** claimed the **women's doubles title** with a decisive victory over the **Latvian-Ukrainian pairing of Jelena Ostapenko and Lyudmyla Kichenok.**

17.   PERSON IN NEWS

17.1   FIRST WOMAN WITH $100 BILLION FORTUNE

❖ **Francoise Bettencourt Meyers** has made history by becoming the **first woman to amass a staggering $100 billion fortune.**

❖ **L'Oréal-** The French beauty empire was **founded by her grandfather** and is **on track for its best stock market performance in decades.**

❖ Ms Bettencourt Meyers is the **vice-chairperson of the company's board**.

❖ She and her family are the **single biggest shareholders of L'Oréal with a stake of around 35%.**

17.2   QUEEN MARGRETHE II ABDICATES THRONE

❖ **Queen Margrethe of Denmark** has announced her abdication after 52 years, leaving her son, Crown Prince Frederik, as the successor.

❖ She will **formally step down on 14 January 2024**, 52 years to the day since she became queen.

❖ The **83-year-old** is the **longest-serving living monarch in Europe**, having taken the throne after the **death of her father King Frederik IX in 1972.**

17.3   RANI VELU NACHIYAR

❖ PM recently paid tributes to **Rani Velu Nachiyar on her birth anniversary.**

ABOUT RANI VELU NACHIYAR (3RD JAN 1730 – 25TH DEC 1796)

❖ Also known as **Veeramangai**, she was the princess of the Ramnad Kingdom of Ramanathapuram, Tamil Nadu.

❖ She is **revered as the first queen to fight against the British colonial power** in India.

❖ In collaboration with **Hyder Ali and Gopala Nayaker**, she waged war against British.

❖ She was proficient in languages like **French, English, and Urdu.**

❖ Nachiyar became **queen of the Sivaganga estate** (present-day Tamil Nadu) in 1780 **after her husband Muthuvaduganathaperiya Udaiyathevar's death**.

  ✓ She ruled until 1790.

❖ She went on to **produce the first human bomb** as well as establish the **first army of trained women soldiers in the late 1700s.**

17.4	BHARATENDU HARISHCHANDRA

❖ The **death anniversary of Bharatendu Harishchandra** was observed recently.

ABOUT BHARATENDU HARISHCHANDRA (9 SEPTEMBER 1850- 6 JANUARY 1885)

❖ He was **an Indian poet, writer and playwright**.
❖ He is **considered the father of modern Hindi literature** as well as **Hindi theatre**.
❖ Writing under the **pen name "Rasa",** Harishchandra **represented the agonies of the people, the country's poverty, dependency, inhuman exploitation**, the unrest of the middle class and the urge for the progress of the country
❖ He authored **several dramas, life sketches and travel accounts**, using new media such as **reports, publications, letters to editors of publications, translations, and literary works** to shape public opinion.
❖ At the **age of 18**, he wrote the Hindi **translation of the Bengali play 'Vidyasundar'.**
❖ Bharatendu Harishchandra is known as **father of 'Khadi Boli** and one of the **era of Hindi literature in 'Khadi Boli' is also known as 'Bharatendu Yuga' after him.**
❖ **Major works**
   ✓ **Journals**: HarishChandra chandrika, Kavivachan Sudha etc.
   ✓ **Drama**: Andher Nagari, Bharat Durdasha, Vaidik Hinsa Hinsa Na Bhavati etc.
   ✓ **Poetry**: Bhakta Sarvagya, Prem Tarang, Madhumukul, Uttarardha Bhaktamal, Varsha Vinod, etc.

OTHER FACTS

❖ The **Ministry of Information and Broadcasting** of India confers **Bharatendu Harishchandra Awards** to encourage **original and creative writing in Hindi** since**1983**.

17.5	SURYA SEN

❖ The death anniversary of **Surya Sen**, the **legendary revolutionary leader** was **observed recently on January 12th**.

ABOUT SURYA SEN (22ND MARCH 1894 – 12TH JANUARY 1934)

❖ Also known as **Surya Kumar Sen**, he was an Indian revolutionary who was influential in the independence movement against **British rule in India**.
❖ In **1918**, he was selected as **president of the Indian National Congress's Chittagong branch.**
❖ He **actively participated** in the **Non-Cooperation Movement** before **being detained** and **held in prison for about two years (1926-1928) due to his revolutionary activities.**
❖ Sen, a **talented and motivating organizer**, was known for remarking that **"Humanism is a distinctive virtue of a revolutionary".**
❖ Surya Sen **was popularly known as 'master da'.**
❖ An armed force named **Indian Republican Army** was **established in 1930** under his leadership and joined by the likes of Kalpana Dutt, Pritilata Waddedar etc.
❖ He is **best known for leading the 1930 Chittagong armoury raid.**
   ✓ The complex strategy involved **stealing weapons from the armoury** and **destroying the city's communications infrastructure** in order to **cut off Chittagong from the rest of the British Raj.**
   ✓ Although, they were **unable to seize the munitions**.
❖ Masterda was **detained on 16 February 1933, put on trial, and executed on 12 January 1934.**

17.6	RASH BIHARI BOSE

❖ The **death anniversary of Rash Bihari Bose** was observed recently on **January 21st**.

ABOUT RASH BIHARI BOSE

❖ Born in **Subaldaha village, Bardhaman District in West Bengal** on 25 May 1886, he was a **revolutionary freedom fighter.**

❖ He was **deeply influenced by the 1789 French Revolution.**

❖ He became **acquainted with Jatin Mukherjee alias Bagha Jatin** and got **involved with the revolutionary freedom fighters of Bengal.**

❖ He was the **mastermind behind the assassination attempt** on the **then Viceroy Lord Hardinge** in **December 1912**.
  - ✓ This incident **later became known as the Delhi Conspiracy Case**.
  - ✓ However, **Hardinge managed to escape with minor injuries**.
  - ✓ There was a **big man-hunt to capture Bose and his accomplices but Bose never got caught**.
  - ✓ Three others involved **Basant Kumar Biswas, Avadh Behari and Amir Chand** were **caught, tried and executed.**

❖ Bose was **associated with Gadar Movement** and after its failure, **managed to elude arrest once again and fled to Japan in 1915.**

❖ He **married a Japanese woman** and became **a Japanese citizen in 1923.**

❖ In Japan, he **advocated the independence of India** and **urged the Japanese government to support the Indian nationalist movement.**

❖ He **founded the Indian Independence League in March 1942.**

❖ He died on **21st January 1945** in Tokyo **due to tuberculosis**.

❖ He was conferred the honour- **'Order of the Rising Sun' by the** Japanese government.

17.7   HOMI JAHANGIR BHABHA

❖ The **death anniversary of pioneering Indian physicist Homi Jehangir Bhabha** was observed on **24th January.**

ABOUT HOMI JEHANGIR BHABHA

❖ **He was** born **on 30th October 1909.**

❖ He is **regarded as the father of India's nuclear programme.**

❖ He **founded and directed two major institutions** involved in Nuclear sciences-
  - ✓ **Tata Institute of Fundamental Research** (TIFR) and
  - ✓ the **Atomic Energy Establishment** (later renamed the Bhabha Atomic Research Centre (BARC) in his honour)

❖ He was also the **first person to become Chairman of Atomic Energy Commission of India.**

❖ India's **three-stage nuclear power programme** was **formulated by Homi Bhabha in the 1954.**

❖ Bhabha was the **first Indian to receive the Adams Prize in 1942**, for his **"theory of the elementary particles and their interactions"**.
  - ✓ It is the **highest honour given by the University of Cambridge.**

❖ He was **also awarded the Padma Bhushan.**

17.8   LALA LAJPAT RAI

❖ The **159th birth anniversary of Lala Lajpat Rai** was observed recently on **January 28th**.

ABOUT LALA LAJPAT RAI

❖ Born on **January 28, 1865**, in **Dhudike, Punjab**, **Lala Lajpat Rai created a legacy of nationalism, unity and strength** as he was a **freedom fighter who was a firm believer in India's independence.**

❖ In **1880**, Rai joined the **Government College at Lahore to major in law**, where he was influenced by the Hindu reformist movement of **Swami Dayanand Saraswati** and **became a member of existing Arya Samaj Lahore (founded 1877)** and **Founder-Editor of Lahore-based Arya Gazette.**

❖ Popularly known as **Punjab Kesari**, Lala Lajpat Rai **was one-third of the triumvirate 'Lal Bal Pal', which included Bal Gangadhar Tilak and Bipin Chandra Pal.**

- ❖ As part of **Indian National Congress**, he took part in **political agitations in Punjab and was subsequently deported to Mandalay without trial in May 1907.**
- ❖ Lala Lajpat Rai **was elected President** of the **Indian National Congress in the Calcutta Special Session of 1920.**
- ❖ In **1921**, he **founded Servants of the People Society**, a **non-profit welfare organization.**
- ❖ He is **best known for leading the non-violent march in protest of the Simon Commission.**
  - ✓ He was **assaulted and was extremely injured** during the protest.
  - ✓ He **subsequently addressed the crowd with his now famous words** and said, **"I declare that the blows struck at me today will be the last nails in the coffin of British rule in India".**
- ❖ He **did not fully recover** from his injuries and **died on November 17, 1928 of a heart attack.**

17.9   DR NITYA ANAND

- ❖ **Dr Nitya Anand**, who **discovered India's first oral contraceptive pill 'Saheli'**, passed away recently.
- ❖ Anand was also the **former director** of the **Central Drug Research Institute (CDRI) from 1974 to 1984.**
  - ✓ He was with CDRI since its inception in 1951.
- ❖ He **published over 400 research papers** and **over 130 patents.**
- ❖ He was also awarded with **Padma Shri.**
- ❖ He was the brain behind the **discovery of Centchroman'**, popularly known as **'Saheli.'**
  - ✓ It was the **world's first and only non-steroidal, non-hormonal, once-a-week oral contraceptive pill.**
  - ✓ It was **launched by then Prime Minister Rajiv Gandhi in 1986.**
  - ✓ In **2016**, Saheli was **incorporated in the National Family Programme of India.**
  - ✓ Even today, **it is the only non-steroidal non-hormonal contraceptive in the world.**

17.10   K M CARIAPPA

- ❖ **Field Marshal K.M Cariappa's birth anniversary** is celebrated **annually on January 28th.**

ABOUT K.M CARIAPPA

- ❖ Field Marshal Kodandera 'Kipper' Madappa Cariappa, often referred to as K.M. Cariappa, was an **Indian military officer** who served as the **first Indian Chief of Army Staff of the Indian Army from 1949 to 1953.**
- ❖ He was **born on 28 January 1899, in Coorg**, which is now part of **Karnataka.**
- ❖ Cariappa **joined the British Indian Army in 1919** and **was commissioned into the 2nd Battalion, 88th Carnatic Infantry.**
- ❖ He **served in various roles and saw action during World War II.**
- ❖ He **rose through the ranks, displaying leadership and tactical skills.**
- ❖ In 1947, when India gained independence, Cariappa was **promoted to the rank of major general** and appointed as the **first Indian Commander-in-Chief of the Indian Army.**
- ❖ His tenure as **Chief of Army Staff began in 1949 when he succeeded General Sir Robert Lockhart.**
- ❖ Cariappa **played a crucial role in the integration of princely states** into the Indian Union and also contributed to the **modernisation and professionalisation of the Indian Army** in its formative years.
- ❖ In recognition of his services, he was **awarded the prestigious title of Field Marshal on January 15th, 1986**, becoming the **first Indian Army officer to hold this rank.**
- ❖ **Other awards include-**
  - ✓ **Order of the Chief Commander of the Legion Merit** in **1949 by US President.**
  - ✓ **Order of the British Empire** for his role in **World War II.**
- ❖ He passed away on 15th May, 1993.

FACTS

- ❖ Army Day is celebrated on **15th January every year in India**

❖ It is observed in **recognition of Lieutenant General Kodandera M. Cariappa's taking over** as the **first Commander-in-Chief of the Indian Army** from **General Francis Roy Bucher**, the last British Commander-in-Chief of India, on **15th January 1949.**

17.11   R. CHAMPAKALAKSHMI

❖ The **academic community** has mourned the **loss of eminent historian R. Champakalakshmi.**
❖ She was the **former president of Indian History Congress** and **professor in the Centre for Historical Studies, Jawaharlal Nehru University.**
❖ Prof. Champakalakshmi was a **multidisciplinary expert** in **archaeology, iconography, ideology, statecraft and trade.**

18.   SOCIAL ISSUES, HEALTH, EDUCATION

18.1   FIRST ALL GIRLS SAINIK SCHOOL

❖ **Defence Minister** recently inaugurated the **inaugural all-girls Sainik School- Samvid Gurukulam Girls Sainik School, in Vrindavan.**
❖ It is the **first all-girls Sainik School, hosting approximately 870 students.**
❖ This establishment is **part of the broader initiative to establish 100 new Sainik Schools** through **collaboration with NGOs, private entities, and state government schools across all states and Union territories.**
   ✓ These are **in addition** to the **existing 33 sainik schools already functioning.**

18.2   BUBBLE BABY SYNDROME

❖ A **two-month-old girl** has become the **youngest to receive bone marrow transplant** from an unrelated donor.
❖ The baby was diagnosed with **'bubble baby syndrome'.**

ABOUT BUBBLE BABY SYNDROME

❖ It is also known medically as **severe combined immunodeficiency (SCID)**.
❖ It's a **very rare genetic disorder** that causes **life-threatening problems with the immune system.**
❖ **Babies with SCID** are **born without an immune system**, making them **vulnerable to life-threatening infections.**
❖ The **genetic defect** linked to SCID leads to **a deficiency in Lymphocytes (type of White blood cells)**, which are a **crucial component of our immune system.**
   ✓ Two main types of Lymphocytes -
      ✓ **T cells** identify, attack, and kill "invaders."
      ✓ **B cells** make antibodies that "remember" an infection for future protection against infections.
   ✓ Without a bone marrow transplant, **most children with SCID succumb to infections before reaching their first birthday.**
❖ The **only cure** for a bubble baby syndrome is **a bone marrow transplant from a healthy donor**. The transplant replaces the child's faulty immune system with a healthy one.

ABOUT BONE MARROW TRANSPLANT

❖ A bone marrow transplant is also called a **stem cell transplant** or, more specifically, **a hematopoietic stem cell transplant.**

- ❖ It can be used to **treat certain types of cancer, such as leukemia, myeloma and lymphoma, and other blood and immune system diseases**.
- ❖ Bone marrow transplants may use cells from the same person (**autologous transplant**) or from a donor (**allogeneic transplant**).

18.3   SMART 2.0

- ❖ **Central Council for Research in Ayurvedic Sciences (CCRAS)** along with **National Commission for Indian System of Medicine (NCISM)** has launched **'SMART 2.0' (Scope for Mainstreaming Ayurveda Research among Teaching professionals) program.**
- ❖ **It aims** to promote **robust clinical studies in priority areas of Ayurveda with Ayurveda academic institutions/hospitals** across the country through mutual collaboration.
- ❖ The objective of 'SMART 2.0' is to **generate a tangible evidence to demonstrate efficacy and safety of Ayurveda interventions** using **interdisciplinary research methods** and translating it into public health care. Under the **'SMART 1.0', around 10 diseases were covered with the active participation of teaching professionals from 38 colleges.**

ABOUT CCRAS

- ❖ CCRAS is **an apex organization for the formulation, co-ordination, development and promotion of research on scientific lines in Ayurveda,** functioning under **the Ministry of Ayush.**

ABOUT NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

- ❖ A **statutory body** constituted under **NCISM Act, 2020.**
- ❖ It **consists of 29 members**, appointed by the **central government**.
- ❖ **Major Functions**
  - ✓ Framing policies for regulating medical institutions and medical professionals of Indian System of Medicine
  - ✓ Assessing the requirements of healthcare related human resources and infrastructure.
  - ✓ Ensuring compliance by the State Medical Councils of Indian System of Medicine of the regulations made under the Bill
  - ✓ Ensuring coordination among the autonomous boards.

18.4   PRERNA PROGRAM

- ❖ **Department of School Education & Literacy, Ministry of Education**, has launched **'Prerana: An Experiential Learning program'**, aiming to offer a **meaningful, unique, and inspiring experience to all participants**, thereby empowering them with **leadership qualities**.
- ❖ It is **a week-long residential program** for **selected students of class IX to XII**.
- ❖ It is **an experiential and inspirational learning program** for students with the **best-in-class technology where heritage meets innovation**.
- ❖ A batch of **20 selected students (10 boys and 10 girls) will attend the program**, **every week** from **various parts of the country.**
- ❖ Prerna Program will run from a **Vernacular School, established in 1888**, in one of the **oldest living cities of India, Vadnagar, district Mehsana, Gujarat.**
- ❖ The **curriculum** of Prerana School is **prepared by IIT Gandhi Nagar** and is **rooted in nine value based themes-**
  - ✓ Swabhiman and Vinay, Shaurya and Sahas, Parishram and Samarpan, Karuna and Sewa, Vividhta and Ekta, Satyanishtha and Shuchita, Navachar and Jigyasa, Shraddha aur Vishwas, and Swatantrata and Kartavya.
- ❖ It aims to embody the **spirit of "Vasudhaiva Kutumbakam"** and foster **unity in diversity.**

18.5   LEAD POISONING

❖ **Lead poisoning**, a pervasive yet oft-underestimated public health concern, has **silently penetrated the landscapes of Odisha.**
❖ Lead contamination in Odisha is **primarily attributed to improper treatment of waste from industries and e-waste** as well as the **informal battery recycling sector**, which affects **the soil, water and subsequently the food chain.**
❖ **Sources of lead poisoning**
  ✓ Aside from **contaminated drinking water**, **fish, vegetables, etc., grown in and around polluted water** and soil, can cause **indirect ingestion of lead and other harmful heavy metals**.
  ✓ **Aluminium utensils, imported candy, adulterated spices, toxic paints, etc.**, are other **sources of lead poisoning.**
❖ **Impact**
  ✓ Lead **accumulates in the body and gets deposited in the bones and teeth**.
  ✓ It **poses severe health risks**, particularly to **children with developing nervous systems** in the form of **cognitive impairments, developmental delays, behavioural disorders.**
  ✓ Adults experience **adverse effects on cardiovascular health, kidneys and reproductive systems**.
  ✓ In **pregnant women specifically**, **lead poisoning can lead to miscarriages, still birth, low birth weight and other complications.**

FACTS

❖ A Report of the World Health Organisation says that **almost one million people die every year due to lead poisoning across the globe** and **1,000-5,000 people die in Odisha, with the most vulnerable being children.**

18.6   CLASPEI DRUG APPROVED

❖ **Claspei Drug** has been approved by **Drug Controller General of India.**
❖ It is a **cannabis based drug for epilepsy.**
❖ The drug contains **tetrahydrocannabinol (THC) content below 0.1%.**
❖ THC is **active ingredient of cannabis.**

ABOUT CANNABIS USE

❖ Under **Narcotic Drugs and Psychotropic Substances Act 1985** –
  ✓ Sale and production of **cannabis resin and flowers is prohibited**
  ✓ **Use of leaves and seeds** of is **permitted**

ABOUT EPILEPSY

❖ Epilepsy is a **chronic noncommunicable disease of brain**.
❖ **Symptoms** include **recurrent seizures, brief episodes of involuntary movement, loss of consciousness etc.**
❖ Epilepsy is the fourth most common neurological disorder and **affects people of all ages.**
❖ There's **no cure for epilepsy**, but the **disorder can be managed with medications and other strategies.**

18.7   WHO LAUNCHES ICD-11, TRADITIONAL MEDICINE MODULE 2

❖ The **data and terminology** relating to diseases **based on Ayurveda, Siddha and Unani Medicine** have been included in the **WHO** International Classification of Diseases 11 (ICD-11) **classification.**
❖ The **Ministry of AYUSH** in collaboration with **World Health Organization** has prepared a **classification of diseases used in Ayurveda, Siddha and Unani systems under TM-2 module of ICD-11 series.**
❖ The initiative aims to establish **a universal code of vocabulary defining diseases** in **Ayurveda, Siddha, and Unani (ASU) medicine, fostering global uniformity.**

❖ Infectious diseases such as **Malaria** and lifestyle ailments like **chronic insomnia** have found a place in this comprehensive classification.

❖ Noteworthy examples include the inclusion of **'Bhramaha' in Ayurveda, 'Ajal Kirkrippu' in Siddha, and 'Sadra-o-Dwar' in Unani** under the common term **"Vertigo Guidance Disorder."**

WHAT IS ICD?

❖ ICD is the **international standard** for **systematic recording, reporting, analysis, interpretation, and comparison of mortality and morbidity data.**

❖ The ICD is **developed and annually updated by the World Health Organization**.

❖ **The ICD-11 is the eleventh revision of the International Classification of Diseases.**

❖ ICD-11 includes **Module-1** which **covers traditional medicine conditions** originating in **ancient China**, and now being **commonly used in Japan, Korea etc.**

18.8   COLLEGE FAGATHANSI MISSION

❖ **Manipur** Chief Minister recently launched the **College Fagathansi Mission** at a grand function organised at the Moirang College, Bishnupur District.

❖ The mission had been taken up **to develop infrastructures of colleges and provide better higher education facilities** as a follow up initiative of School Fagathansi Mission.

18.9   NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

❖ The **National Assessment and Accreditation Council (NAAC)** has put **on hold grading process for around 30 institutes in the country** that saw **inexplicable jump in grades between two accreditation cycles**, separated by five years.

❖ In **March 2023**, **NAAC was pulled up by the Comptroller and Auditor General** for glaring "discrepancies" in its assessment process, pointing to the poor standards that NAAC follows.

ABOUT NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

❖ National Assessment and Accreditation Council (NAAC) was **established in 1994** as **an autonomous institution** of the **University Grants Commission (UGC)**

❖ Headquarters- Bengaluru.

❖ It conducts **assessment and accreditation** of **Higher Educational Institutions (HEIs)** such as **colleges, universities.**

❖ The NAAC **functions through its General Council** (GC) and **Executive Committee** (EC) comprising **educational administrators, policy makers and senior academicians from a cross-section of Indian higher education system.**
   ✓ The **Chairperson of the UGC** is the **President of the GC of the NAAC**, the **Chairperson of the EC** is an **eminent academician nominated by the President of GC (NAAC).**

18.10   OPERATION AMRITH

❖ The **Kerala Drug Control Department** has launched **Operation Amrith (AMRITH - Antimicrobial Resistance Intervention For Total Health)** to prevent the **overuse of antibiotics in the state.**

❖ Operation Amrith is **aimed at conducting surprise raids in retail medical shops** for detecting over-the-counter (OTC) sale of antibiotics.

FACT

❖ The **Kerala government** was the **first state in India** that came up with the **state action plan on AMR, Kerala Anti-Microbial Resistance Strategic Action Plan (KARSAP)**, in 2018.

❖ Aligned with India's National Action Plan on AMR, Kerala's plan **reflected a multi-sectoral approach**.

18.11	NIPAH VIRUS

- Scientists at the **University of Oxford in the U.K.** have launched **first-in-human vaccine trials** for the **deadly Nipah virus** which impacts many Asian countries, including India.
- The trials of the **ChAdOx1 NipahB vaccine**, consisting of **51 people aged 18 to 55**, will be led by the **Oxford Vaccine Group.**
- The vaccine uses the ChAdOx1 platform, the **same viral vector vaccine platform** that was **used for the Oxford/AstraZeneca COVID-19 vaccine.**

ABOUT NIPAH VIRUS

- Nipah virus was **first identified in 1998 with outbreaks in Malaysia and Singapore.**
- Outbreaks have occurred in **countries in Asia, including Singapore, Malaysia, Bangladesh and India**, with a recent one in Kerala in September last year.
- Nipah virus is **carried by fruit bats** and **may also be transmitted by contact with infected animals** (such as **pigs**) or **from person-to-person via close contact.**
- **Symptoms** include **fever, headache, cough, sore throat, difficulty in breathing, and vomiting**, with **severe cases potentially leading to encephalitis, coma, and death.**
- The virus, which is **recognised by the World Health Organization as a priority disease** requiring **urgent research**, belongs to the same family of **paramyxoviruses** as more well-known pathogens like measles.
- Nipah virus is a **devastating disease that can be fatal in around 75% of cases.**
- There are **currently no approved vaccines or treatments.**

18.12	SHRESHTA SCHEME

- The **Central Board of Secondary Education** (CBSE) has issued **instructions for Residential Private Schools** interested in joining the **2023-24 Scheme for Residential Education for Meritorious Scheduled Caste (SC) Students (SHRESHTA)**.
- **Eligible schools** must be
  - ✓ private **residential institutions affiliated with CBSE up to class 12**,
  - ✓ operational for at **least 5 years**, and
  - ✓ boasting **a pass percentage of 75 or more in class 10 and 12 over the last 3 years**.
  - ✓ These schools **should possess adequate infrastructure** to **accommodate at least 10 additional SC students in classes 9 and 11 combined**, with residential status verified by OASIS data.

ABOUT SHRESHTA

- The scheme **aims to fill the gap** in **service-deficient SCs dominant areas** through the efforts of **grant-in-aid institutions** and **residential high schools offering high-quality education.**
- It also **intends to provide an environment** for **socio-economic upliftment and overall development of the Scheduled Castes (SCs).**
- This initiative is **overseen by the Department of Social Justice and Empowerment, Ministry of Social Justice and Empowerment (MoSJE).**
- **Enrollment** under the **scheme is designated for students entering Class 9 and Class 11**.
- The CBSE disclosed that the **National Entrance Test for SHRESHTA (NETS)**, conducted by the **National Testing Agency (NTA)**, selects **3,000 students annually for the scheme**.
- **Allocation to schools** is determined through web counseling **based on merit and student preferences**.
- The scheme **will cover the tuition fee, the hostel fee, and the mess fees for qualifying students.**

18.13	DISEASE X

- At the **World Economic Forum in Davos, Switzerland**, a panel **of health industry leaders** discussed the importance of **preplanning for the outbreak of a hypothetical "Disease X".**

ABOUT DISEASE X

❖ Disease X is **not a specific disease** but is the **name given to a potential novel infectious agent.**
❖ It **represents an illness** which is **currently unknown** but could **pose a serious microbial threat to humans in the future**.
❖ It is **necessary to be prepared** because there is **a vast reservoir of viruses circulating among wildlife** which could **become a source of a new infectious disease to which humans do not have immunity.**
❖ In **2018**, the **World Health Organization (WHO) added Disease X** to a **list of pathogens** that are a **top priority for research**, **alongside** known killers like **Severe Acute Respiratory Syndrome (SARS) and Ebola.**
❖ The WHO has warned that **Disease X could result in 20 times more fatalities than COVID-19.**

18.14 SCRUB TYPHUS

❖ **Every millimetre increase in rainfall** could lead to a **0.5 to 0.7 per cent rise in monthly scrub typhus cases**, according to a new study conducted in Tamil Nadu's Vellore.

ABOUT SCRUB TYPHUS

❖ Scrub typhus is **an infectious disease** caused by **bacteria called Orientia tsutsugamushi** and transmitted through infected mites.
  ✓ Mites carrying the disease are **generally found in the bush, jungle and paddy areas**, so the disease is **also called jungle or bush typhus.**
❖ **Humans** pick up the infection **when they walk, sit, or lie down on the ground infested by mites**.
❖ Symptoms include **fever, headache, body ache and sometimes a rash**.
  ✓ In severe cases, the **infection can lead to respiratory distress, brain and lung inflammation, kidney failure and multi-organ failure, ultimately resulting in death.**
❖ Several **factors, like vector abundance, climatic factors, exposures like farming and owning domestic animals, outdoor activities and sanitation**, affect its **prevalence**.
❖ The disease tends to be **seasonal in the endemic areas.**
  ✓ Scrub typhus incidence is **associated with relative humidity, temperature and rainfall.**
❖ No vaccine is available to prevent scrub typhus.
❖ Treated with the **antibiotic doxycycline.**

18.15 HAVISURE VACCINE

❖ **India's first indigenously developed Hepatitis A vaccine 'Havisure'** was recently **launched in Hyderabad.**
❖ It has been **developed by Hyderabad-based Indian Immunologicals Ltd (IIL)**, a **wholly owned subsidiary of National Dairy Development Board (NDDB)** and **a leading biopharmaceutical company in India.**
❖ This indigenously developed vaccine is **poised to play a crucial role in preventing Hepatitis A**, a **highly contagious liver infection that poses a significant public health challenge**.
  ✓ Hepatitis A is **a viral infection primarily spread through the fecal-oral route**, meaning that it is transmitted through the **ingestion of contaminated food or water.**
❖ It has been reported that the vaccine is **effective in preventing the disease** and **is recommended for children in routine immunization.**
❖ It is **a two-dose vaccine** wherein the **first dose is administered at above 12 months of age** and **the second dose is given at least after 6 months of the first dose.**
  ✓ The **vaccine** is also **recommended for individuals** who are **at risk of exposure or travel to the regions with high hepatitis A prevalence**.
  ✓ In addition to this **people with occupational risk of infection and suffering from chronic liver diseases also need Hepatitis A vaccination.**

18.16 AROGYA MAITRI CUBE

❖ **Two Arogya Maitri Disaster Management Cube-BHISHM**, revolutionary mobile hospitals equipped with cutting-edge technology, **were deployed in Ayodhya** to bolster medical readiness and response capabilities during the upcoming 'Pran Pratishtha' ceremony.

ABOUT AROGYA MAITRI CUBE

❖ The **cube is a part of the broader initiative** named **"Project BHISHM"** – **Bharat Health Initiative for Sahyog, Hita and Maitri**, is **tailored to treat up to 200 casualties**, emphasizing **rapid response and comprehensive care**.

❖ It **integrates Artificial Intelligence (AI) and data analytics** to **facilitate effective coordination, real-time monitoring, and efficient management of medical services in the field.**

❖ The whole unit **contains 72 easily transportable components** that can be **conveniently carried by hand, cycle, or even drone, providing unmatched flexibility**.

❖ In the face of **mass casualty incidents (MCIs),** where requirements range from basic aid to advanced medical and surgical care, the **Aid Cube stands out with its ability to be deployed within an astonishing 12 minutes**.

❖ These cubes are **robust, waterproof, and light, designed for various configurations**, making them ideal for diverse emergency scenarios.

❖ From **airdrops to ground transportation**, the **cube can be rapidly deployed anywhere, ensuring immediate response capability.**

❖ Advanced medical equipment, **RFID-tagged for efficient repacking and redeployment**, is a key feature of the Cube.

❖ The **state-of-the-art BHISHM software system integrated** into a provided **tablet** allows **operators to locate items quickly, monitor their usage and expiry, and ensure readiness for subsequent deployments.**

18.17 MOSQUIRIX VACCINE

❖ The rollout of the **world's first malaria vaccine 'Mosquirix'** began in **Cameroon**, which is said to be a **"transformative chapter in Africa's public health history".**
  ✓ **Cameroon** recorded **more than 6m cases in 2022** and **malaria accounted for 12% of deaths** among **children under five in 2021**.

❖ Also called the RTS,S/AS01 **vaccine** – 662,000 doses of it – will be **administered to children in the west African country, the first to be vaccinated.**
  ✓ The **GlaxoSmithKline-produced shot** is **only about 30% effective**, **requires four doses** and **protection begins to fade after several months.**
  ✓ It is **a World Health Organization (WHO) approved vaccine.**
  ✓ The **vaccine was tested in Africa** and used in pilot programs in three countries- **Ghana, Kenya and Malawi between 2019 and 2021**.
  ✓ **95% of deaths from the malaria occur in Africa.**

❖ It is **made up of proteins of the Plasmodium falciparum parasites** and the **hepatitis B virus.**
  ✓ The parasite, **Plasmodium falciparum** is **responsible for causing malaria.**

❖ A **second malaria vaccine, R21/Matrix-M**, produced by the **University of Oxford**, is due to be **rolled out later this year.**
  ✓ It is **cheaper**, requires **three doses** and India's **Serum Institute** say they could make **up to 200 million doses a year.**

18.18 VAIBHAV FELLOWSHIP

❖ The Department of Science and Technology (DST) announced the first batch of 'Vaibhav' fellows at a function recently.

❖ The fellowship has been awarded to 22 scientists, for collaborations in AI and quantum technologies etc.

ABOUT VAIBHAV SCHEME

❖ It stands for Vaishvik Bharatiya Vaigyanik (VAIBHAV) Fellowship Program.

- ❖ It is a scheme meant to attract Indian-origin scientists based abroad for short-term collaboration.
- ❖ It envisages a collaboration between scientists of the Indian Diaspora with Indian higher educational institutions (HEIs), universities and public-funded scientific institutions.
- ❖ The VAIBHAV Fellows would identify an Indian Institution for collaboration and may spend up to two months in a year for a maximum 3 years.
- ❖ The 75 selected fellows would be invited to work in 18 identified knowledge verticals including quantum technology, health, pharma, electronics, agriculture, energy, computer sciences, and material sciences amongst others.
- ❖ Fellowship would include fellowship grant (INR 4,00,000 per month), international and domestic travel, accommodation and contingencies.

It bears striking similarities to another scheme, called Visiting Advanced Joint Research Faculty.

Similar scheme

VAJRA - VISITING ADVANCED JOINT RESEARCH FACULTY (VAJRA)

- ❖ The scheme, also of the DST, was initiated in 2018.
- ❖ Vajra is open to all foreign scientists, whereas Vaibhav is exclusively for the Indian diaspora.
- ❖ Under the scheme, foreign researchers would receive endowments at par with those in their own countries.
- ❖ The endowments for faculties would be US $15,000 in the first month of residency and US $10,000, for the remaining months.
- ❖ The Science and Engineering Research Board (SERB), a Statutory body of the DST will implement the Scheme.
- ❖ The residency period of the VAJRA Faculty in India would be for a minimum of 1 month and a maximum of 3 months a year.

18.19   SII JOINS CEPI

- ❖ The **Serum Institute of India** (SII) is joining the **Coalition for Epidemic Preparedness Innovations-CEPI.**
- ❖ CEPI will **invest $30 million to build upon SII's capabilities to supply affordable investigational vaccines in any epidemic or pandemic.**

ABOUT CEPI

❖ It is a **partnership between public, private, philanthropic, and civil organisations**, launched at **Davos, Switzerland, in 2017**. ❖ It aims to **finance and coordinate** the **development of new vaccines to prevent and contain infectious disease epidemics.**	SII is the **world's largest vaccine manufacturer** and **has an overall production capacity of 4 billion doses annually.**

- ❖ Headquarters- **Oslo, Norway.**
- ❖ Mission- **accelerate the development of vaccines and other biologic countermeasures** against **epidemics like- Nipah Virus, Lassa fever Vaccine** etc.
- ❖ It is being **funded by** the **Wellcome Trust, Bill and Melinda Gates Foundation, World Economic Forum (WEF)**, Governments of **Norway, Japan, India (Department of Biotechnology) and Germany.**

18.20   LEPROSY

- ❖ The **Central government** has approved **a new treatment regimen for leprosy**, aiming **to stop its transmission at the sub-national level by 2027**, **three years ahead** of the **UN's Sustainable Development Goals.**
- ❖ **Ministry of Health and Family Welfare** has **decided to introduce a three-drug regimen for Pauci-Bacillary (PB) cases** in place of a two-drug regimen for six months.

ABOUT LEPROSY

- ❖ Leprosy is a **chronic infectious disease** caused by the **Mycobacterium leprae bacteria.**

- ❖ The disease **predominantly affects the skin** and **peripheral nerves**.
- ❖ Left untreated, it **may cause progressive and permanent disabilities**.
- ❖ The bacteria are **transmitted via droplets** from the **nose and mouth** during **close and frequent contact with untreated cases**.
- ❖ Leprosy, reported from all the six WHO regions, is **curable with multi-drug therapy (MDT).**

> **Leprosy has been eliminated as a public health problem in India** as per WHO criteria of less than 1 case per 10,000 population at National level in 2005.

  - ✓ The WHO's recommended treatment regimen consists of three drugs — **dapsone, rifampicin and clofazimine.**
  - ✓ The **duration of treatment** is **six months for PB** and **12 months for MB cases**.
  - ✓ MDT **kills the pathogen** and **cures the patient**.
  - ✓ The WHO has been providing **MDT free of cost.**
- ❖ The **majority** of new cases **detected annually are from South East Asia.**
- ❖ It is classified into two types for treatment purposes-
  - ✓ **Pauci-Bacillary (PB) cases** have **fewer bacteria visible** and show **no signs of advanced disease in biopsies.**
  - ✓ **Multibacillary (MB) patients** have **visible bacteria** and may show **signs of more advanced disease in biopsies.**

18.21   AISHE 2021-22

- ❖ The **All India Survey on Higher Education (AISHE) 2021-22** was released recently.
- ❖ **AISHE 2021-22** has been conducted by the **Union Education Ministry** and is the **12th edition of the survey.**
- ❖ The Ministry has been **conducting AISHE since 2011**, covering **all Higher Educational Institutions (HEIs) in the country registered with AISHE** collecting detailed information on different parameters such as **student enrollment, teachers, infrastructural information, etc.**

MAJOR FINDINGS

- ❖ The **total enrolment in higher education** has increased to **nearly 4.33 crore in 2021-22** from 4.14 crore in 2020-21.
  - ✓ **UP, Maharashtra, Tamil Nadu, MP, West Bengal and Rajasthan** are top 6 states.
- ❖ The **Female enrolment** has increased to **2.07 crore in 2021-22 from 2.01 crore in 2020-21.**
- ❖ **Gross Enrollment Ratio** has **increased to 28.4** in 2021-22 from 23.7 in 2014-15 [as per 2011 population projections for 18-23 years age group].
- ❖ **Female GER** has **increased to 28.5 in 2021-22** from 22.9 in 2014-15.
- ❖ **Gender Parity Index** (GPI), the **ratio of female GER to male GER is 1.01** in 2021-22. GPI has continued to be above 1 since 2017-18 i.e., **female GER continues to be more than male GER for fifth consecutive year.**
- ❖ The **highest number of graduates in 2021-22** as per the AISHE report is **from the Arts Discipline**.
- ❖ The **total number of pass-outs increased to 1.07 crore in 2021-22** as against 95.4 lakh in 2020-21
- ❖ **Availability** of different infrastructural facilities in university in 2021-22:
  - ✓ Libraries (99%)
  - ✓ Laboratories (88%)
  - ✓ Computer centers (93%)
  - ✓ Skill Development Centre (71%)
  - ✓ Play Ground (91%)
- ❖ **Number of Institutions**
  - ✓ The **total number of Universities / University level institutions** registered is **1,168, Colleges 45,473 and Standalone Institutions 12,002.**
- ❖ **Faculty**
  - ✓ The **total number of faculty/teachers in 2021-22 are 15.98 lakh**, of which about **56.6% are male and 43.4% are female.**

18.22	WESTERN EQUINE ENCEPHALITIS

❖ The **International Health Regulations National Focal Point (IHR NFP) in Argentina** has alerted the **Pan American Health Organization/World Health Organization (PAHO/WHO)** of a **human case of Western Equine Encephalitis Virus (WEEV) infection.**

ABOUT WESTERN EQUINE ENCEPHALITIS

❖ **Western Equine Encephalitis** is a **mosquito-borne infection** caused by the **Western Equine Encephalitis Virus (WEEV)**, which belongs to the **Togaviridae family of viruses**.

❖ The virus has **an approximately 11.5 kilobases long single-stranded RNA genome** and is a **recombinant of the eastern equine encephalitis virus (EEEV)** and a **Sindbis-like virus**.

❖ **Passerine birds** are thought to be the **reservoir** and **equine species** as **intermediate hosts**.

❖ The **primary mode of transmission** of the infection to humans is through **mosquitoes which act as vectors for the virus**.

❖ While **most of the infections are asymptomatic**, the infection may lead to **severe consequences in rare cases**.

❖ An estimated **4-5% of cases may manifest as infection/inflammation of the brain**, resulting in **neurological symptoms**.

❖ With **no specific antiviral treatment**, **symptomatic care is crucial**, especially for neurologic symptoms

19. MISCELLANEOUS

19.1	PUNJAB – 1ST STATE TO MAP ACCIDENT BLACKSPOTS

❖ **Punjab** has become the **first state in India to map all 784 accident black spots on the Mappls App**, a navigation system developed by MapMyIndia.

❖ Punjab Police teamed-up with MapmyIndia **for real-time traffic updates and alerts on Mappls App about Black and Blind spots.**

❖ Citizens can **receive voice alerts in Punjabi near critical areas** marking Punjab as the first state to Map accident-prone sites Road Safety

❖ An **accident blackspot is a place** where **road traffic accidents have historically been concentrated.**

19.2	VEER GATHA PROJECT

❖ More than **1.36 crore school students from all 36 States and Union Territories of India** came together to participate enthusiastically in the 3rd edition of the Veer Gatha Project.

❖ The project is an initiative under the **Gallantry Awards Portal (GAP) in 2021**, which aims to **honor the acts of bravery and sacrifice of the officers and personnel of the Armed Forces** while instilling values **of civic consciousness and patriotism among students.**

❖ It is a **joint initiative of Ministry of Defence and Ministry of Education.**

❖ As part of this, the students framed different projects through various media like **art, poems, essays and multimedia on these gallantry award winners** and **best projects were awarded** at national level by the Ministry of Defence and the Ministry of Education.

19.3	FOUR STARS OF DESTINY: AN AUTOBIOGRAPHY BY GEN M M NARVANE

❖ **General Manoj Mukund Naravane** has penned his autobiography titled **"Four Stars of Destiny: An Autobiography."**

❖ Gen MM Naravane served as the **28th Chief of Army Staff**, leading the Indian Army with distinction from **December 2019 to April 2022.**

19.4	WHY BHARAT MATTERS BOOK BY S JAISHANKAR

❖ External Affairs Minister **S. Jaishankar** launched his new book **'Why Bharat Matters'** in which he **examines the geopolitics and various aspects of India's foreign policy since Independence** using the **epic Ramayana as the overarching perspective.**

❖ The book focuses on **presenting the 'Bharatiya' view of the world.**

❖ The book has **chapters on dealing with China, the Quad grouping, re-imagining security, and ends with the essay that is the title of the book – Why Bharat Matters.**

19.5	SANSKRITI KE AYAAM- BOOK RELEASED

❖ General V.K. Singh (Retd), Union Minister of State, Ministry of Road Transport and Highways and Ministry of Civil Aviation recently released the book **'Sanskriti ke Ayaam'** written by **Manorama Mishra.**

❖ This book, written in **Hindi language**, has been **published by the National Book Trust, India, working under the Ministry of Education (MOE).**

❖ The book **talks about Indian knowledge, tradition and culture.**

19.6	GANDHI: A LIFE IN THREE CAMPAIGNS- BOOK RELEASED

❖ Eminent author, **M.J. Akbar**, launched his new book named **"Gandhi A Life in Three Campaigns"** at Prime Minister's Museum and Library at the Pradhan Mantri Sangrahalaya.

❖ The **Foreword of the book has been written by K. Natwar Singh**, former diplomat and External Affairs Minister of India.

❖ The particularly focuses on **three pivotal mass campaigns** led by Gandhiji-
  ✓ **Non-Cooperation Movement (1920)**
  ✓ **Salt Satyagraha (1930)**
  ✓ **Quit India Movement (1942)**

19.7	CONVERSATIONS WITH AURANGZEB' NOVEL RELEASED

❖ **"Conversations with Aurangzeb"** is a **novel by Tamil literary icon Charu Nivedita, translated into English by Nandini Krishnan.**

❖ This book **represents a unique fusion of historical narrative** and **satiric**

19.8	CENTRE OF EXCELLENCE IN DIGITAL FORENSICS

❖ The Union Home Minister **recently inaugurated Centre of Excellence in Digital Forensics** at **National Forensic Sciences University in Gandhinagar.**

❖ The **ultra-modern Centre of Excellence in Digital Forensics** has been **endowed with state-of-the-art tools and infrastructure.**

❖ The **Centre** will **provide investigators with digital weaponry** against **cybercrime** and also **help in addressing crimes that are powered by the abuse of technology.**

20.   HIMACHAL NEWS

20.1   ST STATUS FOR HATTEE COMMUNITY

❖ Himachal Pradesh Government issued a notification **granting Scheduled Tribe (ST) status to the Hattee community.**

❖ About **1.6 lakh Hattees** residing in **95 villages of 58 panchayats spread across** the **four Assembly segments of Shillai, Renukaji, Pachhad and Paonta Sahib** in **Sirmaur district stand to benefit from the order.**
   ✓ **The Scheduled Caste (SC) community has been excluded from the notification.**

❖ This has paved the way for the **Hattee community** to be **entitled for reservation in educational institutions and government jobs.**

❖ The Hattees had been **demanding ST status since 1967** when the people of **adjoining areas of Jaunsar Bawar, now in Uttarakhand, were given this benefit.**

❖ As per the notification issued by Union Ministry of Tribal Affairs, **Hattee refers to permanent residents of the Trans Giri area of Sirmaur district.**

20.2   RITU NEGI WINS ARJUNA AWARD

❖ Himachal Pradesh's **Kabaddi sensation**, **Ritu Negi**, was **bestowed with the esteemed Arjuna Award by President Draupadi Murmu.**

❖ The **honour** comes in recognition of **Negi's exceptional achievements and prowess in Kabaddi, solidifying her status as one of India's foremost athletes.**

20.3   PRAVEEN SINGH LOHIA GETS TENZING NORGAY NATIONAL ADVENTURE AWARD

❖ **Praveen Singh Lohia**, a resident of Sar panchayat in **Rakkar tehsil of Kangra district**, was honoured with the **Tenzing Norgay National Adventure Award** by President Droupadi Murmu.

❖ He was **bestowed the honour for conquering more than 25 peaks**, including **Mount Everest and Mount Comet twice.**

❖ He is a **serving ASI in the Border Security Force (BSF).**

ABOUT THE AWARDS

❖ The **Tenzing Norgay National Adventure Award**, formerly known as the **National Adventure Awards**, is **awarded to individuals who have demonstrated excellence in the promotion of adventure sports.**

❖ The award is **named after Tenzing Norgay, one of the first two individuals to summit Mount Everest.**

20.4   HP-SHIVA PROJECT

❖ The **orchards of seven districts** of **Himachal Pradesh will be filled with mango, guava, orange and pomegranate by the year 2028**.

❖ Under the **HP Shiva Project**, a **target has been set to complete the work of growing cash crops on 6000 hectares of agricultural land by the year 2028**.

❖ This includes **plantation, irrigation facilities and fencing work**.

❖ The **Himachal Pradesh Subtropical Horticulture, Irrigation, and Value Addition (HPSHIVA) Project** aims to increase the **income of farm households in seven districts (Bilaspur, Hamirpur, Kangra, Mandi, Solan, Sirmour and Una) of subtropical areas of Himachal Pradesh.**

❖ The project **will expand climate resilient subtropical horticulture plantation area along with assured irrigation and market access through value chain development.**

20.5	HP- BEST PERFORMER IN START-UP RANKING 2022

- ❖ Himachal Pradesh has been recognised as the **'Best Performer'** state under the **'State's Start-up Ranking 2022'** in **B category (having population less than one crore)**.
- ❖ Himachal Pradesh is evaluated on **seven reform areas** and **27 action points** that have a significant contribution towards propelling the start-up ecosystem.
- ❖ The State was recognised as a **Capacity Building Pioneer, Funding leader, Sustainability Promoter, an Incubation Hub, Mentorship Champion, an Innovative Leader and an Institutional Champion.**

20.6	'MY SCHOOL-MY PRIDE' CAMPAIGN

- ❖ In a move **aligning with the National Education Policy (NEP)-2020**, Himachal Pradesh has unveiled the **'My School-My Pride' campaign** under the **'Apna Vidyalay' programme**, aimed at **revolutionising the quality of education in government schools.**
- ❖ This initiative **will encourage active participation from individuals** and **organisations** to **adopt schools and contribute to various aspects of students' growth.**
- ❖ The stakeholders will be **urged to provide career counselling, offer remedial teaching, coach students for examinations**, and **engage in community support services**.
- ❖ The initiative **also involves monetary contributions for infrastructure development, event sponsorship, scholarships, and support for the Mid-Day Meal (MDM) programme.**

20.7	HALDA FEST

- ❖ The **Halda festival celebrations** began in the **Gahar and Tinan valleys of Lahaul and Spiti district**.
- ❖ To celebrate the festival, **villagers cut thin cedar branches into pieces** and tie **them into bundles to make a torch called 'halda'**.
- ❖ The torch is **lit at a house where villagers gather to perform various rituals, besides singing and dancing.**
- ❖ The **aim** of the festival is to **appease local deities, seek better crop yield and ward off evil spirits.**
- ❖ The **Halda festival** is similar to **Diwali** and **starts on a full moon day**.
- ❖ It is **dedicated to Shishkar Apa**, who is believed to be the **goddess of wealth in the Lamaistic pantheon**.

20.8	SUMDO-KAZA-GRAMPHU HIGHWAY

- ❖ The **Border Roads Organisation** (BRO) will **widen the strategically important Sumdo-Kaza-Gramphu highway** at a cost of **Rs 1,400 crore** to **ensure better connectivity to the Spiti region of Lahaul and Spiti district from Manali and Lahaul**.
- ❖ It will be **a double-lane highway**.
- ❖ The **BRO has already started the exercise to widen the road after getting approval of funds from the Central Government.**
- ❖ **The Spiti region of Lahaul and Spiti district shares border with China.**
  - ✓ **So, the Central Government is keen to ensure better road connectivity to the region from Manali and Lahaul to ensure an easy access for the Indian Army to border and also provide access to common civilians to promote tourism.**
- ❖ The **211-km-long road** has been in a **pathetic condition for many years.**
- ❖ The BRO has **divided the road project** into **four sections, namely Sumdo-Kaza, Kaza-Losar, Losar-Batal and Batal-Gramphu.**

20.9	HIMACHAL PRADESH- STATEHOOD DAY

- ❖ The **54th statehood day of Himachal Pradesh** was **celebrated in Dharampur in Mandi district.**
- ❖ Parliament on **December 18th, 1970**, had **passed the State of Himachal Pradesh Act** and the **new state came into being on 25th January, 1971.**
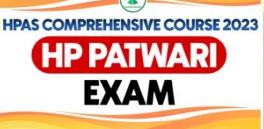- ❖ Thus, Himachal Pradesh **emerged as the 18th state of India**.

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