

CivilsTap

Quality & Affordable Education



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By CivilsTap Himachal

FOR HPAS &
other competitive
Exam in
Himachal Pradesh

Prelims

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1. POLITY	7	3. GEOGRAPHY	20
1.1. Zero FIRs		3.1. Indian Ocean Geoid Low	
1.2. Ol chiki script of Santhali language		3.2. Shelf clouds	
1.3. Electoral bonds		3.3. Kaas Plateau	
1.4. Solicitor General Of India.....		3.4. Phosphate deposits found in Norway.....	
1.5. Rajasthan Minimum Guarantee Bill		3.5. Anti-cyclone Cerberus.....	
1.6. Naveen Patnaik Becomes 2 nd Longest-Serving CM		3.6. Ghaggar river.....	
2. ECONOMY.....	10	3.7. Heat index	
2.1. Financial Stability Report.....	10	3.8. Ranjit Sagar Dam	
2.2. Greedflation.....		3.9. Batagaika Crater	
2.3. National Maritime Heritage Complex		3.10. Parkachik Glacier	
2.4. Subansiri Lower Hydroelectric Project		4. ART AND CULTURE	23
2.5. Mahila Samman Savings certificate		4.1. Ashadha Purnima.....	
2.6. Institute Of Chartered Accountants Of India (ICAI)		4.2. Zo people.....	
2.7. SWAMIH Fund.....		4.3. Gutti Koya tribe	
2.8. Bharat 6G Alliance launched by DoT.....		4.4. Porpanaikottai.....	
2.9. Kakrapar Atomic power plant.....		4.5. Kui language	
2.10. Small finance banks.....		4.6. Ker Puja	
2.11. Price Monitoring Division		4.7. Sushruta Jayanti.....	
2.12. Geocoding.....		4.8. Namda art	
2.13. PBW-RS1.....		4.9. Nawab Wajid Ali Shah.....	
2.14. Lambani Embroidery Patches		4.10. Tankai method.....	
2.15. Senior citizens saving scheme.....		4.11. Anubhav Mantapa	
2.16. BHARAT campaign.....		4.12. Bengaluru Joins WCCF.....	
2.17. Windfall tax.....		5. SCIENCE AND TECHNOLOGY.....	27
2.18. Invest India.....		5.1. Heavy Water.....	
2.19. Logistics Data Bank Project.....		5.2. Data scraping.....	
2.20. National Statistical Organisation (NSO).....		5.3. Enteroviruses.....	
2.21. Income Tax Day- July 24 th		5.4. OpenKylin.....	
2.22. Full Reserve banking.....		5.5. Majorana Zero Mode	
2.23. White Label ATM.....		5.6. India's first regional AI news anchor.....	
2.24. National Coal Index		5.7. Bard chatbot.....	
2.25. Digital Payment Index.....		5.8. Non-Fungible Tokens	
2.26. Urea Gold.....		5.9. Radio Thermoelectric Generators	
2.27. Offer for sale.....		5.10. Advanced Chemistry Cells (ACC) Battery	

5.11. New AI Company 'xAI'	8.1. Coalition For Disaster Resilient Infrastructure (CDRI)
5.12. Fluorochemicals	8.2. Just Energy Transition Partnership (JET-P).....
5.13. Hygroelectricity.....	8.3. New species of flora and fauna
5.14. INDIAai.....	8.4. Gucci mushrooms.....
5.15. Citizen Financial Cyber Fraud Reporting and Management System.....	8.5. Wildlife Crime Control Bureau
6. DEFENCE 32	8.6. New Zealand bans plastic produce bags.....
6.1. India's first 'Police Drone Unit'	8.7. Chinkara
6.2. JIMEX	8.8. Khazan land
6.3. SALVEX.....	8.9. Ambergris.....
6.4. Cluster Bombs	8.10. Indore gets EPR credits
6.5. Project 75I.....	8.11. Indian Grey Hornbill.....
6.6. HAL's regional office in Kuala Lumpur.....	8.12. Mukurthi National Park.....
6.7. SCALP missiles.....	8.13. Salsola oppositifolia Desfontania
6.8. Operation Southern Readiness	8.14. Nature Restoration Law
6.9. Hwasong-18	8.15. State disaster Response Funds (SDRF).....
6.10. Nomadic Elephant exercise 2023.....	8.16. Moderate Resolution Imaging Spectroradiometer (MODIS).....
6.11. Akira ransomware.....	8.17. Atlantic menhaden
7. SPACE 35	8.18. Hoolock Gibbon
7.1. Euclid telescope	8.19. Umiam dam.....
7.2. Supermoon	8.20. Gambusia fish.....
7.3. Solar flares	8.21. Cicadas
7.4. LVM-3	8.22. Bura Chapori Wildlife Sanctuary
7.5. Neutrinos	8.23. Gharial.....
7.6. Phosphine at Venus.....	8.24. Srivilliputhur Megamalai Tiger Reserve (SMTR)
7.7. Solar cycle.....	8.25. Solar Technology Application Resource Centre Initiative
7.8. Organic matter found on Mars	8.26. India Climate Energy Dashboard (ICED) 3.0
7.9. Chandrayaan 3	8.27. Indravati Tiger Reserve
7.10. Auroras on Mercury	8.28. White's seahorses.....
7.11. ISRO successfully tests SMPS.....	8.29. Ludwiga peruviana.....
7.12. Long March 10 Rocket.....	8.30. Meri Maati Mera Desh campaign.....
7.13. STARFIRE.....	8.31. Silvopasture.....
7.14. Markarian 421.....	8.32. Intergovernmental Panel on Climate Change (IPCC)
7.15. "Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer"- OSIRIS REx spacecraft.....	8.33. Resource Efficiency Circular Economy Industry Coalition (RECEIC)
7.16. Ureilite.....	8.34. Project Tiger and Project Elephant merged
8. ENVIRONMENT 41	

9. POLICY AND PROGRAMME 54

- 9.1. e-SARAS mobile app
- 9.2. Annapurthi.....
- 9.3. NeSDA Portal.....
- 9.4. SAMARTH scheme.....
- 9.5. ONGC gets ABMS certification
- 9.6. Pradhan Mantri Bhartiya Janaushadhi Pariyojana

10. INDEX AND REPORTS 56

- 10.1. Energy Transition Index 2023
- 10.2. Panchayat development index.....
- 10.3. World Investment Report 2023
- 10.4. Global Peace Index.....
- 10.5. Performance Grading Index 2.0
- 10.6. Global Multi-Dimensional Poverty Index.....
- 10.7. Export Preparedness Index.....
- 10.8. Global Education Monitoring Report, 2023.....
- 10.9. Global Climate Litigation Report- Status review ..

11. INTERNATIONAL, SUMMITS..... 61

- 11.1. SCO summit held.....
- 11.2. ICJ
- 11.3. Startup20 Torch Handover to Brazil.....
- 11.4. First Overseas IIT Campus.....
- 11.5. Chemical Weapons Convention
- 11.6. Group of Global Crisis Response Group (GCRG) ..
- 11.7. European Sky Shield Initiative (ESSI)
- 11.8. Muslim World League
- 11.9. European Free Trade Association (EFTA)
- 11.10. UNHRC.....
- 11.11. Bastille Day and Legion of Honour
- 11.12. Maputo protocol
- 11.13. Association of World Election Bodies (A-WEB)....
- 11.14. UK joins CPTPP
- 11.15. Nigeria declares emergency
- 11.16. IIT in Abu Dhabi.....
- 11.17. Singapore tops Henley Passport Index.....
- 11.18. Universal Postal Union
- 11.19. BIMSTEC.....
- 11.20. LNG exploration in Iraq.....

- 11.21. Japan signs semiconductor pact with India.....
- 11.22. Black Sea Grain Initiative.....
- 11.23. African Union.....
- 11.24. War memorial in Italy
- 11.25. India Argentina bilateral exchange.....
- 11.26. Free movement regime.....

12. PLACES IN NEWS70

- 12.1. Orkney Islands
- 12.2. Zaporizhzhia nuclear power plant
- 12.3. Strait of Hormuz
- 12.4. Cabo Delgado gas fields
- 12.5. Taylor Glacier.....
- 12.6. Ubinas Volcano.....
- 12.7. Takeshima Islands.....
- 12.8. Solomon Islands.....
- 12.9. Chavin de Huanter
- 12.10. Alaskan Penisnula
- 12.11. Black Sea
- 12.12. Rhodes and Corfu islands.....
- 12.13. Tuvalu.....
- 12.14. Papua New Guinea

13. DAYS TO REMEMBER73

- 13.1. National Postal Worker Day- July 1st
- 13.2. International Plastic Bag Free Day- July 3rd
- 13.3. International day of Cooperatives-July 1st
- 13.4. World Zoonosis Day 2023 – July 6th
- 13.5. World Population Day- July 11th
- 13.6. International Malala Day-July 12.....
- 13.7. National Fish Farmers Day
- 13.8. International Moon Day- July 20th
- 13.9. World Chess Day- July 20th
- 13.10. National Flag Adoption Day.....
- 13.11. National Mango Day- July 22nd
- 13.12. Kargil Vijay Diwas.....
- 13.13. International Day for the Conservation of the Mangrove Ecosystem
- 13.14. World Hepatitis Day- July 28th

13.15. World Day against Trafficking in Persons- July 30 th	18.4. Tele MANAS.....
14. APPOINTMENTS 75	18.5. Peste des petits ruminants (PPR)
14.1. Brajendra Navnit is India’s ambassador to WTO 75	18.6. Naegleria fowleri or “brain-eating amoeba”
14.2. Rakesh Pal is new Coast Guard DG.....	18.7. Candida Auris.....
14.3. LIC gets new MD.....	18.8. Gullian Barre syndrome
15. PERSON IN NEWS 75	18.9. Brucellosis disease
15.1. Alan Arkin	18.10. Entamoeba moshkovskii
15.2. Luis Suarez	18.11. Duchenne’s Muscular Dystrophy.....
15.3. Aruna Asaf Ali.....	18.12. Measles
15.4. Mangala Narikar.....	18.13. Crimean-Congo hemorrhagic fever
15.5. Mangal Pandey.....	18.14. e-Cigarettes
15.6. J R Oppenheimer	18.15. Fragile X syndrome
15.7. Vyomesh Chandra Banerjee	18.16. Tele MANAS.....
15.8. Bal Gangadhar Tilak.....	18.17. India’s first Cannabis medicine project.....
15.9. Chandra Shekhar Azad.....	18.18. CHIS - CONTROLLED HUMAN INFECTION STUDIES
16. AWARDS AND HONOURS..... 78	18.19. Nipah virus
16.1. PEN pinter prize	18.20. MERS- Middle East Respiratory Syndrome
16.2. Bhoomi Samman Awards.....	18.21. Dengue.....
16.3. Byculla railway station gets UNESCO’s award	18.22. Conjunctivitis.....
17. SPORTS 79	19. MISCELLANEOUS89
17.1. Asian Kabaddi Championship.....	19.1. Sharenting
17.2. Neeraj Chopra wins at Diamond league.....	19.2. Lisa Franchetti to lead US navy.....
17.3. Max Verstappen wins Austrian GP.....	20. HIMACHAL NEWS90
17.4. NADA signs MoU with SARADO	20.1. Uncertainty persists over Kullu’s Bhootnath bridge restoration
17.5. World Archery Youth Championships	20.2. Two irrigation projects stuck for want of central funds
17.6. Wimbledon 2023.....	20.3. Earthquakes in Lhaul spiti
17.7. Swastik makes world record.....	20.4. Sangla valley.....
17.8. Virat Kohli- 500 international appearances.....	20.5. Minjar Fair
17.9. Hungarian GP	20.6. Panchvaktra temple.....
17.10. Lahiru Thirimanne retires from international cricket	20.7. Gaddi shepherds stranded in Chandratal area....
17.11. India's first online gaming academy in MP.....	20.8. Works worth Rs 51L dedicated in Haroli sub- division
18. SOCIAL ISSUES, HEALTH, EDUCATION 81	20.9. CUHP gets A+ NAAC grade
18.1. Aspartame.....	20.10. Agniveer training centre opens at ACC, Barmana
18.2. Zombie drug.....	20.11. Sashakt Mahila Rin Yojana
18.3. One Health.....	

20.12. State Commission for Water Cess on
Hydropower Generation.....
20.13. Malana Dam.....
20.14. Sainj river

20.15. Zoological park, tiger safari to come up in Kangra
20.16. Jawali irrigation project.....



1. POLITY

1.1 ZERO FIRS

- ❖ Manipur is witnessing a rise recently in Zero FIRs.

ABOUT ZERO FIRS

- ❖ When a police station receives a complaint regarding an alleged offence that has been committed in jurisdiction of another police station, it registers an FIR, and then transfers it to concerned police station for further investigation.
 - ✓ This is called a Zero FIR.
 - ✓ No regular FIR number is given.
- ❖ After receiving Zero FIR, concerned police station registers a fresh FIR.
- ❖ It was introduced on the recommendation of the Justice Verma Committee formed at the backdrop of the brutal Nirbhaya gang rape in Delhi in 2012.
- ❖ This puts a legal obligation on the police to begin an investigation and take quick action without the excuse of the absence of jurisdiction.

Other amendments related to addition of languages in the 8th schedule include-

- 21st Amendment added Sindhi.
- 71st amendment added Konkani, Manipuri, and Nepali.

Trick to remember- 21 + 71 = 92

ABOUT FIRST INFORMATION REPORT (FIR)

- ❖ It is the information given to a police officer in writing as per the provisions of Section 154 of the Code of Criminal Procedure (CrPC).
- ❖ From the point of view of an informant, the main purpose of an FIR is to set criminal law into motion.
 - ✓ While for the police, the main purpose of an FIR is to obtain information about alleged criminal activity and take necessary steps to produce the perpetrator(s) before a court.

1.2 OL CHIKI SCRIPT OF SANTHALI LANGUAGE

- ❖ PM recently wished the people of Santhal tribe on occasion of Hul diwas using Ol Chiki Script of Santhali language.
- ❖ Hul Divas is observed annually on June 30 in memory of tribals — Sidho and Kanhu Murmu — who led the Santhal hul (rebellion) on June 30, 1855, at Bhognadih in Sahebganj district.
 - ✓ Hul, in the local language, means a movement for liberation.
- ❖ The 92nd Constitutional Amendment Act added Bodo, Dogri, Maithili and Santhali languages to Schedule VIII to Constitution of India.
- ❖ The Ol Chiki script, also known as Ol Chemet', Ol Ciki, Ol, and sometimes as the Santali alphabet, is the official writing system for Santhali.
- ❖ It was created in 1925 by Raghunath Murmu.
- ❖ Santhali is a Munda language and is spoken mainly in Jharkhand, West Bengal, Odisha, and also in Bangladesh, eastern Nepal and Bhutan.
- ❖ There are about 7.3 million speakers of Santali in India according to 2011 census.

1.3 ELECTORAL BONDS

- ❖ Government has approved the 27th sale of EBs from July 3, 2023.

ABOUT ELECTORAL BOND SCHEME

- ❖ EBs, introduced in 2017-18, as interest-free bearer instruments to cleanse the system of political funding in country.

- ❖ Only the political parties **registered** under **Section 29A of the Representation of the People Act, 1951** and have **secured not less than 1% of the votes** polled in the last general election to the House of the People or the Legislative Assembly, are eligible to receive electoral bonds.
- ❖ **EBs are valid for 15 days from the date of issue** and can be purchased by a **citizen of India or entities incorporated or established in India**.
- ❖ Sold in multiples of **Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore**.
 - ✓ One can purchase these bonds **only digitally or through cheques**.
- ❖ **SBI is the only bank authorised to sell them**.
- ❖ **The bonds are available for purchase by any citizen of India for a period of ten days each** in the months of **January, April, July and October** as may be specified by the Central Government

1.4 SOLICITOR GENERAL OF INDIA

- ❖ **Appointments Committee of Cabinet**, chaired by **Prime Minister** has approved **re-appointment of existing SGI- Tushar Mehta and 6 Additional SGIs (Vikramjit Banerjee, K.M Nataraj, Balbir Singh, S.V Raju, N. Venkataraman, and Aishwariya Bhati)**.
- ❖ Solicitor General is the **second most senior law officer after Attorney General** (who is appointed under **Article 76**).
- ❖ He is assisted by Additional SGIs.
- ❖ **Term of office is of 3 years**, or until further notice, whichever should be earlier.
- ❖ **Solicitor General and Additional Solicitors General are only statutory positions**.
- ❖ He also advises the government in legal matter.

1.5 RAJASTHAN MINIMUM GUARANTEE BILL

- ❖ **The Rajasthan Minimum Guaranteed Income Bill 2023** was tabled in state legislature recently.
- ❖ The Bill aims to **provide entitlement-based social security to support the individuals or households with an additional minimum guaranteed income in the form of a guaranteed wage or social security pension**.
- ❖ The government anticipates an **additional expenditure of Rs 2,500 crore per year for this scheme**, which may increase with time.

MAIN PROVISIONS OF THE BILL

- ❖ The Bill largely covers three broad areas: **Right to Minimum Guaranteed Income, Right to Guaranteed Employment and Right to Guaranteed Social Security Pension**.
 1. **Each adult citizen** of the state has been guaranteed a **minimum income for 125 days a year through**
 - The Rajasthan government's flagship Indira Gandhi Shahri Rozgar Guarantee Yojana for urban areas, and MGNREGA in rural areas. In his budget speech this year, **the CM had increased the employment guarantee per family from 100 days to 125 days for his urban employment scheme**. The state will supplement the MGNREGA's 100 days by providing jobs for an additional 25 days in rural areas.
 2. **Guaranteed employment**: The right to employment states that **post the work in urban or rural employment schemes, the minimum wages should be paid weekly or in any case not later than a fortnight**. The state will designate a **program officer** - not below the rank of Block Development Officer in rural areas and an Executive Officer of the local body in urban areas - to implement the Act.
 - ✓ Among other things, the Program Officer shall ensure that the **work site is within a radius of 5 Kms of where the job card is registered in both rural and urban areas**. If the Program Officer fails to provide employment within 15 days from the receipt of the application, the **applicant shall be entitled to an unemployment allowance on a weekly basis and in any case not later than a fortnight**.
 3. **Guaranteed social security pension**: Every person falling in the **category of old age/ specially abled/ widow/ single woman with prescribed eligibility** shall be entitled to a **pension of Rs 1000/month**.

- ✓ It will increase over the base rate in two instalments - 5% in July and 10% in January of each financial year starting 2024-2025.

1.6 NAVEEN PATNAIK BECOMES 2ND LONGEST-SERVING CM

- ❖ Naveen Patnaik of Odisha has become the **second longest serving chief minister of a state in India** with a tenure of **23 years and 139 days**.
- ❖ Patnaik, the **five-time Chief Minister of Odisha**, took charge on March 5, 2000, and has been holding the post since.
- ❖ He surpassed the **record of former West Bengal chief minister Jyoti Basu**.
- ❖ Patnaik is now second only to **Pawan Kumar Chamling of Sikkim**, who holds the record of being a state CM for the **longest time of 24 years and 166 days between December 1994 and May 2019**.



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2. ECONOMY

2.1 FINANCIAL STABILITY REPORT

- ❖ Reserve Bank of India recently released the **Financial Stability Report 2023**.
- ❖ It is **biannual report** that reflects **risks to financial stability and resilience of Indian financial system**.

The **Global Financial Stability Report (GFSR)** is a semiannual report by the **International Monetary Fund (IMF)** that assesses the **stability of global financial markets and emerging-market financing**.

MAJOR FINDINGS

- ❖ Indian banking system is **well capitalised and capable of absorbing macroeconomic shocks over a one-year horizon** even in the absence of any further capital infusion.
- ❖ **Gross Non-Performing Assets (GNPA) ratio of Scheduled commercial banks (SCBs)** continued its downtrend and fell to a 10-year low of **3.9% in March 2023**.
 - ✓ It is further **expected to decrease to 3.6% by March 2024**.
 - ✓ **Net non-performing assets (NNPA)** ratio declined to 1.0%.
- ❖ **Capital to Risk-Weighted Assets Ratio (CRAR)** of SCBs rose to historical highs of **17.1%** in March 2023.
- ❖ Remarkable credit growth in the banking sector, equally driven by the public sector banks and the private ones. **Credit growth reached 15.4%**, with considerable **contribution from the personal loan segment**.
- ❖ The **aggregate deposit growth picked up pace to reach 11.8%** as on June 02, 2023.
- ❖ The report **describes some emerging risks to financial stability emanate from cryptocurrencies** (although limited as the overall size is 0.4% of global financial assets) and **cyber risks that requires special attention**.
- ❖ **Insolvency and Bankruptcy Code (IBC)** has **rescued 72% of the distressed assets** since it came into being in 2016.
 - ✓ **Average time for concluding corporate insolvency resolution process (CIRPs)** that yielded resolution plans was **512 days (330 days provided in IBC)**.

2.2 GREEDFLATION

- ❖ Greedflation refers to the situation where **corporate greed drives inflation**.
- ❖ **Rather than a wage-price spiral, it is a Profit-Price Spiral where companies exploit inflation by raising prices excessively**, going beyond covering their increased costs, and aiming to maximize their profit margins.
- ❖ **These further fuels inflation**.
- ❖ Indian listed companies' net profits surged to Rs.2.9 trillion in March 2023, over 3.5 times the pre-pandemic average of Rs.0.83 trillion from December 2017 to Dec 2019, indicating exceptional post-pandemic profit generation.
- ❖ In India, **60% of the growth in net profit can be attributed entirely to the increase in profit margin**. The **increase in sales contributed an additional 36%** and the rest was a bonus from a combination of the two
- ❖ This shows the **presence of greedflation**

2.3 NATIONAL MARITIME HERITAGE COMPLEX

- ❖ The government has announced the development of a **National Maritime Heritage Complex (NMHC)** in **Lothal, Gujarat** under the **Sagarmala program (under the Ministry of Ports, Shipping, and Waterways (MoPSW))**.
 - ✓ **Sagarmala Programme**, launched in 2015 by **MoPSW**, ensures **holistic port infrastructure development along India's 7500km long coastline**.
- ❖ The **project aims to showcase India's maritime heritage from ancient to modern times**.
- ❖ It will **consolidate all diverse and rich artifacts from ancient to modern times** for edutainment purposes, i.e. entertainment designed to be educational.
- ❖ It will include **world's highest light house museum, world's largest open aquatic gallery, India's largest naval museum** and is envisaged to be **one of the biggest international tourist destinations in world**.
- ❖ It is **funded by MoPSW and Ministry of Culture** through **National Culture Fund** by way of grant.

ABOUT LOTHAL

- ❖ Lothal, prominent city of Indus-Valley Civilization (IVC), had the **oldest man-made dry-dock dating back to 2400 BC.**
- ❖ It is located **between Bhogavo and Sabarmati rivers** near Gulf of Khambat in Gujarat.
- ❖ It was **nominated to be enlisted as a UNESCO World Heritage Site in 2014** and its application is pending on tentative list of UNESCO.

- Gujarat has **more than 200 Indus Valley Civilization sites.**
- **Surkatoda and Dholavira** are the other two major ones.

ABOUT INDUS VALLEY CIVILISATION

- ❖ IVC aka Harappan Civilization was home to largest of four ancient urban civilizations of Egypt, Mesopotamia, India and China.
- ❖ It was an urban civilisation which had roads, developed drainage systems, houses made of baked bricks with had **two or more storeys.**
- ❖ It thrived about **2,500 BC in western South Asia**, which now is Pakistan and northwest India.
- ❖ **By 1500 BC, the Harappan culture came to an end.**

2.4 SUBANSIRI LOWER HYDROELECTRIC PROJECT

- ❖ **National Hydroelectric Power Corporation (NHPC) Limited** has completed construction of **2,000 Mega Watt Subansiri Lower Hydroelectric Project dam** till the top level of Elevation Level (EL) 210 m.
- ❖ SLHP is located on Subansiri River which is on border of India's two north-eastern states, Arunachal Pradesh and Assam.
- ❖ It is the **biggest hydroelectric project undertaken in India so far** and is a run of river scheme on river Subansiri.
 - ✓ A run-of-river dam is one in which the **flow of water in the river downstream of the dam is the same as the flow of water upstream** of the dam.
- ❖ **Subansiri River, aka Gold River, is the tributary of River Brahmaputra.**
- ❖ It originates from the Tibetan Himalayas and makes its way to India via (Miri Hills) Arunachal Pradesh.

2.5 MAHILA SAMMAN SAVINGS CERTIFICATE

- ❖ Finance Ministry has permitted **all Public Sector Banks and eligible Private Sector Banks** to implement and operationalize **Mahila Samman Savings Certificate (MSSC, 2023.)**

ABOUT MSSC

- ❖ MSSC is a **one-time savings scheme** introduced in **Budget 2023-24** to encourage women to invest.
- ❖ It is available for two years, **from April 2023-March 2025.**
- ❖ It offers a fixed interest rate of 7.5% per year and has a flexible investment and partial withdrawal options, with a **maximum limit of Rs 2 lakh.**
- ❖ Maturity date is **two years from deposit date.**
- ❖ **Minimum amount** to be invested is **Rs.1,000** and any sum in multiples of **Rs.100.**
- ❖ It **does not have any credit risk** since it is backed by govt.
- ❖ The Mahila Samman Savings Certificate **can be done only in the name of a girl child or woman.**
- ❖ A **woman or the guardian of a minor girl child** can open a Mahila Samman Saving Certificate scheme.
- ❖ A woman or guardian of a girl child can **open a second Mahila Samman Savings Certificate account after a minimum gap of three months** from the opening of the existing account.
- ❖ The account holder **can withdraw up to 40% of the account balance after one year** from the account opening date.

2.6 INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA (ICAI)

- ❖ The President of India, recently attended the **75th Foundation Day** celebrations of the **Institute of Chartered Accountants of India (ICAI)**.

ABOUT ICAI

- ❖ ICAI functions under the **administrative control of the Union Ministry of Corporate Affairs**.
- ❖ It was established in **1949**.
- ❖ It is a **statutory body established under the Chartered Accountants Act, 1949**.
- ❖ HQ: **New Delhi**.
- ❖ It is **tasked with the regulation of the profession of Chartered Accountancy**.
- ❖ **ICAI can be appointed as statutory auditor** of a company under the Companies Act, 2013.

2.7 SWAMIH FUND

- ❖ PM recently congratulated the new home owners in **Bengaluru's first project under SWAMIH Fund**.

ABOUT SWAMIH FUND

- ❖ SWAMIH stands for **Special Window for Affordable and Mid-Income Housing**.
- ❖ It is **India's largest social impact fund** specifically formed for completing **stressed and stalled residential projects**.
- ❖ The fund is **sponsored by the Ministry of Finance** and is **managed by SBICAP Ventures Ltd**.
 - ✓ SBICAP Ventures Limited is a **wholly-owned subsidiary of the State Bank of India**.
- ❖ It has **one of the largest domestic real estate private equity teams** focused only on funding and monitoring the completion of stressed housing projects.
- ❖ It is a **Category-II AIF (Alternate Investment Fund) debt fund** registered with the Securities and Exchange Board of India (SEBI).

ELIGIBILITY

- ❖ The real estate projects seeking **last-mile funding from SWAMIH must be RERA-registered projects** which have been stalled due to a lack of adequate funds.
- ❖ They **must also fall under the 'Affordable and Middle-Income Project' category**. These include
 - ✓ projects in which the flats do not measure more than 200 square metres in carpet area and are priced as below:
 - **Upto INR 2 crore** in the **Mumbai Metropolitan Region**
 - **Upto INR 1.5 crore** in the **National Capital Region, Chennai, Kolkata, Pune, Hyderabad, Bangalore and Ahmedabad**
 - **Upto INR 1 crore** in the **rest of India**.
- ❖ **Net-worth-positive projects** are also eligible for SWAMIH funding.
- ❖ Finally, **each of these projects must be very close to completion**.

Net-worth positive projects are those projects for which the value of their receivables (debts owed to them by buyers), plus the value of their unsold inventories is greater than their completion costs and outstanding liabilities.

2.8 BHARAT 6G ALLIANCE LAUNCHED BY DOT

- ❖ **B6GA** is a collaborative platform **consisting of public and private companies, academia, research institutions, and Standards development organizations**.
- ❖ It aims to **achieve universal and affordable connectivity, promote indigenous technology, and establish India as a global leader in the telecom sector**.
- ❖ It'll **forge coalitions and synergies with other 6G Global Alliances**, fostering international collaboration and knowledge exchange.

6G is the successor of 5G with ability to use higher frequencies (**Sub-6 GHz and 95 GHz to 3 THz (Terahertz)**) with greater **speed (Up to 1,000 Gbps)** and **lower latency (1 millisecond)**.

- ❖ One of the key goals of B6GA is to facilitate market access for Indian telecom technology products and services, enabling the country to emerge as a global leader in 6G technology.
- ❖ It aims to enable India to become a leading global supplier of intellectual property, products and solutions of affordable 5G and 6G and other future telecom solutions and to deploy 6G technologies to act as a powerful force multiplier for India by 2030.
- ❖ In addition, with a grant of 240.51 crores under the Telecom Technology Development Fund (TTDF), two agreements were signed for projects,
 - ✓ 6G THz Testbed with Orbital Angular Momentum(OAM) & Multiplexing
 - ✓ Advance Optical Communication Test Bed
- ❖ Under DCIS (Digital Communication Innovation Square), funds were allocated to Start-ups and MSMEs.

ABOUT TTDF SCHEME

- ❖ TTDF scheme was launched by Universal Service Obligation Fund (USOF) in 2022.
 - ✓ USOF is a body under Department of Telecommunications.
- ❖ 5% of annual collections from USOF are available for TTDF for funding R&D in rural-specific communication technology applications and form synergies among academia, start-ups, and industry to build and develop telecom ecosystem.

2.9 KAKRAPAR ATOMIC POWER PLANT

- ❖ India's first indigenously developed 700 MW nuclear power reactor at the Kakrapar Atomic Power Project (KAPP) in Gujarat has successfully commenced commercial operations.
- ❖ The reactor, known as KAPP-3, began operating at 90% of its total power capacity on June 30, 2023, as confirmed officials.

2.10 SMALL FINANCE BANKS

- ❖ The Reserve Bank of India (RBI) recently rejected three applications for small finance bank licences as they "were not found suitable for granting of in-principle approval."

ABOUT SMALL FINANCE BANKS

- ❖ Scope- Basic banking activities of acceptance of deposits and lending to unserved and underserved sections.
- ❖ They are registered as a public limited company under the Companies Act, 2013.
- ❖ The minimum paid-up voting equity capital for small finance banks shall be Rs.200 crore, except for such small finance banks which are converted from UCBs.
- ❖ The Promoter shall hold a minimum of 40 per cent of the paid-up voting equity capital of the bank, which shall be locked-in for a period of five years.
- ❖ SFBs need to maintain a Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR).
- ❖ They are required to extend 75% of its Adjusted Net Bank Credit (ANBC) to the sectors eligible for classification as priority sector lending by the Reserve Bank of India.
- ❖ At least 50% of its loan portfolio should constitute loans and advances of up to Rs. 25 lakh.
- ❖ They cannot be a Business Correspondent (BC) for another bank.
 - ✓ However, they can have their own BC network.

Capital Small Finance Bank (formerly Capital Local Area Bank Ltd) was India's first small finance bank that started its banking operations in April 2016 in Jalandhar, Punjab.

2.11 PRICE MONITORING DIVISION

- ❖ Prices of 16 more food items, including eggs, millets may be tracked by PMD due to the recent rise in retail prices of several essential commodities.
- ❖ Currently, PMD tracks the daily prices of 22 commodities (Rice, Wheat, Atta, Gram Dal, Tur (Arhar) Dal, Urad Dal, Moong Dal, Masur Dal, Sugar, Gur, Groundnut Oil, Mustard Oil, Vanaspati, Sunflower Oil, Soya

Oil, Palm Oil, Tea, Milk, Potato, Onion, Tomato and Salt) based on **data collected from 505 market centres spread** across the country representing **North, West, East, South and North-eastern regions of the country.**

- ❖ Benefit- It will **help policy planners and institutions**, including the **Reserve Bank of India (RBI)**, improve the quality of decision-making as it will **reduce the dependence on the Consumer Price Index (CPI) data**, which comes with a lag of one month.

ABOUT PRICE MONITORING DIVISION

- ❖ PMD is under **Ministry of Consumer Affairs, Food, and Public Distribution.**
- ❖ It **monitors the retail and wholesale prices**, and **spot and future prices of selected essential commodities on a daily basis.**
- ❖ In the **event of shortage of any specific essential commodity** and to keep price of the item under control, Price Monitoring Division **also implements commodity-specific market intervention schemes to give temporary relief to the consumers.**

2.12 GEOCODING

- ❖ Amid concerns over **fake registrations and fraudulent availment of input tax credit** under the Goods and Services Tax (GST) regime, GST Network (GSTN) has launched **geocoding for all states and territories.**
- ❖ **Geocoding** converts an **address or description of a location into geographic coordinates.**
- ❖ It has been **introduced to ensure the accuracy of address details in GSTN records and streamline address location and verification process.**
- ❖ **Submission of geocoding will be a one-time activity and once submitted, revision in the address is not allowed.**
- ❖ GSTN has **already geocoded 1.8 crore principal places of businesses.**

ABOUT GSTN

- ❖ GSTN is a **non-profit organization**, which **provides IT infrastructure and services to Central and State Governments, taxpayers and other stakeholders for implementation of GST.**
- ❖ The Board of GSTN in its 49th Board Meeting held in June, 2022 has **approved the conversion of GSTN into Government Company** and hence **100% of the shareholding being held by Government (50% with Union Government and 50% jointly with State Governments & UTs) in GSTN.**

2.13 PBW-RS1

- ❖ The Ludhiana-based institution, **Punjab Agricultural University**, has **developed a new variety of wheat called PBW RS1.**
- ❖ It contains **high amylose starch content.**
- ❖ **Resistant starch (RS) won't cause an immediate and rapid rise in glucose levels.**
- ❖ The high amylose and resistant starch, instead, **ensure that glucose is released more slowly into the bloodstream.**
- ❖ It is known to **reduce risks of type-2 diabetes and cardiovascular diseases.**
- ❖ Food prepared from its whole grain flour also have **lower glycemic index.**

ABOUT GLYCEMIC INDEX

- ❖ It is a **rating system for foods containing carbohydrates.**
- ❖ It **shows how quickly each food affects your blood sugar (glucose) level** when that food is eaten on its own.
- ❖ Foods are **classified as low, medium, or high glycemic foods** and ranked on a scale of 0–100.
- ❖ The **lower the GI of a specific food, the less it may affect the blood sugar levels.**

2.14 LAMBANI EMBROIDERY PATCHES

- ❖ The Lambani Embroidery Exhibition held in Hampi created history on the first day of the G-20 Culture working group, achieving a **remarkable Guinness World Record for the largest display of Lambani items.**

- ❖ It has been named after the Lambani tribe.
- ❖ Features- It is an amalgam of pattern darning, mirror work, cross stitch, and overlaid and quilting stitches with borders of “Kangura” patchwork.
- ❖ It is done on loosely woven dark blue or red handloom base fabric.
- ❖ It received the status of Geographic Indication (GI) tag in 2010 from Karnataka.

ABOUT LAMBANI TRIBE

- ❖ They are also called Lambadis or Banjaras.
- ❖ They were once nomadic tribes who arrived from Afghanistan to India, mainly Rajasthan (in the Mewar region) and then spread themselves across the states of Karnataka, Andhra Pradesh, Madhya Pradesh, Gujarat and Maharashtra.
- ❖ They are believed to have assisted the Mughal Emperor Aurangzeb to carry goods to the southern part of the country in the 17th century, and that is when some of them settled there.

2.15 SENIOR CITIZENS SAVING SCHEME

- ❖ The collections under the revamped Senior Citizen Savings Scheme (SCSS) jumped 176% on year to Rs 55,000 crore in the first quarter of the current financial year.
- ❖ The SCSS has added 6,52,000 new accounts in the first three months of FY24.

ABOUT SENIOR CITIZEN SAVINGS SCHEME (SCSS)

- ❖ SCSS was launched with the main aim of providing senior citizens in India a regular income after they attain the age of 60 years old.
- ❖ **Eligibility**
 - ✓ Indian citizens above the age of 60 years.
 - ✓ Retirees in the age bracket of 55-60 years who have opted for Voluntary Retirement Scheme (VRS) or Superannuation.
 - ✓ Retired defence personnel above 50 years and below 60 years of age.
- ❖ **Tenure**- It has a maturity period of 5 years.
 - ✓ But, a depositor can extend one's maturity period for another 3 years.
- ❖ **Premature withdrawal** is allowed after 1 year of opening the account.
- ❖ Individuals are allowed to operate more than one account by themselves or open a joint account with their spouse.
- ❖ **Deposit Limits**
 - ✓ **Minimum** Deposit– Rs. 1,000 (and in multiples thereof)
 - ✓ **Maximum** Deposit– Rs. 30 Lakh (doubled in Budget for FY24 from 15 lakh)
- ❖ Under SCSS, the interest amount is paid to the account holders quarterly.
- ❖ Deposits in SCSS qualify for deduction under the section 80-C of Income Tax Act.

2.16 BHARAT CAMPAIGN

- ❖ Ministry of Agriculture & Farmers Welfare launched BHARAT Campaign for banks under Agriculture Infrastructure Fund (AIF).
- ❖ It is a month-long Campaign with a target of Rs 7200 crore.
- ❖ It aims to get active involvement and support of members of commercial Banks in the public and private sector, Regional Rural Banks, Small Finance Banks, NBFCs and select cooperative Banks in promoting the Scheme of Agriculture Infrastructure Fund.

ABOUT AGRICULTURE INFRASTRUCTURE FUND

- ❖ It is a Central Sector Scheme which was launched in 2020.
- ❖ AIF is a financing facility for creation of post-harvest management infrastructure and community farm assets.
- ❖ The duration of the scheme is from FY2020 to FY2029 (10 years).

- ❖ AIF provides support of 3% interest subvention, credit guarantee support through Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for loan of up to Rs. 2 crore and facility of convergence with other Central and State Government schemes.
- ❖ Eligible beneficiaries include farmers, FPOs, PACS, Marketing Cooperative Societies, SHGs etc.

2.17 WINDFALL TAX

- ❖ Indian govt. has reimposed windfall tax on petroleum crude after two months.
- ❖ It is a higher tax levied by the government on specific industries when they experience unexpected and above-average profits.
- ❖ A Windfall Tax is imposed on an industry's profits when it experiences a sharp increase in revenue due to unrelated external events.
- ❖ These revenues are not linked to anything the company actively pursued, such as its business strategy or expansion.

2.18 INVEST INDIA

- ❖ Ms. Nivruti Rai has joined as the new Managing Director & CEO of Invest India.

ABOUT INVEST INDIA

- ❖ It is the National Investment Promotion and Facilitation Agency that helps investors looking for investment opportunities and options in India.
- ❖ It was formed under Section 25 of the Companies Act 1956.
- ❖ It was set up in 2009 as a non-profit venture under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry.
- ❖ It is set up as a joint venture company between Industry Associations (17% each of FICCI, CII & NASSCOM) and remaining 49% of Central and 19 State Governments.
- ❖ Invest India focuses on sector-specific investor targeting and development of new partnerships to enable sustainable investments in India.
- ❖ It also actively works with several Indian states to build capacity as well as bring in global best practices in investment targeting, promotion and facilitation areas.
- ❖ It also plays a role in executing the government's flagship initiatives including Make in India, Startup India, and National Single Window System.

2.19 LOGISTICS DATA BANK PROJECT

- ❖ The Department for Promotion of Industry and Internal Trade (DPIIT) held a Logistics Data Bank Project (LDB) Meeting today to review the measures taken by Port Authorities to improve port performance.

ABOUT THE PROJECT

- ❖ LDB project aims to make India's logistics sector more efficient through use of Information Technology.
- ❖ It was launched in 2016 at JNPT, Mumbai.
- ❖ It is a joint effort of India and Japan conceived during planning of Delhi Mumbai Industrial Corridor Project.
- ❖ Nodal Ministry: Ministry of Commerce and Industry.
- ❖ It is being implemented through a Special Purpose Vehicle called Delhi Mumbai Industrial Corridor Development Corporation Logistics Data Services Ltd.
 - ✓ (DLDSL) - that is jointly (50:50) owned by the Delhi Mumbai Industrial Corridor (DMIC) Trust and Japanese IT services major NEC Corporation.
- ❖ LDB handles 100% of India's EXIM container volume.

2.20 NATIONAL STATISTICAL ORGANISATION (NSO)

- ❖ The Government of India recently appointed a panel under the **chairmanship of Pronab Sen, former Chief Statistician of India** to review the **methodology of the National Statistical Organisation (NSO)**.

ABOUT NATIONAL STATISTICAL ORGANISATION (NSO)

- ❖ **NSO acts as the nodal agency under the Ministry of Statistics and Programme Implementation for planned development of the statistical system in the country, lays down and maintains norms and standards in the field of statistics, involving concepts and definitions, methodology of data collection, processing of data and dissemination of results.**
- ❖ The National Statistical Office(NSO) **consists of the**
 - ✓ **Central Statistical Office (CSO),**
 - ✓ **Computer center and**
 - ✓ **National Sample Survey Office (NSSO).**
- ❖ On **23rd May 2019**, the **Indian government passed the order to merge the National Sample Survey Office (NSSO) with the Central Statistics Office (CSO) to form the National Statistical Office (NSO).**
- ❖ **Functions-**
 - ✓ Acts as the **nodal agency for planned development of the statistical system** in the country.
 - ✓ Prepares **national accounts** as well as **publishes annual estimates of national product.**
 - ✓ It **compiles and releases the Index of Industrial Production (IIP) every month** in the form of **'quick estimates'**;
 - ✓ conducts the **Annual Survey of Industries (ASI);**
 - ✓ Conducts **periodic all-India Economic Censuses.**
 - ✓ Maintains **liaison with international statistical organizations**, such as, the **United Nations Statistical Division, the Economic and Social Commission for Asia and the Pacific (ESCAP)** etc.

ABOUT INDEX OF INDUSTRIAL PRODUCTION (IIP)

- ❖ It is a **composite indicator** that measures the **growth rate of industry groups classified under:**
 - ✓ **Broad sectors**, namely, Mining, Manufacturing, and Electricity.
 - ✓ **Use-based sectors** like capital goods, basic goods, intermediate goods, infrastructure goods, consumer durables, and consumer non-durables.
- ❖ **Base Year** for IIP is **2011-2012.**
- ❖ The **eight core industries** of India **represent about 40% of the weight of items that are included in the IIP.**
- ❖ In **decreasing order of their weightage**, these include: **Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.**

2.21 INCOME TAX DAY- JULY 24TH

- ❖ The IT day is **celebrated every year on 24th July** to **spread awareness around the importance of taxes** and encourage more and more people to pay taxes for the development of the nation.
- ❖ In **1860, on July 24th**, **Sir James Wilson introduced the concept of income tax for the first time ever in India.** This initiative was taken to **compensate the loss during the first war of Independence (1857)** in the British rule.
- ❖ In **2010, Aaykar Diwas** was celebrated for the first time on **July 2010** to **acknowledge 150 years of income tax** in India.

2.23 FULL RESERVE BANKING

- ❖ **Full-reserve banking**, also known as **100% reserve banking**, refers to a **system of banking where banks are not allowed to lend out money that they receive from customers in the form of demand deposits.**
 - ✓ **Demand deposits** are deposits that **customers can withdraw from the bank at any point in time without any prior notice.**
- ❖ So, under full-reserve banking, **banks are mandated to hold all money that they receive as demand deposits from customers in their vaults at all times.**

- ❖ In this case, **banks simply act as custodians to depositors' money and may charge a fee from depositors for the service of safekeeping** that they offer to the depositors.
- ❖ This is **in contrast to today's banking system in which banks pay interest to customers on their demand deposits.**
- ❖ Thus, under **full-reserve banking, banks are expected to hold reserves backing 100% of their liabilities in the form of demand deposits.**
- ❖ This is **to ensure that banks can successfully meet redemption demands from depositors, and thus avoid a run on the bank** even if all depositors someday decide to come asking for their money at the same time.
- ❖ Under a full-reserve banking system, **banks can only lend money that they receive as time deposits from their customers.**
 - ✓ **Time deposits are deposits that customers can withdraw from the bank only after a certain period of time that is agreed upon between the bank and its customers.**
- ❖ This arrangement **gives banks the time to lend these deposits to borrowers at a certain interest rate, collect repayments from the borrowers, and finally repay depositors their money along with a certain amount of interest.**

FRACTIONAL RESERVE BANKING

- ❖ In the banking system that exists today, also known as the **fractional-reserve banking system, banks predominantly do not lend money in the form of physical cash.**
- ❖ Banks **lend more money than the cash they have in their vaults.**
- ❖ This is **made possible because most lending to various borrowers happens in the form of electronic money.**

BENEFITS

- ❖ It is the **only natural form of banking** and that it can prevent the various crises that affect today's fractional-reserve banking system.
- ❖ Since banks will be allowed to make loans to borrowers only out of their time deposits and since they will be **legally forced to keep demand deposits in their vaults to meet depositor demands for cash**, the chances of a bank run would be negligible under a full-reserve banking system.
- ❖ Since **banks will not be able to create money out of thin air in a full-reserve banking system**, their influence on the economy's money supply will become severely restricted.
- ❖ This will **prevent artificial economic booms and busts** that are said to be the consequence of changes in money supply.

HOWEVER

- ❖ Full-reserve banking **unnecessarily restricts bank lending.**
- ❖ Supporters of **fractional-reserve banking** believe that such **banking frees the economy from having to rely on real savings from depositors** to finance the huge investments required to fuel growth.

2.23 WHITE LABEL ATM

- ❖ As per Ministry of Finance, **White Label ATMs (WLAs) are expected to drive ATM spread** across India with a **greater focus on tier III to VI centres.**
- ❖ To expand ATM access in the country, the **Reserve Bank of India (RBI) has granted permission to non-bank entities to establish, own, and operate White Label ATMs (WLAs) nationwide.**
- ❖ This move is **aimed at enhancing banking services' reach, especially in smaller towns and rural areas, and promoting financial inclusion.**
- ❖ WLAs offer banking services to customers through **cards issued by various banks, such as debit, credit, or prepaid cards.**

Brown Label: These are managed service providers which deploy and operate ATMs for banks.

Green Label: ATM is provided for Agricultural Transaction.

Yellow Label: ATM is responsible for handling E-Commerce transactions.

- ❖ Apart from cash withdrawals, these ATMs provide an array of services, including account information, cash deposits, bill payments, mini/short statement generation, PIN changes, and requests for cheque books.
- ❖ At present, India has four authorized non-bank entities operating White Label ATMs.

2.24 NATIONAL COAL INDEX

- ❖ The NCI has declined 238.3 points in May 2022 to 157.7 in May 2023.
- ❖ The **decline indicates a strong supply of coal in the market**, with **sufficient availability** to meet the growing demands.
- ❖ Similarly, **NCI for non-coking coal declined 34.3% on year to 147.5 points in May**.
 - ✓ Non-coking coal is **mainly used in thermal plants for power generation due to its inherent lack of caking properties**.

ABOUT NATIONAL COAL INDEX (NCI)

- ❖ It is **released by the Ministry of Coal every month**.
- ❖ The National Coal Index **combines coal prices from all sales channels, including notified prices, auction prices and import prices**.
- ❖ Established with the **base year as fiscal year 2017-18**, it serves as a reliable indicator of market dynamics, **providing valuable insights into coal price fluctuations**.

2.25 DIGITAL PAYMENT INDEX

- ❖ The **Reserve Bank of India's Digital Payments Index (RBI-DPI)**, which measures the growth of online payments in India, **showed a 13.24% growth in the year ending March 2023**.
- ❖ The **RBI introduced the composite Digital Payments Index (RBI-DPI) in January 2021 with March 2018 as the base**, to capture digitisation of payments.
- ❖ The index has **since been steadily rising, crossing the 300-point mark in September 2021**.
- ❖ It is **published on a half-yearly basis**.
- ❖ The RBI-DPI comprises **five parameters to measure the deepening and penetration of digital payments over different time periods**. These include-
 - ✓ **Payment enablers – 25% weightage**,
 - ✓ **Payment infrastructure – demand-side factors - 10%**,
 - ✓ **Payment infrastructure – supply-side factors- 15%**,
 - ✓ **Payment performance - 45%**,
 - ✓ **Consumer centricity – 5%**
- ❖ As per the **Economic Survey 2022-23**, India has the **highest fintech adoption rate of 87%** among the public compared to the **global average of 64 per cent**.
- ❖ Further, **India has gained the third place in digital payments, coming only after US and China**.

2.26 UREA GOLD

- ❖ PM recently launched the **"Urea Gold"**.
- ❖ It is a new variety of **urea that is coated with Sulphur**.
- ❖ It is **expected to address sulphur deficiencies in the soil**.
- ❖ This "innovative fertiliser" is **more economical and efficient than neem-coated urea, "ensuring improved nitrogen use efficiency, reduced consumption, and enhanced crop quality"**.
- ❖ Urea coated with sulphur **helps in slow release of nitrogen**, therefore **increasing its availability and uptake**.
- ❖ Urea Gold has added **humic acid to enhance longevity of the fertiliser**.
- ❖ It will **substitute urea consumption and also reduce fertiliser use**.
- ❖ It is said that **15 kg of Urea Gold is comparable to 20 kg of conventional urea**.

2.27 OFFER FOR SALE

- ❖ The **offer-for-sale (OFS)** of Rail Vikas Nigam was **subscribed 1.7 times**.
- ❖ The OFS saw **bids for 18.91 crore shares as against a total of 11.18 crore shares on offer**.
- ❖ An Offer for Sale is a simpler method wherein promoters in public companies can sell their shares and reduce their holdings in a transparent manner through the bidding platform for the Exchange.
- ❖ The OFS method was brought in by the **Securities and Exchange Board of India (SEBI)** in **2012** as a simpler one to aid promoters of listed forms to **dilute their stake** and **comply with the minimum public shareholding norms** by June 2013.
- ❖ Anyone can **bid for these shares**, be it **foreign institutional investors, retail investors or companies**.
- ❖ Any shareholder **holding 10% stake in the company** can **participate in an offer for sale**.

3. GEOGRAPHY

3.1 INDIAN OCEAN GEOID LOW

- ❖ Researchers from **IISc, Bengaluru** have identified the **cause of an over 3 million sq. km -wide 'gravity hole'** - known as the **Indian Ocean Geoid Low (IOGL)**- in the Indian Ocean.
- ❖ **At IOGL**, located just south of Sri Lanka, **Earth's gravitational pull is at its weakest**.
 - ✓ As a result, **sea level is 106 metres lower than the global average**.
- ❖ According to scientists, the **IOGL likely took its present shape about 20 million years ago** and will likely last millions more.
- ❖ Earth is not a true sphere — it's flatter on both poles and bulges along the equator.
 - ✓ As a result of **this and other factors such as mass of its crust, gravitational pull varies making earth's shape irregular**.
- ❖ These **anomalies (due to irregularity in gravitational field)** on Earth's undulating map are known as **geoids**.
- ❖ IOGL is **called lowest geoid anomaly on Earth**.
- ❖ Researchers found that **IOGL was caused by plumes of molten rock rising along the edges of Tethys Ocean bed**.
 - ✓ Tethys was a **prehistoric ocean that separated the mega-continents of Gondwana and Laurasia**.
- ❖ Hot material from **African superplume** — a large section of Earth's mantle that carries heat from near the **core up to the crust** — was being **deflected eastwards**.
- ❖ This **material then ended under IOGL**.
- ❖ The researchers found that **'low density anomalies' or the presence of lighter materials in the upper to mid-mantle** (layer of Earth between the core and the crust) below the IOGL, **were responsible for the low gravity in this region**.

3.2 SHELF CLOUDS

- ❖ A shelf cloud was seen recently in Haridwar.

ABOUT SHELF CLOUD

- ❖ A **"shelf cloud" or "Arcus cloud"** generally forms along the **leading edge of thunderstorms**.
- ❖ A shelf cloud is a **type of low-lying, horizontal cloud formation** characterized by a **clearly defined line of solid clouds**.
- ❖ It is **known for its distinctive wedge-shaped formation**.
- ❖ They **usually appear as a broad arc across the sky** that can sometimes appear to be rotating horizontally.
- ❖ It **extends horizontally beneath the main cloud base** and **typically appears on the leading edge of a storm**.
- ❖ The **formation of shelf clouds** occurs when a **mass of cold and dense air is forcefully driven by the wind into a warmer air mass**.
- ❖ This phenomenon **takes place during the downdraft of a thunderstorm**, where the **cold air rapidly descends and disperses, creating a strong gust front**.

3.3 KAAS PLATEAU

- ❖ A new **study of the sediments from a seasonal lake** in the **Kaas Plateau** has indicated a major shift in the **Indian Summer Monsoons** towards dry and stressed conditions with low rainfall during the **Early-Mid-Holocene**, around **8664 years BP**.

ABOUT KAAS PLATEAU

- ❖ **Kaas plateau or pathar**, also known as **valley of flower**, is located in **Satara District, Maharashtra**.
- ❖ It falls in **biosphere of Western Ghats**.
- ❖ It falls under the **Sahyadri Sub-Cluster of the Western Ghats**.
- ❖ Its name is derived from **Kaasa tree**, botanically known as **Elaeocarpus glandulosus (rudraksha family)**.
- ❖ It is made of **igneous rocks**.
- ❖ It is inscribed in **UNESCO World Natural Heritage Site lists** under the name of **Western Ghats**.
- ❖ **Soil** in Kaas Plateau is a **thin layer on top of Deccan rock**, with **varying quality of nutrients**.
- ❖ **Kaas Pathar** is home to **1500 plant species, 450 wildflower species** out of which **33 are endangered**.

3.4 PHOSPHATE DEPOSITS FOUND IN NORWAY

- ❖ Extensive deposits of phosphate rocks, **enough to meet the electric power demand for the next 50 years**, have been **discovered in Norway**, according to **Norge Mining**, a government organisation.
- ❖ **Phosphorus plays a key role in the production of lithium-iron phosphate batteries** which are utilised in **electric cars**.
- ❖ In addition to **vanadium and titanium**, the Norwegian phosphates are said to contain valuable materials.

3.5 ANTI-CYCLONE CERBERUS

- ❖ **European heatwaves** are being caused by an **anticyclone named Cerberus**.
- ❖ **Cerberus was a three-headed dog in ancient Greek mythology** who guarded the gates to the underworld.
- ❖ While heatwaves are **not officially named like cyclones and hurricanes**, recently monikers have emerged to describe the abnormally high temperatures.

ABOUT ANTICYCLONES

- ❖ These are areas of **sinking air (diverges at the surface)** which **result in high pressure**.
- ❖ In an anticyclone, **winds move out from a high-pressure area** with **wind direction clockwise in northern hemisphere, anti-clockwise in the southern hemisphere**.
- ❖ **High pressure systems** have **small pressure differences**.
- ❖ As the **air sinks, it warms up, leading to warm and dry weather**.
- ❖ The track is **highly variable and unpredictable**. They move **very sluggishly** and sometimes they become **stationary over a particular place**.

3.6 GHAGGAR RIVER

- ❖ Ghaggar river has affected **six districts of Haryana** (Panchkula, Ambala, Kaithal, Fatehabad and Sirsa), **four of Punjab** (Mohali, Patiala, Sangrur and Mansa) and **two (Hanumangarh and Sriganganagar) of Rajasthan** with floods, this monsoon season.
- ❖ The **Ghaggar and many of its tributaries originate in the Shivalik foothills** of Haryana, Punjab and Chandigarh.
- ❖ Among these tributaries, **the Kaushalya, Tangri, Markanda, Beghna and Sukhna rivers are the ones that merge into the Ghaggar**.
- ❖ The **encroachment of the catchment area** has converted these **perennial rivers into seasonal rivers**.
- ❖ These are considered **dead rivers** but in this monsoon season they reclaimed their floodplains and caused **heavy losses**.
- ❖ The **Ghaggar-Hakra River** is an **intermittent river in India and Pakistan** that **flows only during the monsoon season**.

- ❖ The river is known as Ghaggar in India, before the Otu barrage, and as the Hakra in Pakistan, downstream of the barrage.
- ❖ It eventually dries up in the Great Indian (Thar) Desert.

3.7 HEAT INDEX

- ❖ IMD has recently **launched Heat Index on an experimental basis** to provide general guidance for the regions within in India, where **apparent temperatures are on higher side causing discomfort to the people**.
- ❖ At present, **heat index is derived using the heat index equation similar to** what is used by National Weather Service, **National Oceanic and Atmospheric Administration (NOAA), USA**.
- ❖ Heat index provides information about the **impact of humidity on the high temperatures** and thus provides a **feel like temperature for human beings** which can be used as an indication for human discomfort.
- ❖ **Color codes for Heat Index:**
 - ✓ **Green:** - Experimental heat Index less than 35 deg C
 - ✓ **Yellow:** - Experimental heat Index in the range 36-45 deg C
 - ✓ **Orange:** - Experimental heat Index in the range 46-55 deg C
 - ✓ **Red:** - Experimental heat Index greater than 55 deg C

3.8 RANJIT SAGAR DAM

- ❖ The Ranjit Sagar Dam (RSD) project has **achieved a new record of 153.97 lakh units** in **single-day power generation from its four units**.
- ❖ The **Punjab State Power Corporation Limited (PSPCL)** has been operating all the four units.

ABOUT RANJIT SAGAR DAM (RSD)

- ❖ **Ranjit Sagar Dam or Thein Dam** is part of a **hydroelectric project constructed by the Punjab Irrigation Department** on the **Ravi River** on the **border of Jammu and Kashmir and Punjab**.
- ❖ A **large portion (up to 60%) of the reservoir falls within Jammu and Kashmir**.
- ❖ The dam was **constructed to harness the waters of the Ravi River** and was **completed in 2000**.
- ❖ It is a **concrete gravity dam with a height of about 162 meters** and a **length of approximately 518 meters**.
- ❖ The reservoir (**Ranjit Sagar Lake or Thein Lake**) created by the dam **has a storage capacity of around 0.97 billion cubic meters**.
- ❖ The project is the **largest hydroelectric dam in Punjab** with a **capacity of 600 megawatts**.

3.9 BATAGAIKA CRATER

- ❖ The **Batagaika crater, the world's largest one kilometre-long permafrost crater, is expanding at a baffling rate due to the thawing of the permafrost**.
 - ✓ This has been **exacerbated by global warming**.
- ❖ The crater is located in the **Sakha Republic in Russia** and reaches **depths of up to 100 metres**.
- ❖ In the 1960s, after **deforestation led to the melting of the underground permafrost**, it caused the land to sink.
- ❖ Over the years, the **crater has only expanded** and is locally called **'the cave-in' or 'mega-slump'** by scientists.
- ❖ This is **releasing greenhouse gasses like methane stored in the thawed soil** which is **25 times more potent than carbon dioxide**.
- ❖ The thawing permafrost causes **very tangible, immediate infrastructural damage** as well such as **buckling roadways, splitting houses, and disrupting pipelines**.
- ❖ When a **wildfire breaks out, the thawing fastens**.
- ❖ **Russia is warming about 2.5 times faster than the rest of the world**. As a consequence, the long-frozen tundra that covers 65 per cent of the country's landmass is melting.

ABOUT PERMAFROST

- ❖ Permafrost is any ground that remains completely frozen — 32°F (0°C) or colder — for at least two years straight.
- ❖ It is most common in regions with high mountains and in Earth's higher latitudes — near the North and South Poles.

3.10 PARKACHIK GLACIER

- ❖ The Parkachik Glacier in Ladakh is likely to have three lakes of different dimensions due to subglacial over-deepening -- a characteristic of basins and valleys eroded by glaciers, shows a new study.
- ❖ Main reasons for rapid melting of glacier are global warming and increasing temperatures, and a lower altitude than other glaciers in Zaskar region.
- ❖ Parkachik Glacier is located in Suru sub-basin of Upper Indus River, Zaskar Himalaya.
 - ✓ Suru River valley is a part of southern Zaskar Ranges in western Himalayas.

4. ART AND CULTURE

4.1 ASHADHA PURNIMA

- ❖ On the occasion of Guru Purnima 2023, the International Buddhist Confederation (IBC), celebrated the day as the Chakra Pravartana Divas.
- ❖ The celebration is an annual flagship event of the IBC, which comes under the aegis of the Ministry of Culture.

ABOUT ASHADHA PURNIMA

- ❖ The day is also celebrated as Guru Purnima and it falls every year on the full moon day of the month of Ashadha as per the Indian lunar calendar.
- ❖ The day is also celebrated as Esala Poya in Sri Lanka and Asanha Bucha in Thailand.
- ❖ The day is remembered for the first teaching of Gautam Budha after attaining Enlightenment to the first five ascetic disciples (panchavargiya) on at 'Deer Park', Risipatana Mrigadaya in the present day Sarnath, near Varanasi.
- ❖ This day is also aptly observed as Guru Purnima by both Buddhists and Hindus as a day to mark reverence to their gurus.
- ❖ This day also marks the beginning of the rainy season retreat for the Monks and Nuns also starts with this day.
 - ✓ The season lasts for three months from July to October. During the season they remain in a single place, generally in their temples dedicated to intensive meditation.

4.2 IZO PEOPLE

- ❖ The Zoram People's Movement (ZPM), in Mizoram, has called for a reunification of the Zo people in view of the continuing ethnic violence between the dominant Meiteis and the Kuki-Zomi tribes in Manipur.
- ❖ Zo peoples include all tribes of the Chin-Kuki-Mizo ethnic group spread across Myanmar, India, and Bangladesh.
- ❖ They are from same origin which is known as Sinlung.
- ❖ The group include many sub-tribes and clans such as the Chin, Kuki, Mizo, Lushei, Zomi, Paitei, Hmar, Ralte, Pawi, Lai, Mara, Gangte, Thadou, etc.
- ❖ The tribes are believed to have migrated from China through Tibet to settle in Myanmar.
- ❖ They speak a group of Tibeto-Burman languages.
- ❖ The Chin Hills, or Indo-Chin hill ranges, is a thickly forested region with an elevation of 2,100-3,000 metres in northwestern Myanmar.
 - ✓ The Hills are home to a large number of tribes that come under the Zo umbrella.
- ❖ In northeastern India, they are present in Tripura, Nagaland, Mizoram, Manipur, Meghalaya and Assam.

4.3 GUTTI KOYA TRIBE

- ❖ Tribesmen of Gutti Koya tribe erect **stone memorials in the event of death of their three most important service providers—physician, priest and village leader**
 - ✓ The Gutti Koya tribe **appoints only men to these positions.**
- ❖ Notably, **only bodies of these three are buried by the tribe**, which normally cremates its dead.
- ❖ The **Koya population is concentrated in Telangana, Andhra Pradesh, Chhattisgarh and Odisha.**
- ❖ They speak the **Koya**, which is a **Dravidian language.**
- ❖ They **earn a living through animal husbandry and minor forest produce.**

4.4 PORPANAİKOTTAI

- ❖ A gold stud, a bone point and a carnelian bead **belonging to Sangam Age have been excavated at Porpanaikottai site in Pudukottai district of Tamil Nadu.**
- ❖ The discovery of a **carnelian bead** (generally found in Northern part of India) indicated **a trade with in country.**
- ❖ Discovery of **bone point tools indicated a Porpanaikottai was a site of weaving industry.**

4.5 KUI LANGUAGE

- ❖ The **Odisha cabinet recently approved the proposal for the inclusion of Kui language in the 8th schedule of the constitution.**
- ❖ **The inclusion of Kui in the eighth schedule will help in the preservation, promotion and propagation of the language and culture.**

ABOUT KUI

- ❖ Kui is a **South-Eastern Dravidian language** that is also known by the **names Kandh, Khondi, Khond, and Khondo.**
- ❖ It is **spoken by the Kandhas.**
- ❖ It is **mostly spoken in Odisha**, and **written in the Odia script.**
- ❖ The Kui language was **also referred to as the Kuinga language during the historical period.**
- ❖ It is **closely related to the Gondi and Kuvi languages.**
- ❖ The **1991 Indian Census places it at number 29 with 941,988 native speakers.**

4.6 KER PUJA

- ❖ PM Modi wished for joy, harmony, health and prosperity for the citizens of Tripura on the eve of Ker Puja.
- ❖ It is a **festival celebrated in Tripura that takes place two weeks after Kharchi Puja and honours Ker, a guardian god.**
- ❖ In the **Kokborok**, a local tribal language, **Ker means boundary or specific area.**
- ❖ During the festival, **entrances to Agartala are closed to create a protected area and people are not allowed to light fires, dance, sing or even wear shoes.**
- ❖ During Ker Puja offerings, **sacrifices are made to please gods for the welfare of the villages so that they can save them from calamities, epidemics and external aggression.**
- ❖ It is **also held in few other northeastern states**, as well as in the **Chittagong Hill Tracts in Bangladesh.**

4.7 SUSHRUTA JAYANTI

- ❖ The All-India Institute of Ayurveda (AIIA) organized a three days seminar called **“Shalyacon”** on the auspicious occasion of **Sushruta Jayanti-2023.**
- ❖ Sushruta Jayanti is **celebrated every year on 15th July** to honour the legendary Sushruta, hailed as the father of surgery.

- ❖ He **created and developed surgical procedures**, documented in the **Sushruta Samhita**, an ancient text on plastic surgery.
 - ✓ Medical knowledge is found in the **Charak Samhita** and **Ashtanga Samhita**.
 - ✓ **Sushruta, Charaka, and Vagbhata** together are considered to be **“The Trinity” of Ayurvedic knowledge**.
- ❖ Sushruta Samhita is **divided into two parts**-
 - ✓ **Purva Tantra** gives the **signs and symptoms of important surgical diseases, obstetrics, geriatrics, anatomy** etc.
 - ✓ **Uttara tantra** gives **account of various diseases of ear, eye, head and nose and solutions to complications** that may arise out of surgery.
- ❖ He also trained students, known as the **Saushrutas**, in **surgical techniques and emphasized anatomical studies and the use of surgical instruments**.
- ❖ He described **upakarmas (treatments for wounds), surgical instruments, and procedures**.

4.8 NAMDA ART

- ❖ The **Namda craft of Kashmir** is **being successfully revived under a Skill India’s Pilot Project** as part of the **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**, with **nearly 2,200 candidates from across six districts of the state, receiving training in the dying art form**.

ABOUT NAMDA ART

- ❖ **Namda craft** is a rug made of **sheep wool through felting technique** instead of normal weaving process.
- ❖ Namda Art is **said to have begun when Mughal Emperor Akbar** wanted to get a covering for his horses to protect them from the cold.
- ❖ It **originated in the 16th century** and was **introduced by a Sufi saint named Shah-e-Hamdan**.
- ❖ Namda works **are used in the form of carpets, rugs, floor mats** etc. and are **used as floor coverings and home decor**.

4.9 NAWAB WAJID ALI SHAH

- ❖ An exhibition, a walk and a talk was held in Kolkata to mark the bicentenary year of Nawab Wajid Ali Shah.
- ❖ The events will all take place in **Metiabruz, where the exiled Wajid Ali Shah spent the last part of his life**.
- ❖ He was the **eleventh and final King of Awadh**, reigning from 13 February 1847 to 11 February 1856.
- ❖ He is remembered as a **poet, playwright, dancer, and patron of the arts** who made significant contributions during his rule.

4.10 TANKAI METHOD

- ❖ A new agreement has been signed by **Indian Navy with Ministry of culture to revive/rejuvenate 2,000-Year-Old Shipbuilding Technique and construction of the stitched ship**.
- ❖ The stitched ship is **made by stitching wooden planks**.
- ❖ These ships **are more durable as nails are not used**.
- ❖ It makes them **less susceptible to damage from shoals and sandbars**.
- ❖ **The Indian Navy will oversee the implementation and execution of the entire project adhering to the highest standards of safety and precision**.
- ❖ **Arrival of European ships** led to a **shift in shipbuilding techniques**.
- ❖ However this art is **still practiced in a few coastal regions of India, mainly for small local fishing boats**.
- ❖ **Importance** - The **revival of the stitched shipbuilding method** is vital for **preserving India’s rich maritime heritage and cultural history**. Furthermore, it aims to **promote cultural memories and strengthen ties** with Indian Ocean littoral countries.

4.11 ANUBHAV MANTAPA

- ❖ The Prime Minister inaugurated the **International Exhibition-cum-Convention Centre (IECC) complex** at Pragati Maidan in New Delhi recently.
 - ✓ It has been named, **'Bharat Mandapam'**.
- ❖ **'Anubhav Mandapam'** of **Bhagwan Basaveshwara** is the **inspiration behind the name 'Bharat Mandapam'**.

ABOUT ANUBHAVA MANTAPA

- ❖ 'Anubhava Mantapa' literally means "experience center" and was an **academy of mystics, saints and philosophers of the 'Veerashaiva' faith** in the 12th century.
- ❖ Anubhava Mantapa was **one of the earliest Parliaments in history of mankind**, where **Sharanas (poets and socio-spiritual reformers) deliberated for reforms in various spheres**.
- ❖ **Prabhudeva**, a great Yogi of extraordinary achievement, **was the president** and **Lord Basava acted as the prime minister**.
- ❖ The **only difference between the present day parliament and AnubhavaMantapa** is that the **members were not elected by the people**, but were **nominated by the higher authorities of the Mantapa**; the necessary qualification expected being spiritual attainment.

4.12 BENGALURU JOINS WCCF

- ❖ Bengaluru, the capital of Karnataka, became the first Indian city to be part of the World Cities Culture Forum (WCCF), which is a **global network of cities that share research and intelligence**.
- ❖ Bengaluru became the **41st city** to join the forum and **the network currently includes 40 cities across six continents**.

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5. SCIENCE AND TECHNOLOGY

5.1 HEAVY WATER

- ❖ **Merck Life Science** will soon supply of Heavy Water for production of Deuterium Labelled Compounds to Atomic Energy Commission.
- ❖ It has **entered into a five-year partnership with the Department of Atomic Energy** for the constant supply of heavy water.

ABOUT HEAVY WATER

- ❖ Heavy water contains significantly **more than the natural proportions (one in 6,500) of heavy hydrogen (deuterium, D) atoms** to ordinary hydrogen atoms.
- ❖ Heavy water is also called **deuterium oxide** and is denoted by the chemical formula D_2O .
- ❖ The **density of D_2O is approximately 11% greater than that of H_2O** , an ice cube made of deuterium oxide will sink in normal water.
- ❖ It is **used as a moderator in Pressurised Heavy water reactors** because it **slows down neutrons effectively** and also has a low probability of absorption of neutrons.
- ❖ It is also used for **non-Nuclear Application (Metabolism studies, Active Pharmaceutical Ingredients, Semiconductors etc.**

NOTE-

- ❖ Tritium or **hydrogen-3** (symbol T or $3H$) is a **rare and radioactive isotope of hydrogen** with a **half-life of about 12 years**.

5.2 DATA SCRAPING

- ❖ Twitter announced **temporary reading limits to combat data scraping**.
- ❖ **Data scraping or web scraping** is the **automated process of extracting large amounts of data from websites or online sources**.
- ❖ It **involves using software tools or programming techniques** to gather information from web pages.
- ❖ Positively, it can be **used for academic research, data journalism, or to create innovative applications and services**.
- ❖ But it may also lead to **copyright infringement, privacy violations, manipulation and misuse of data etc.**

5.3 ENTEROVIRUSES

- ❖ Recently, World Health Organization (WHO) has warned against the rising incidence of enterovirus infections in a few countries across Europe.
- ❖ **Enterovirus** is an **umbrella term** used for a group of viruses, including, **echovirus, coxsackievirus, enterovirus, and poliovirus**.
- ❖ Though the virus develops mild infection, it can be **lethal among high risk groups like children and immunocompromised patients**.
- ❖ They can infect anyone, but **are more likely to cause illnesses in people with weak immune systems, as well as infants, children, and teens who don't have immunity against a virus yet because it's their first exposure to it**.
- ❖ **Symptoms-** The enterovirus infection manifests a range of symptoms among the patients for e.g. **Hand, foot, and mouth disease, inflammatory muscle disease, skin rash, viral meningitis, encephalitis etc.**
- ❖ There are **multiple transmission routes**, particularly in the **neonatal period**, including **intrapartum by exposure to maternal blood, secretions, and/or stool, or postnatally from close contacts with infected caregivers**.
- ❖ **Treatment:**
 - ✓ There is **no specific treatment for enterovirus infection**.
 - ✓ The **focus is on easing symptoms until the infection has run its course, which usually takes only a few days**.

5.4 OPENKYLIN

- ❖ China launched country's first open-source desktop operating system (OS) named as OpenKylin 1.0 with the motive to create an independent software system and cut reliance on US technology.

ABOUT OPENKYLIN

- ❖ It is a **Linux-based operating system** built by a community of **about 4,000 developers**.
- ❖ **OpenKylin users have access to the software's lines of code and can modify them as they wish**, unlike Microsoft and Apple, which keep the workings of Windows and MacOS systems secret.
- ❖ **OpenKylin ensures security in critical areas including, government affairs, communications, energy and transportation.**
- ❖ **Openkylin will provide reliable fundamental software services to support the country's IT industrial chain.**

5.5 MAJORANA ZERO MODE

Microsoft has recently announced to have found Majorana zero modes to revolutionise Quantum computing.

BACKGROUND KNOWLEDGE

- ❖ All **subatomic particles** that make up matter are called **fermions**.
- ❖ In 1928, the **British physicist Paul Dirac derived the Dirac equation**, which predicted the existence of an **antiparticle for each particle, such that if the two meet, they annihilate each other.**
- ❖ The **first antiparticle found was the positron** (or the anti-electron).
- ❖ Later **Physicist Ettore Majorana** predicted particles that satisfied **certain conditions to be their own antiparticles.**
- ❖ In his honour, **fermions that are their own antiparticles are called Majorana fermions.**
- ❖ **One subatomic particle that physicists think could be Majorana fermions are neutrinos.**
- ❖ **Pair, or bound states, of fermions that are their own antiparticles are called Majorana zero modes.**
- ❖ Majorana zero modes **could help build quantum computers that are much less fragile than they are today, making them computationally superior.**

ABOUT QUANTUM COMPUTING

- ❖ **Quantum computing is a multidisciplinary field that utilizes quantum mechanics to solve complex problems faster than on classical computers.**
- ❖ It uses **two key principles of quantum physics: superposition and entanglement.**
 - ✓ **Superposition means** that each quantum bits or qubit can represent both 1 and 0 at the same time.
 - ✓ **Entanglement means** that qubits in a superposition can be correlated with each other; i.e., state of one (whether it is a 1 or a 0) can depend on state of another.

5.6 INDIA'S FIRST REGIONAL AI NEWS ANCHOR

- ❖ **Odisha TV, an Odia-based news station, has unveiled "Lisa," India's first regional AI news anchor.**
- ❖ Lisa possesses the **remarkable ability to speak multiple languages, including Odia, English, and others.**

5.7 BARD CHATBOT

- ❖ **Google's parent company Alphabet is rolling out its artificial intelligence chatbot Bard in Europe and Brazil.**
- ❖ It is the **product's biggest expansion since its March launch in the US and the UK** and heats up the rivalry with **Microsoft's ChatGPT.**

ABOUT BARD

- ❖ It is an **Artificial Intelligence (AI) chatbot** developed by **Alphabet.**
- ❖ It is an **example of generative AI** that can respond to **questions in a human-like way.**

- ❖ The **Users can interact with the Bard chatbot in 40 languages**, including nine Indian languages.
- ❖ Users can also change the **tone and style of Bard's responses to either simple, long, short, professional or casual**.
- ❖ They can **pin or rename conversations, export code to more places and use images in prompts**.
- ❖ New feature include the **ability for the chatbot to speak its answers back to user**.

5.8 NON-FUNGIBLE TOKENS

- ❖ **Google has unveiled NFT policy for Play Store to incorporate tokens into games.**

ABOUT NON-FUNGIBLE TOKENS (NFTS)

- ❖ NFTs are **cryptographic assets** which work on a **block-chain technology** i.e., a **distributed public ledger that records transaction and cannot be replicated**.
- ❖ They can represent **digital or real-world items** like **artwork, photograph, song, video, real estate, individuals' identities, property rights, and more**.
- ❖ They are **assigned unique identification codes and metadata** that distinguish them from other tokens.
- ❖ The term '**non-fungible**' simply means that each token is different as opposed to a fungible currency such as money.
 - ✓ **Fungibility** is the **ability of an asset to be interchanged with other individual assets of the same type**.
- ❖ Examples
 - ✓ **Fungible Assets:** Currencies, Bitcoin, Stocks, Mutual Funds
 - ✓ **Non Fungible Assets:** Paintings, Real Estate, Non-Fungible Tokens (NFTs)
- ❖ NFTs can be **traded and exchanged for money, cryptocurrencies, or other NFTs**—it all depends on the **value the market and owners have placed on them**.
- ❖ NFT transactions are recorded on **blockchains**, which is a **digital public ledger**
- ❖ Most **NFTs being a part of the Ethereum blockchain**.

5.9 RADIO THERMOELECTRIC GENERATORS

- ❖ According to sources, **ISRO and Bhabha Atomic Research Center (BARC)** are developing **Radio thermoelectric generators (RTGs)**.
- ❖ RTGs are **lightweight, compact spacecraft power systems**.
- ❖ The RTGs **use radioactive materials, such as Plutonium-238 or Strontium-90, which release heat as they decay**.
- ❖ It contains two parts-
 - ✓ the **radioisotope heater unit (RHU)** which generates heat, and
 - ✓ the **RTG, which converts the heat into electricity**.
- ❖ **Large difference in temperature** between this hot fuel and cold environment of space is applied across **thermocouples**, which generates an **electrical current using no moving parts**.
 - ✓ **Thermocouple** is a material that develops a voltage if there is a heat gradient across it.
- ❖ RTGs are **independent of solar proximity and planetary alignment** which are necessary to send a spacecraft deep into space, such as **into inter-planetary missions**.
- ❖ Earlier, spacecrafts such as **Voyager, Cassini etc have been powered by RTGs**.

5.10 ADVANCED CHEMISTRY CELLS (ACC) BATTERY

- ❖ **Ministry of Heavy Industries** has recently announced the **re-bidding of ACC manufacturing under PLI Scheme on 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage'**.
- ❖ ACCs are **new generation of advanced storage technologies** that can store electric energy, either as **electrochemical or as chemical energy**, and **convert it back to electric energy as and when required**.
- ❖ **Applications-** electric vehicles, maintaining grid stability, solar rooftop, consumer electronics etc.

- ❖ The government has approved the PLI scheme 'National Programme on ACC Battery Storage' for achieving a manufacturing capacity of 50 Giga Watt Hour (GWh) of ACC to enhance manufacturing capabilities with a budgetary outlay of Rs 18,100 crore.

5.11 NEW AI COMPANY 'xAI'

- ❖ **Elon Musk, CEO of Tesla and SpaceX**, and owner of Twitter, announced the debut of a new AI company, **xAI**, with the goal to “understand the true nature of the universe.”
- ❖ **xAI** would seek to build a “good AGI,” as an alternative to **Microsoft, Google and OpenAI**.
- ❖ AGI stands for **Artificial General Intelligence** and refers to **AI that can solve problems like a human**.
- ❖ The company will use **public tweets to train its AI models** and may also work with **Tesla on AI software**.

5.12 FLUOROchemicals

- ❖ Scientists from the **University of Oxford** have come up with a **new way to obtain fluorine atoms, in a much safer and less energy-intensive way**.

TRADITIONAL METHOD

- ❖ **Fluorine** is a **highly reactive element** used to make **fluorochemicals**, which in turn are used to produce **plastics, agrochemicals, lithium-ion batteries, and drugs**.
- ❖ **Fluorine** comes from a calcium salt called **calcium fluoride, or flourspar**.
- ❖ Flourspar is **mined and then treated with sulphuric acid** at a high temperature to **release hydrogen fluoride (HF)**.
- ❖ **HF is then made to react with other compounds** to create **fluorochemicals**.

DISADVANTAGES

- ❖ HF is an **extremely poisonous and corrosive liquid** that irritates the eyes and respiratory tract even at low concentrations.
- ❖ It **also requires special transportation and storage requirements**.

NEW METHOD

- ❖ Researchers **ground the flourspar in a ball-mill with potassium phosphate**.
- ❖ While fluorine is very reactive, calcium atoms prefer phosphorus even more, so the **milling created calcium phosphate and another compound with fluorine atoms**. They called the latter **Fluoromix**.
- ❖ When Fluoromix was reacted with organic compounds, it **could create around 50 fluorochemicals with up to 98% yield**.
- ❖ The researchers took inspiration from **how the human body makes bones and teeth: through calcium phosphate biomineralisation**.

5.13 HYGROELECTRICITY

- ❖ Researchers at the **University of Massachusetts Amherst** have successfully developed a new technology called **Hygroelectricity** that can generate electricity from humid air.
- ❖ The discovery of **hygroelectricity** marks a significant step **forward in the pursuit of clean and renewable energy sources**.

WORKING

- ❖ The key to harvesting electricity from humid air lies in a tiny device **comprising two electrodes** and a **thin layer of material filled with nanopores**.
- ❖ These **nanopores, each less than 100 nanometers in diameter**, allow water molecules from the air to pass through the device.
- ❖ As these **molecules move from an upper chamber to a lower chamber**, they interact with the edges of the nanopores, leading to a buildup of electric charge imbalances between the chambers.
- ❖ This **process effectively transforms the device into a miniature battery**, generating continuous electricity.

APPLICATIONS

- ❖ The potential applications are vast, ranging from **powering miniature computers and sensors to providing sustainable energy sources for remote locations.**
- ❖ This technology **can be applied to a wide range of materials, including wood and silicon, as long as they possess the required nanopores.**

ISSUES

- ❖ Currently, the fingernail-sized device **can only produce electricity equivalent to a fraction of a volt.**
- ❖ **Scaling up the technology to meet practical energy demands is a significant hurdle.**

5.14 INDIAAI

- ❖ INDIAai and Meta India have recently signed a **MoU to collaborate on Artificial Intelligence (AI) and emerging technologies.**
- ❖ As part of the agreement, the **two sides will establish a framework for cooperation in the field of emerging technologies.**
- ❖ Meta's **open-source AI model will also be made available for Indian AI startups.**
- ❖ The MoU is **also envisaged to advance research and development (R&D) in the burgeoning space.**

ABOUT INDIA AI

- ❖ INDIAai is the **National AI Portal of India** - a central hub for everything AI in India and beyond.
- ❖ INDIAai is **an independent business unit (IBU) under the Digital India Corporation.**
- ❖ INDIAai, a joint venture by **Ministry of Electronics and Information Technology (MeitY), National e-Governance Division (NeGD) and NASSCOM**, has been set up to prepare the nation for an AI future.
- ❖ It is **knowledge portal, research organisation and an ecosystem building initiative.**

5.15 CITIZEN FINANCIAL CYBER FRAUD REPORTING AND MANAGEMENT SYSTEM

- ❖ As per the Home Ministry, cyber reporting system **saved Rs 570 crore from fraudsters.**
- ❖ The **Citizen Financial Cyber Fraud Reporting and Management System**, has been **launched for immediate reporting of financial frauds** and to **stop siphoning off of funds by the fraudsters.**
- ❖ It has **been launched under Indian Cyber Crime Coordination Centre (I4C).**
 - ✓ **I4C is under the purview of Ministry of Home Affairs.**
- ❖ It **leverages new-age technologies for sharing online fraud related information and taking action in almost real time.**
- ❖ **CFCFRMS aims to integrate Law Enforcement Agencies and Banks and Financial Intermediaries.**
- ❖ It is **integrated with Helpline no. 155260**, which is **manned and operated by the concerned State Police.**

6. DEFENCE

6.1 INDIA'S FIRST 'POLICE DRONE UNIT'

- ❖ India's first 'Police Drone Unit' was recently launched by Greater Chennai City Police (GCP) for aerial surveillance over vast areas and quick detection of criminal activities.
- ❖ According to the police, a total of nine drones under three categories are available in this unit: Quick Response Surveillance Drones (6), Heavy Lift Multicopter Drone (1) and Long Range Survey Wing Plane (2).
- ❖ The drones equipped with advanced surveillance technology will aid in identifying potential threats, monitoring crowd gatherings, and assisting in traffic management.

6.2 JIMEX

- ❖ The 7th edition of the bilateral Japan-India Maritime Exercise 2023 was hosted by the Indian Navy off the coast near Visakhapatnam.
- ❖ The exercise will be conducted in two phases, the Harbour Phase and the Sea phase.
- ❖ The first ever JIMEX was conducted off Japan in January 2012.

6.3 SALVEX

- ❖ The 7th edition of the Indian Navy – US Navy ,Salvage and Explosive Ordnance Disposal (EOD) exercise, SALVEX was conducted recently in Kochi.
- ❖ Indian Navy – US Navy have been participating in joint Salvage and EOD exercises since 2005.
- ❖ The exercise saw participation from both the navies which included the ships – INS Nireekshak and USNS Salvor in addition to Specialist Diving and EOD teams.

6.4 CLUSTER BOMBS

- ❖ The United States has announced that it is sending cluster munitions to Ukraine to help its military push back Russian forces entrenched along the front lines.

ABOUT CLUSTER BOMBS

- ❖ A cluster munition is a bomb/canister that carry tens to hundreds of smaller bomblets, also known as sub-munitions.
- ❖ The bomblets are designed to take out tanks and equipment, as well as troops, hitting multiple targets at the same time.
- ❖ These canisters can be dropped from aircraft, launched from missiles or fired from artillery, naval guns or rocket launchers.
- ❖ Canisters break open at a prescribed height, depending upon the area of intended target.
- ❖ They are fused by a timer to explode closer to or on the ground.

6.5 PROJECT 75I

- ❖ Spanish submarine manufacturer Navantia and India's Larsen and Toubro (L&T) on recently concluded a Teaming Agreement, to jointly bid for the Project 75I.

ABOUT PROJECT-75I

- ❖ Project-75I envisages construction of six advanced submarines in India with significant indigenous content and is estimated to cost over ₹45,000 crore.
- ❖ The P-75I is the first project being executed under the Strategic Partnership model of Defence Acquisition Procedure and the Request For Proposal (RFP) was originally issued in July 2021.
- ❖ The first submarine must have a minimum of 45% indigenisation, with the indigenous content going up to 60% in the sixth.

- ❖ Project 75I requires an Indian bidder to tie up with a foreign collaborator and build six conventional submarines equipped with AIP systems.

AIR-INDEPENDENT PROPULSION (AIP) SYSTEM

- ❖ AIP is mostly implemented as an auxiliary source, with the traditional diesel engine handling surface propulsion.
- ❖ Most of these systems generate electricity, which in turn drives an electric motor for propulsion or recharges the boat's batteries.
- ❖ An AIP module acts as a force multiplier as it enables conventional submarines to remain submerged for longer duration thereby increasing their endurance and reducing chances of detection.
- ❖ It decreases the noise levels made by the submarines. This makes it hard to detect the submarines.
- ❖ An indigenously developed AIP module is set to be installed on the Scorpene submarines as they go for refit from 2024 onwards.

6.6 HAL'S REGIONAL OFFICE IN KUALA LUMPUR

- ❖ Defence Minister recently inaugurated Hindustan Aeronautics Limited (HAL)'s Regional Office in Kuala Lumpur, the capital of Malaysia.
- ❖ The Regional Office will facilitate close defence industrial collaboration between India and Malaysia.
- ❖ It will also serve as a hub for the HAL's engagement with the wider South-East Asian region and act as a window for other Indian Defense PSUs.

6.7 SCALP MISSILES

- ❖ France has agreed to arm Ukraine with Storm Shadow/SCALP missile, the longest-range Western weapon that it has received so far.
- ❖ It can strike targets in the Russian-occupied territory in Ukraine's east.
- ❖ The SCALP (Système de Croisière Autonome à Longue Portée) missile is jointly developed by UK and France and has a range on over 250 kms.
- ❖ It is manufactured by MBDA and used by France, Italy and the United Kingdom.
- ❖ It is a fire and forget missile, programmed before launch. Once launched, the missile cannot be controlled, its target information changed or self-destructed.

6.8 OPERATION SOUTHERN READINESS

- ❖ It is an annual multinational exercise (India, USA, Italy, UK, Seychelles) conducted by Combined Maritime Forces.
- ❖ It was hosted by Seychelles.
- ❖ INS Sunayna participated in the exercise from India. It is the second Saryu-class patrol vessel of the Indian Navy.

6.9 HWASONG-18

- ❖ North Korea tested its latest Hwasong-18 intercontinental ballistic missile (ICBM) recently.
- ❖ It is the core of its nuclear strike force and a warning to the United States and other adversaries.
- ❖ It is the North Korea's first ICBM to use solid propellants, which can allow faster deployment of missiles during a war.

6.10 NOMADIC ELEPHANT EXERCISE 2023

- ❖ It is a joint military exercise between India-Mongolia.
- ❖ It is the 15th edition of bilateral joint military exercise.
- ❖ An annual training event, it is conducted alternatively in Mongolia and India.
- ❖ This year it is being held in at Ulaanbaatar, Mongolia.

- ❖ The **primary theme** of the exercise will **focus on counter-terrorism operations in mountainous terrain under United Nations mandate.**

6.11 AKIRA RANSOMWARE

- ❖ **CERT-In (Indian Computer Emergency Response Team)** has recently issued **alerts regarding the 'Akira' Internet Ransomware.**
- ❖ The ransomware operates by **targeting both Windows and Linux-based systems.**
- ❖ A Ransomware is **designed to steal crucial personal information and encrypt data, thereby coercing individuals into paying ransom money.**



CivilsTap Hlmachal

7. SPACE

7.1 EUCLID TELESCOPE

- ❖ The **European Space Agency (ESA)** is embarking on an extraordinary mission with the launch of the **Euclid Space Telescope**.
- ❖ It will be **launched on a SpaceX Falcon 9 rocket** and will remain operational for a minimum of six years.
- ❖ The spacecraft measures **approximately 4.7 metres tall and 3.7 metres in diameter**.
- ❖ It is **named after the Greek mathematician Euclid of Alexandria**.
- ❖ This mission is part of **ESA's Cosmic Vision programme**, which plans to explore the origin and components of the Universe and the fundamental laws that govern it.
- ❖ The spacecraft will have a **1.2-metre-wide telescope and two instruments**;
 - ✓ **A visible-wavelength camera (the VISible instrument)**: It will look for tiny distortions in the shapes of distant galaxies from different points in time to highlight the tussle between the pull of gravity and the push of dark energy.
 - ✓ **A near-infrared camera/spectrometer (the Near-Infrared Spectrometer and Photometer)**:
 NISP will observe galaxies in the near-infrared range, providing essential data on their **distance, redshift, and clustering properties**. By measuring the distribution of galaxies at different cosmic epochs, NISP will aid in the study of **large-scale cosmic structures**.
- ❖ After a **month-long journey through space**, Euclid will **join its fellow space telescope James Webb** at a stable hovering spot **around 1.5 million kilometers** (more than 930,000 miles) from Earth called the **second Lagrange Point (L2)**.
- ❖ Euclid will **chart the largest-ever map of the universe**, encompassing up to **two billion galaxies across more than a third of the sky**.
- ❖ The telescope hopes to **deliver images that are at least four times sharper than ground-based ones**.

The unknowns in universe

Around 70 percent is thought to be **dark energy**, the name given to the **unknown force that is causing the universe to expand at an accelerated rate**.

And **25 percent** is **dark matter**, thought to **bind the universe together and make up around 80 percent of its mass**.

7.2 SUPERMOON

- ❖ The **first supermoon of 2023** which was seen on **July 3** appeared brighter in the night sky.

ABOUT SUPERMOON

- ❖ A **supermoon occurs** when the **Moon's orbit is closest to the Earth** at the same time that the **Moon is full**.
- ❖ As the Moon orbits the Earth, there is a point of time when the distance between the two is the least (called the **perigee** when the **average distance is about 360,000 km from the Earth**) and a point of time when the distance is the most (called the **apogee** when the distance is about **405,000 km** from the Earth).
- ❖ Now, when a **full Moon appears at the point when the distance between the Earth and the Moon** is the least, **not only does it appear to be brighter but it is also larger than a regular full moon**.
- ❖ The **term "Supermoon"** was coined by astrologer **Richard Nolle in 1979**, defining it as a special event when a **full moon is within 90 percent of its closest point to Earth**.
- ❖ In a typical year, there may be **two to four full supermoons and two to four new supermoons in a row**.

7.3 SOLAR FLARES

- ❖ Recently **X-class solar flares** led to radio blackouts in parts of the US, Pacific Ocean.

ABOUT SOLAR FLARES

- ❖ Solar flares are **giant explosions on the sun that send energy, light, and high-speed particles into space.**
- ❖ These flares are often associated with **solar magnetic storms known as coronal mass ejections (CMEs).**
- ❖ It happens when **energy stored in 'twisted' magnetic fields (usually above sunspots) is suddenly released.**
- ❖ They can **affect radio communications, power grids and navigation signals and endanger astronauts and spacecraft.**
- ❖ Solar flares **can be divided into various categories based on their brightness in X-ray wavelengths.**
- ❖ The **smallest are A-class, followed by B, C, M, and X, the largest.**
- ❖ Each **letter represents a 10-fold increase in energy output.**
- ❖ Within each letter class, **there is a finer scale from 1 to 9.**

Solar Flares Class	Impact on Earth
X	Can trigger planet-wide radio blackouts and long
M	Can cause brief radio blackouts that affect Earth's polar regions and minor radiation storms.
C	Small with few noticeable consequences on Earth.
B	Too small to harm Earth.
A	hardly noticed and do not cause any harm

Severity decreases from top to bottom.

7.4 LVM-3

- ❖ The **Indian Space Research Organisation (ISRO) has three classes of launch vehicles:**
 1. **Polar Satellite Launch Vehicle (PSLV),**
 2. **Geosynchronous Satellite Launch Vehicle (GSLV), and**
 3. **new Small Satellite Launch Vehicle (SSLV).**
- ❖ Of these, **ISRO has launched the PSLV the most.** It has a **famous reputation as a "workhorse",** with a very low failure rate.
 1. **The PSLV can lift up to 3.8 tonnes to low-earth orbit.**
- ❖ **ISRO developed and uses the GSLV to launch heavier payloads, and if required into higher orbits.**
- ❖ Like the PSLV, the **GSLV also has multiple configurations.**
- ❖ The **most powerful configuration is LVM-3, short for Launch Vehicle Mark 3'; it can lift up to 10 tonnes to low-earth orbit.**
- ❖ **ISRO will launch its Chandrayaan 3 mission on July 14 onboard an LVM-3.**
- ❖ The **LVM-3 has three stages.**
 1. The **first stage is in the form of two S200 boosters strapped to the sides of the rocket body.** They combust a **solid fuel' called hydroxyl-terminated polybutadiene.**
 2. The **second stage is powered by two Vikas engines, which combust a liquid fuel - either nitrogen tetroxide or unsymmetrical dimethylhydrazine.**
 3. The **uppermost final stage is powered by a cryogenic engine. It combusts liquefied hydrogen with liquefied oxygen.**
- ❖ **Hydrogen has a very high specific impulse as rocket fuels go, but using it in an engine requires it to be liquefied first, which in turn means it must be stored at very low temperature, and with special pumping and transport systems.**

7.5 NEUTRINOS

- ❖ The **IceCube Neutrino Observatory** has produced the **first view of the Milky Way galaxy through the lens of neutrino particles.**

ABOUT NEUTRINOS

- ❖ Neutrinos are **very low mass fundamental particles** and they only interact very weakly with other matter.
- ❖ They are also called as **“ghost particles”**.
- ❖ Neutrinos are **electrically neutral, undisturbed by even the strongest magnetic field**.
- ❖ The **direction from which they arrive points directly back to their original source**.
- ❖ They are **emitted from our galaxy when cosmic rays collide with interstellar matter** or they are also **produced by some exploding stars, supernovas, gamma-ray bursts and quasars**.
- ❖ Hence, **they can provide us an unprecedented view of highly energetic processes** in our galaxy.

ABOUT ICECUBE NEUTRINO OBSERVATORY

- ❖ The IceCube Neutrino Observatory is a **unique detector encompassing a cubic kilometer of Antarctic ice** with over **5,000 light sensors**.
- ❖ It **detects high-energy neutrinos**, which **possess energies millions to billions of times higher than those produced by stellar fusion reactions**.

7.6 PHOSPHINE AT VENUS

- ❖ Scientist have **detected Phosphine in deeper parts of Venus’ atmosphere** using the **James Clark Maxwell Telescope (JCMT) located at the Mauna Kea Observatory in Hawaii**.
 - ✓ On Earth, **microorganisms residing in low-oxygen environments generate phosphine**.
- ❖ This discovery has sparked intrigue and led to the notion that **phosphine could serve as a potential biosignature in other worlds**.
 - ✓ **“Biosignatures” are indirect signs of life on other planets and moons in the solar system and beyond**.

ABOUT PHOSPHINE

- ❖ Phosphine is a **phosphorus atom with three hydrogen atoms attached (PH₃)** – is **highly toxic to people**.
- ❖ It is a **flammable, colorless and toxic gas on Earth** that’s often **thought of as swamp gas**.
- ❖ **Phosphine is still manufactured as an agricultural fumigant**, is used in the **semiconductor industry**, and is a **by-product of meth labs**.

ABOUT VENUS

- ❖ **Venus is the second planet from Sun and is Earth’s closest planetary neighbor (often called Earth’s twin)**.
- ❖ **Surface temperatures reach a scorching 880 degrees Fahrenheit**, hot enough to melt lead. It is the hottest planet in the solar system.
- ❖ **Venus rotates on its axis backward i.e from east to west**.
- ❖ The planet’s atmosphere is primarily made of **carbon dioxide and sulfuric acid clouds**.

7.7 SOLAR CYCLE

- ❖ The Sun is set to reach the **Solar Maximum in the next two years of the current solar cycle**.

SOLAR MAXIMUM

- ❖ **Solar maximum is a period of time** during which the **Sun experiences peak solar activity** and its **magnetic field reaches its strongest and most disordered dynamic point**.
- ❖ During solar maximum, **large numbers of sunspots appear**, and the **solar irradiance output grows tremendously**.
- ❖ **Large solar flares occur during a maximum**.
- ❖ The **solar maximum happens roughly in the middle of each cycle**.
- ❖ **Impact-** The increased solar activity during this period can **cause large-scale solar storms, eruptions and flares**, which in turn can have devastating impacts on the Earth. It **can potentially disrupt radio communications, the power grid, the internet and even have serious health consequences for astronauts**.

SOLAR MINIMUM

- ❖ Solar minimum is the **period of least solar activity**.

- ❖ During this time, sunspot and solar flare activity diminishes, and **often does not occur for days at a time.**
- ❖ Solar minima **are correlated with changes in climate.**

SOLAR CYCLE

- ❖ The Sun is a **huge ball of electrically-charged hot gas.**
- ❖ This charged **gas moves, generating a powerful magnetic field.** This magnetic field goes through a cycle, **called the solar cycle.**
- ❖ **Every 11 years or so, the Sun's magnetic field completely flips.**
- ❖ This means that the **Sun's north and south poles switch places.** Then it takes about another 11 years for the Sun's north and south poles to flip back again.
- ❖ So far, **astronomers have documented 24 such cycles,** the last one ended in 2019.
- ❖ **Solar minima and maxima are the two extremes of the Sun's 11-year activity cycle.**

7.8 ORGANIC MATTER FOUND ON MARS

- ❖ A new study using data from **NASA's Mars Perseverance rover** has found **potential evidence of organic molecules on Mars,** indicating a **complex organic geochemical cycle and the possibility of prolonged habitability.**
- ❖ **Scanning Habitable Environments with Raman and Luminescence for Organics and Chemicals (SHERLOC) instrument on rover** was used to detect organic molecules in Jezero Crater.
 - ✓ Jezero crater is an **ancient lake basin site** which has **potential for discovering evidence of past life in Mars.**
- ❖ **SHERLOC employs deep ultraviolet Raman and fluorescence spectroscopy** to simultaneously measure **weak Raman scattering and strong fluorescence emissions,** providing **crucial insights into the organic composition of Mars.**
- ❖ **SHERLOC, operates day or night, uses ultraviolet laser light to search for organics and minerals.**
- ❖ **It helps in determining which compounds exist in a sample.**

7.9 CHANDRAYAAN 3

- ❖ ISRO's Chandrayaan-3 was **launched successfully recently.**

ABOUT CHANDRAYAAN-3

- ❖ Chandrayaan-3 was **launched using LVM3 (Geosynchronous Satellite Launch Vehicle Mk III).**
- ❖ It was a **follow on mission to Chandrayaan-2, which was a partial success, because its lander Vikram, and rover Pragyaan, crashed on Moon's surface.**
- ❖ **Launch Vehicle Mark 3 (LVM3) (previously known as GSLV-MK III) is a three-stage launch vehicle** consisting of **two solid propellants S200 strap-ons on its sides and a core stage comprising L110 liquid stage and C25 cryogenic stage.**
- ❖ The vehicle is also **dubbed as one of the heaviest for its ability to carry satellites up to 8,000 kg.**
- ❖ Chandrayaan-3 consists of an **indigenous propulsion module, lander module, and a rover** to develop and demonstrate new technologies required for inter-planetary missions.
- ❖ **Lander and rover will collect invaluable data for scientific research on lunar surface for 14 Earth days (a single day on moon).**
- ❖ The **mission objectives** of Chandrayaan-3 are:
 - ✓ **To demonstrate Safe and Soft Landing on Lunar Surface**
 - ✓ **To demonstrate Rover roving on the moon and**
 - ✓ **To conduct in-situ scientific experiments.**

PAYLOADS

- ❖ Lander payloads:
 - ✓ **Chandra's Surface Thermophysical Experiment (ChaSTE)** to measure the thermal conductivity and temperature;
 - ✓ **Instrument for Lunar Seismic Activity (ILSA)** for measuring the seismicity around the landing site;

- ✓ **Langmuir Probe (LP)** to estimate the plasma density and its variations.
- ✓ A passive **Laser Retroreflector Array from NASA** is accommodated for lunar laser ranging studies.
- ❖ Rover payloads:
 - ✓ **Alpha Particle X-ray Spectrometer (APXS)** and **Laser Induced Breakdown Spectroscopy (LIBS)** for deriving the elemental composition in the vicinity of landing site.

7.10 AURORAS ON MERCURY

- ❖ During a close Mercury flyby, BepiColombo spacecraft collected data that showed how **electrons raining down on the planet's surface** are **triggering X-ray auroras**.
- ❖ **BepiColombo** is a **joint mission** by the **European Space Agency (ESA)** and the **Japanese Aerospace Exploration Agency (JAXA)** to the planet Mercury.
- ❖ The mission was **named after Giuseppe "Bepi" Colombo**, an **Italian mathematician and engineer** who made **significant contributions to the understanding of Mercury's orbit**.
- ❖ The BepiColombo spacecraft **consists of two main components**:
 - ✓ **Mercury Planetary Orbiter (MPO)**: The MPO is **primarily provided by ESA** and is responsible for mapping and studying Mercury's surface, as well as its composition and topography.
 - ✓ **Mercury Magnetospheric Orbiter (MMO)**: The MMO is **provided by JAXA** and focuses on studying Mercury's magnetic field and magnetosphere.
- ❖ **Auroras on Earth** are triggered when a **stream of charged particles emitted by the Sun** interact with the **ionosphere**.
- ❖ **But Mercury has a very thin atmosphere** (called an exosphere).
- ❖ Auroras on the planet are created when **solar wind, the stream of particles, interact directly with the planet's surface**.

7.11 ISRO SUCCESSFULLY TESTS SMPS

- ❖ **ISRO has successfully tested Gaganyaan Service Module Propulsion System (SMPS)**.
- ❖ The **service module** of Gaganyaan is a **regulated bi-propellant based propulsion system** that caters to the requirements of the **Orbital Module, performing orbit injection, circularisation, on-orbit control, de-boost manoeuvring, and SM-based abort (if any) during the ascent phase**.
- ❖ This test involved **five liquid apogee motor (LAM) engines** with a thrust of **440 N**, and **16 reaction control system (RCS) thrusters** with a thrust of **100 N**.
- ❖ The **440 N thrust LAM engines provide the main propulsive force** during the ascending phase, while the **RCS thrusters ensure precise altitude correction**.

ABOUT GAGANYAAN MISSION

- ❖ The Gaganyaan project envisages **demonstration of human spaceflight capability** by launching a **crew of three members to an orbit of 400 km** for a **three-day mission**, and bringing them back safely to Earth, by landing in Indian sea waters.
- ❖ As part of it, **two unmanned missions** and **one manned mission** are **approved** by the government.
- ❖ **LVM3 (Geosynchronous Satellite Launch Vehicle Mk III)** is identified as the **launch vehicle for Gaganyaan mission**. It is a **three stage vehicle: solid, liquid and cryogenic**.
- ❖ ISRO plans to carry out **Gaganyaan's first abort test in August**.

7.12 LONG MARCH 10 ROCKET

- ❖ **China successfully carried out a trial test on the main engine of the Long March-10, a new carrier rocket designed for manned moon landing missions**.
- ❖ The rocket will be **capable of ferrying a crew module** along with a **lunar lander to Earth-Moon transfer orbit**.

7.13 STARFIRE

- ❖ Scientists at **Raman Research Institute (RRI)**, an autonomous institute of the Department of Science and Technology, have developed an algorithm called **STARFIRE** which can estimate the **Radio Frequency Interference (RFI)** emitted by FM radio stations, WiFi networks, mobile towers, radar, satellites, and communication devices, and use this calculation for designing and fine-tuning the antennas and other instrument components of missions like India's Probing Reionization of the Universe using Signal from Hydrogen (**PRATUSH**).
 - ✓ **PRATUSH** is one of the several mission opportunities in space contemplated to address the growing RFI on land, to study the birth of the first stars and galaxies in the Universe using the 21-cm hydrogen line obtained from the far side of the moon.
- ❖ The scientists used information on the FM transmitter stations from six countries in the world.
- ❖ Data from Canada, USA, Japan, Australia, Germany and South Africa were used as inputs for developing the model and testing STARFIRE – Simulation of Terrestrial Radio Frequency Interference in orbits around Earth.
- ❖ These RFI effects were studied at altitudes 400 kms, 3,795 kms, and 36,000 kms from the Earth's surface, which correspond to the Low Earth Orbit, Medium Earth Orbit, and Geo-stationary orbit.
- ❖ **Advantages**
 - ✓ This algorithm can be handy in orbit selection for future missions.
 - ✓ Another advantage of STARFIRE would be the flexibility for users to change properties of the antennas that transmit and receive RFI along with including the astrophysical radio signals from our own galaxy and the cosmos to derive meaningful conclusions about experiment sensitivity.

RFI-It is the conduction or radiation of radio frequency energy that causes an electronic or electrical device to produce noise that typically interferes with the function of an adjacent device.

7.14 MARKARIAN 421

- ❖ Markarian 421, a **supermassive black hole**, is firing powerful jets of high-energy particles directly towards our planet.
- ❖ The "blazar," which is the name given to black hole systems that have jets pointed at Earth, is about **400 million light-years away in the constellation Ursa Major**.
- ❖ Supermassive black holes that are active at the centres of galaxies (active galactic nuclei) are surrounded by "accretion disks" that feed them.
 - ✓ But not all the material in the accretion discs ends up being consumed by the black hole.
 - ✓ Some of it is channelled towards the black hole's "poles" and blasted out at a speed near that of light.

7.15 "ORIGINS, SPECTRAL INTERPRETATION, RESOURCE IDENTIFICATION, SECURITY, REGOLITH EXPLORER"- OSIRIS REX SPACECRAFT

- ❖ NASA's **OSIRIS-REx spacecraft**, currently on a return journey from asteroid Benu, has made a **critical course adjustment** by altering its velocity by a seemingly minuscule but crucial **2.09 kilometers per hour**.
- ❖ This change in speed and direction is vital for the spacecraft to get close enough to Earth to deliver its precious cargo.
- ❖ This trajectory correction maneuver is the **final major adjustment required to set up OSIRIS-REx for its Earth return on September 24, 2023**.
 - ✓ However, two more minor maneuvers are scheduled for September 10 and 17.
- ❖ The ultimate goal is a **precise landing at the Department of Defense's Utah Test and Training Range near Salt Lake City**.
- ❖ The OSIRIS-REx mission is the **first US mission to collect a sample from an asteroid**.
- ❖ It was **launched on Sept. 8, 2016**.
- ❖ It is **presently 38 million km away from earth**, hurtling through space at a **staggering speed of about 22,000 miles per hour**.

7.16 UREILITE

- ❖ A new study suggests **rare Ureilite meteorite** formed **India's Dhala impact crater**, offering insights into early solar system and potential impact on Earth's water and life development.

ABOUT DHALA CRATER

- ❖ **Dhala crater** is situated in the heart of India's **Madhya Pradesh region in Shivpuri**.
- ❖ With an impressive **diameter of 11 kilometres**, the **Dhala structure has been confirmed** by scientists to be **Asia's largest and the world's 7th largest impact crater**.

ABOUT UREILITES

- ❖ 'Ureilites' **belong to a scarce class of primitive meteorites**, making up **only a small fraction of all meteorites found on Earth**.
- ❖ This **dark grey or brownish meteorite type** is named after the **village Novy Urey** in Mordovia Republic of Russia, where a **meteorite of this type fell on 4 September 1886**.
- ❖ **Comprising mostly olivine and pyroxene silicate rocks**, Ureilites also **contain less than 10% of carbon** (either in the form of diamond or graphite), **metal sulphides, and a few fine-grained silicates**.

8. ENVIRONMENT

8.1 COALITION FOR DISASTER RESILIENT INFRASTRUCTURE (CDRI)

- ❖ The Cabinet has recently approved **Ratification of the Headquarters Agreement (HQA) between India and Coalition for Disaster Resilient Infrastructure (CDRI)**.
- ❖ Signing of HQA **will provide CDRI an independent and international legal persona**, so that it can carry out its functions internationally more efficiently.

PRECEDING EVENTS

- ❖ On the 28th August 2019, the Cabinet had approved the setting up of CDRI along with its supporting Secretariat in New Delhi and also approved financial support of ₹480 crore over a period of five years from 2019-20 to 2023-24.
- ❖ On the 29th June 2022, the Cabinet had approved recognition of CDRI as an international organization and for signing of Headquarters Agreement for granting CDRI exemptions, immunities and privileges as contemplated under Section-3 of the UN (Privileges & Immunities) Act, 1947.
 - ✓ **Section 3 of the act states that premises of UN shall be inviolable. Act was also extended to several other international organisations.**

ABOUT CDRI

- ❖ It is a **global partnership of National Governments, UN agencies and programmes, multilateral development banks, private sector, academic and knowledge institutions etc.**
- ❖ It aims to **increase the resilience of infrastructure systems to climate and disaster risks**, thereby ensuring sustainable development.
- ❖ Presently, CDRI has **31 nations (including India), 6 International and 2 Private organisations as its members**.
- ❖ It was **launched in 2019, by the Indian PM** (supported by UNDRR) at the **United Nations Climate Action Summit in New York**.
- ❖ It is the **Government of India's second major global initiative outside of UN, after the International Solar Alliance**.

8.2 JUST ENERGY TRANSITION PARTNERSHIP (JET-P)

- ❖ **Senegal** has become the fourth country, following **South Africa, Indonesia, and Vietnam**, to sign the **JETP deal**.

ABOUT JUST ENERGY TRANSITION PARTNERSHIP

- ❖ It is a **mechanism for multilateral financing by developed countries** to support an **energy transition in developing countries**.
- ❖ It was **first announced at UNFCCC COP26 in Glasgow**, where **France, Germany, UK, USA, and EU** announced **JETP to support South Africa's decarbonization effort**.
- ❖ **Goal** of JETP is to **support countries' transition from coal to cleaner energy** sources while addressing social consequences, such as job creation and economics impact.
- ❖ It aims to **reduce emissions in the energy sector and accelerate the coal phase-out**.
- ❖ **India refused to give its consent**, saying that **coal cannot be singled out as a polluting fuel** and that **energy transition talks need to take place on equal terms**.

8.3 NEW SPECIES OF FLORA AND FAUNA

- ❖ Maximum discoveries of both flora and fauna were made in Kerala.

FLORA

- ❖ "**Animal Discoveries - New Species and New Records 2023**" by the **Zoological Survey of India (ZSI)** was released.
- ❖ In 2022, India added a total of **664 animal species to its faunal database**. This includes **467 new species and 197 new records**, which are species found in India for the first time.
- ❖ Major species discovered
 - ✓ **Miniopterus phillipsi**, a long-fingered **bat**, and *Glischropus meghalayanus*, a bamboo-dwelling bat from Meghalaya.
 - ✓ **Sela macaque** (*Macaca selai*), a new macaque species found in Arunachal Pradesh.
 - ✓ **Macaca leucogenys**, a **white-cheeked macaque** (found in Modog, Tibet) sighted in India for the first time in AP.
 - ✓ The **yellow-rumped flycatcher** (*Ficedula zanthopygia*) was also found in Narcondam Island of the Andaman archipelago after being known from various other regions.

ABOUT ZSI

- ❖ It is a **subordinate organization of the MoEFCC** and was **established in 1916** as a national center for the faunistic survey and exploration of the resources leading to the advancement of knowledge on the exceptionally rich faunal diversity of the country.
- ❖ ZSI has its **headquarters at Kolkata** and 16 regional stations located in different geographic locations of the country.

FLORA

- ❖ "**Plant Discoveries 2022**" by the Botanical Survey of India (BSI) was released recently.
- ❖ India added **339 new plant taxa** to its floral database in 2022, consisting of 186 taxa new to science and 153 taxa as new distributional records within the country.
- ❖ Major species discovered
 - ✓ **Nandadevia Pusalkar**, found in the Uttarakhand Himalayas.
 - ✓ **Nilgiriella Pusalkar**, endemic to the southern Western Ghats in Karnataka, Kerala, and Tamil Nadu.
 - ✓ **Calanthe lamellosa**, an orchid species earlier recorded in China and Myanmar, found in India in Japfu mountain range in Kohima, Nagaland.

ABOUT BOTANICAL SURVEY OF INDIA

- ❖ It is the **apex research organization under the Ministry of Environment and Forests (MoEFCC)** for carrying out taxonomic and floristic studies on wild plant resources of the country.
- ❖ It was **established in 1890**.
- ❖ It has 9 regional circles with **headquarters is in Kolkata**.

8.4 GUCCHI MUSHROOMS

- ❖ **Unpredictable weather patterns, early springs, and above-average temperatures** have left gucchi mushroom hunters in distress in Kashmir.

ABOUT GUCCHI MUSHROOMS (MORCHELLA ESCULENTA)

- ❖ Also known as **Morel Mushrooms**, are the **costliest among fungi in the world**.
- ❖ Ideal weather conditions for the great morel are **when daytime Celsius is between 15 and 20 and night-time temperatures are in the 5 to 9**.
- ❖ Guccis **vary in colour** from **blonde to dark black**.
- ❖ It **grows in clusters on logs of decaying wood**.
- ❖ They can **normally be found on southerly slopes and sunny areas before showing up on the northern side of hills or in the shade**.
- ❖ Growth is **limited to a few weeks in the spring** and is found in **Himachal Pradesh, Uttarakhand, and Jammu and Kashmir**.
- ❖ Gucchi mushrooms **cannot be cultivated commercially** and **does not grow at the same spot every time**.
- ❖ **Health Benefits:** rich in **potassium, vitamins (including Vitamin D), copper and antioxidants**.
- ❖ **Gujjars living in the mountains** are known as **skilled morel hunters**.

8.5 WILDLIFE CRIME CONTROL BUREAU

- ❖ **WCCB** has issued **red alert** cautioning authorities against **organized hunting gangs** which have raised concerns about **possible poacher intrusion in 11 tiger reserves of the country**.

ABOUT WCCB

- ❖ It was **set up in 2007 under Wild Life (Protection) Act, 1972 by amending it in 2006**.
- ❖ It is a **statutory multi-disciplinary body established under Ministry of Environment, Forests and Climate Change**.
- ❖ The Bureau has-
 - ✓ **five regional offices** at Delhi (headquarters), Kolkata, Mumbai, Chennai and Jabalpur; and
 - ✓ **five border units** at Ramanathapuram, Gorakhpur, Motihari, Nathula and Moreh.
- ❖ **Objective** -To collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to State; establish a centralized wildlife crime data bank etc.
- ❖ WCCB is **designated nodal agency for CITES related enforcement**.

8.6 NEW ZEALAND BANS PLASTIC PRODUCE BAGS

- ❖ **New Zealand** has become **first country to ban plastic produce bags at supermarkets** including **Recyclable, biodegradable or plant-based plastic bag**.
- ❖ The move aligns with the **government's ongoing campaign against single-use plastics**, which began in 2019 **with the prohibition of thicker plastic shopping bags**.

8.7 CHINKARA

- ❖ In a first-of-its-kind judgment, a sessions court in **Rajasthan's Hanumangarh district** has ordered the **payment of half of the fine amount**, imposed on a convict in a chinkara killing case, **to the informer as a prize for helping in the detection of crime against wildlife**.

ABOUT CHINAKARA

- ❖ Scientific Name - **Gazella bennettii**.
- ❖ **Chinkara or Indian gazelle** is the **State animal of Rajasthan**.
- ❖ It is mostly a **solitary animal**, but sometimes forms small groups of 2 – 4 individuals.
- ❖ Chinkara inhabits **arid areas, including sand deserts, flat plains and hills, dry scrub and light forest**.

- ❖ They can go for a long time without water and can get sufficient fluids from plants and dew.
- ❖ Globally the species is found in **India, Iran, Pakistan and possibly Afghanistan**.
 - ✓ However, **most of the global population is found in the Thar Desert of western India.**
- ❖ **Protection status**
 - ✓ **IUCN Red List- Least Concern**
 - ✓ **CITES- Appendix III**

8.8 KHAZAN LAND

- ❖ Recently, **NGT set aside order passed by Goa Coastal Zone Management Authority** in which it had dismissed proceedings against some people for carrying out **illegal construction and illegal filling of eco-sensitive, low-lying khazan lands in Cavelossim village, Salcete taluka.**

ABOUT KHAZANS

- ❖ **Khazans are coastal wetlands of Goa.**
- ❖ It is a **low-lying, saline water-logged area** that is **influenced by tidal flows.**
- ❖ They are **reclaimed from mangrove forests, probably in the pre-Christian era** by an intricate system of **dykes, sluice gates and canals** and put to **multiple productive uses such as agriculture, aquaculture and salt panning.**
- ❖ They act as a **main drainage system for flood water** in the area.

8.9 AMBERGRIS

- ❖ **Ambergris**, worth Rs 4 crore, was recently found in dead whale.
- ❖ Ambergris which means grey amber in French, is a **waxy substance that originates from the digestive system of protected sperm whales.**
- ❖ The **freshly passed ambergris is a light yellowish** substance.
- ❖ Ambergris is **produced only by an estimated 1% of sperm whales.**
- ❖ It is a **rare substance**, which contributes to its **high demand and high price** in the international market.
- ❖ Traditionally, It is **used to produce perfumes which have notes of musk.**
- ❖ While there are records of it being used to flavour food, alcoholic beverages and tobacco in some cultures in the past.
- ❖ Although there is a **ban on the possession and trade of ambergris in countries like the USA, Australia and India**, in several **other countries it is a tradable commodity.**

ABOUT SPERM WHALE (ALSO CALLED CACHALOT)

- ❖ Sperm whales (**Physeter catodon**) are the **largest of the toothed whales** and have one of the widest global distributions of any marine mammal species.
- ❖ The sperm whale is **dark blue-gray or brownish**, with **white patches on the belly.**
- ❖ It is **thickset** and has **small paddle like flippers** and a series of rounded humps on its back.
- ❖ It is **found in temperate and tropical waters throughout the world.**
- ❖ **Protection status**
 - ✓ IUCN red list: **Vulnerable**
 - ✓ CITES: **Appendix I**
 - ✓ Wildlife (Protection) Act, 1972: **Schedule 2**

8.10 INDORE GETS EPR CREDITS

- ❖ **Indore Municipal Corporation** has become the **first urban body in the country** to receive the **Extended Producers Responsibility credit** by **recycling 8 tonnes of banned single-use plastic items.**
- ❖ **Indore** has also been recognized recently as **India's cleanest city** for the **sixth consecutive year.**

8.11 INDIAN GREY HORNBILL

- ❖ In a rare sighting, the **Indian grey hornbill (Ocyrceros birostris)**, often found in urban settings, was recently sighted by a bird enthusiast from the Nature and Wildlife Forums in Koodapakkam, near **the Sankarabarani river in Puducherry.**

ABOUT GREY HORNBILL

- ❖ It is a common hornbill found on the Indian subcontinent.
- ❖ It is **commonly sighted in pairs.**
- ❖ The **male and female look similar.**
- ❖ It is **one of the few hornbill species found in urban areas in many cities** where they are able to make use of large trees in avenues.
- ❖ These birds are **known to be arboreal**, i.e. spend most of their time on tall trees, but may descend for food and to collect mud pellets for nesting.
- ❖ Protection status
 - ✓ IUCN red list- **Least Concern**

8.12 MUKURTHI NATIONAL PARK

- ❖ Tamil Nadu Forest Department has stepped up vigil around Mukurthi National Park in Nilgiris to curb poaching.

ABOUT MUKURTHI NATIONAL PARK

- ❖ It is located in the **northwest corner of Tamil Nadu** in the Western Ghats.
- ❖ It is part of the **Nilgiri Biosphere Reserve** along with **Mudumalai Wildlife Sanctuary, Bandipur National Park, Nagarhole National Park, Wayanad Wildlife Sanctuary and Silent Valley.**
 - ✓ **Nilgiri Biosphere Reserve** was the first Biosphere reserve of India and is a UNESCO world heritage site.
- ❖ It is also home to **Mukurthi Peak (2,554m)**, the **fourth highest peak** in the **Nilgiri Hills.**
- ❖ **Pykara and Kundah rivers** flow through the park along with several perennial streams that originate in the park and drain into the Bhavani Puzha.
- ❖ Flora includes **montane grasslands and shrublands** on a high altitude with **shola forests scattered around** along with **Rhododendron, raspberries and black berries etc.**
- ❖ The main faunal species of Mukurthi National Park is **Nilgiri Tahr (IUCN red list - Endangered)**. Other species like the **Royal Bengal Tiger, Sambar, Leopard, panthers, Nilgiri Marten, Barking Deer, Nilgiri Langur; jackals Asian Elephant** are also found.

8.13 SALSOLA OPPOSITIFOLIA DESFONTANIA

- ❖ A team of researchers from Gandhinagar-based Gujarat Ecological Education and Research (GEER) Foundation has discovered a new species of saltwort called **Salsola Oppositifolia Desfontania.**
- ❖ It is a **perennial shrub that grows in saline, arid to semi-arid environments** of the **Kutch district.**
- ❖ It belongs to the **family of Amaranthaceae.**
- ❖ It is a **perennial, succulent shrub that can grow one to two metres tall and have a smooth, cylindrical, woody base.**
- ❖ It is **rarely prostrate and unlike other species of Salsola, does not have any hairs.**
- ❖ As the name **oppositifolia** suggests, the **leaves of this plant grow opposite each other in the stem.**
- ❖ It is a **halophyte — a plant adapted to growing in saline conditions.**
- ❖ **Salsola oppositifolia Desfontania** is the **6th species of Salsola genus to be discovered in India.**
 - ✓ Previously, **Salsola kali, Salsola hatmanii, Salsola monopectera, Caroxylon imbricatum (Salsola baryosma) and Halogeton glomeratus (Salsola glomerata)** were recorded in India.
- ❖ **Salsola oppositifolia** is used as a **raw material for manufacturing soda ash.** He said that **other Salsola species are used in manufacturing lye and soaps.**

8.14 NATURE RESTORATION LAW

- ❖ **European Parliament** recently passed the Nature Restoration Law with an aim to repair damage done to Europe's nature by 2050.
- ❖ This act is an **initiative of European Commission** to protect nature and combat climate change and biodiversity loss.
- ❖ It is a **key part of the European Green Deal**, which seeks to implement some of world's most ambitious climate and biodiversity targets.
- ❖ It aims to
 - ✓ restore habitats and species covering 20% of land/sea areas by 2030.
 - ✓ reverse the decline of pollinator populations by 2030.
 - ✓ ensure no net loss of green urban spaces by 2030.
 - ✓ reduce use and risk of chemical pesticides by 50% by 2030.
- ❖ It allows for **30% of all former peatlands currently exploited for agriculture** to be restored by 2030. (raising to 70% by 2050)
 - ✓ **Peatland**, is a type of wetland, that forms over thousands of years from the remains of dead plants, storing more carbon than any other ecosystem.
- ❖ Globally, peatlands take up some 3% of the planet's land area — but absorb nearly twice as much carbon dioxide as all the Earth's forests combined.

8.15 STATE DISASTER RESPONSE FUNDS (SDRF)

- ❖ **Ministry of Finance** recently released an amount of Rs. 7,532 crore to 22 State Governments for the respective State Disaster Response Funds (SDRF).
- ❖ The amount has been released as per the recommendations of the Ministry of Home Affairs.

ABOUT SDRF

- ❖ The State Disaster Response Fund (SDRF) has been constituted in each State under Section 48 (1) (a) of the Disaster Management Act, 2005.
- ❖ The fund is the primary fund available with State Governments for responses to notified disasters.
- ❖ The Central Government contributes 75% to the SDRF in general States and 90% in North-East and Himalayan States.
- ❖ The annual Central contribution is released in two equal instalments as per the recommendation of the Finance Commission.
- ❖ The SDRF is to be used only for meeting the expenditure for providing immediate relief to the victims of notified calamities like cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack and frost & cold wave.
- ❖ Allocation of SDRF funds to the States is based on multiple factors like past expenditure, area, population, and disaster risk index.
 - ✓ These factors reflect States' institutional capacity, risk exposure, and hazard and vulnerability.

8.16 MODERATE RESOLUTION IMAGING SPECTRORADIOMETER (MODIS)

- Human-induced climate change has altered the colour of more than 56 per cent of the world's oceans in the last 20 years, according to a concerning study.
- The team analysed ocean colour measurements taken by the Moderate Resolution Imaging Spectroradiometer which has been monitoring ocean colour for 21 years.

ABOUT MODIS

- MODIS (or Moderate Resolution Imaging Spectroradiometer) is a key instrument aboard the Terra (originally known as EOS AM-1) and Aqua (originally known as EOS PM-1) satellites.

- The first MODIS instrument was launched by NASA on board the Terra satellite in December 1999, and the second was launched on Aqua in May 2002.
- Terra's orbit around the Earth is timed so that it passes from north to south across the equator in the morning, while Aqua passes south to north over the equator in the afternoon.
- It collects remotely sensed data used by scientists for monitoring, modelling, and assessing the effects of natural processes and human actions on the Earth's surface.
- Terra MODIS and Aqua MODIS are viewing the entire Earth's surface every 1 to 2 days, acquiring data in 36 spectral bands.
- MODIS takes measurements in seven visible wavelengths.

8.17 ATLANTIC MENHADEN

- ❖ The reason for declining reproduction rates of Osprey, a raptor species, is said to be the overfishing of Menhaden, a tiny fish of Atlantic system.

ABOUT ATLANTIC MENHADEN (BREVOORTIA TYRANNUS)

- ❖ It is also known as **Fatback, Bunker, Pogie, Mossback.**
- ❖ It is **found in coastal and estuarine waters from Nova Scotia to northern Florida.**
- ❖ They are **large in numbers by volume**, along the Atlantic Coast of the United States.
- ❖ Primarily **consume phytoplankton and zooplankton.**
- ❖ It can feed variety of organisms like –
 - ✓ **Fish - striped bass and weakfish.**
 - ✓ **Other marine animals - whales and dolphins.**
 - ✓ **Birds - Bald eagles, Great blue herons & brown pelicans.**
- ❖ They are a **major source of omega-3 fatty acids**, so they are used to develop human and animal supplements.
- ❖ Menhaden **isn't usually sold for food** as it has a **pungent flavor and is very bony.**
- ❖ **Threats**
 - ✓ Overfishing by commercial fishing industry for **their use in Food products like fish oil, fish meal etc.**
 - ✓ They are **also caught for their use as bait for crabs and lobsters.**
- ❖ IUCN Status - **Least Concern.**

8.18 HOOLOCK GIBBON

- ❖ The **conservation status of India's only ape** was a cause for concern at a global event on Hoolock gibbons held in China.
- ❖ **Gibbons, the smallest and fastest of all apes**, live in **tropical and subtropical forests in the southeastern part of Asia.**

ABOUT HOOLOCK GIBBON

- ❖ The **hoolock gibbon**, unique to India's northeast, is **one of 20 species of gibbons on Earth.**
- ❖ The **estimated population of hoolock gibbons is 12,000.**
- ❖ Like all apes, they are **extremely intelligent, with distinct personalities and strong family bonds.**
- ❖ **Threat-** primarily from the **felling of trees for infrastructure projects.**
- ❖ It is categorised into **Western Hoolock Gibbon and Eastern Hoolock Gibbon.**
 - ✓ **Interestingly Centre for Cellular and Molecular Biology (CCMB) in 2021 proved through genetic analysis that there is only one species of ape in India.**
 - ✓ **It debunked earlier research that the eastern hoolock gibbon was a separate species based on the colour of its coat.**
- ❖ The **eastern hoolock gibbon (Hoolock leuconedys)** found in a specific region of Arunachal Pradesh and the **western hoolock gibbon (Hoolock hoolock)** distributed elsewhere in the northeast.
- ❖ IUCN Red list categorises
 - ✓ the **western hoolock gibbon as 'endangered'** and

- ✓ the eastern hoolock gibbon as 'vulnerable'.

8.19 UMIAM DAM

- ❖ The Office of the Deputy Commissioner (DC) in **Ri Bhoi district, Meghalaya** had recently issued a warning to **residents living downstream of Umiyam Dam** that the water may be released any time in case there is further rise in water level in the reservoir above the safe level.

ABOUT UMIAM DAM

- ❖ The **Umiyam Dam**, also known as the **Barapani Dam**, is a **large reservoir located in the state of Meghalaya** in northeastern India.
- ❖ It is **situated on the Umiyam River**, a tributary of the **Brahmaputra River**.
- ❖ **Primary purpose** -To provide **hydroelectric power generation and supply drinking water to the region**. It serves as a **major water source for Shillong and its surrounding areas**.
- ❖ Umiyam Dam was **constructed in the early 1960s** as a part of the **Umiyam-Umtru Hydro-Electric Project**.
- ❖ It is a **concrete gravity dam**, standing at a height of approximately **55 meters** and having a length of about **1,009 meters**.
 - ✓ The Umiyam Dam has a hydroelectric power station with a total installed capacity of **2x30 megawatts**.
- ❖ The dam **creates a reservoir known as the Umiyam Lake**, which covers an area of about **220 sq km**.

8.20 GAMBUSIA FISH

- ❖ The **Andhra Pradesh government** has released approximately **10 million Gambusia fish** into the state's water bodies to **combat mosquito-borne diseases like malaria and dengue**.
- ❖ **Gambusia affinis** is **native to south-eastern United States**.
- ❖ Fish, also known as **mosquitofish**, is widely used as a **biological agent for controlling mosquito larvae**.
- ❖ **A single full grown fish eats about 100 to 300 mosquito larvae per day**.
- ❖ Multiple countries, including India have listed **Gambusia as invasive species**.
- ❖ Fish has a **high breeding capacity**. A single female may produce between **900 and 1,200 offsprings during its lifespan**.
- ❖ They are **known to eat the eggs of competing fishes and frog tadpoles**.
- ❖ Its high adaptability has allowed the fish to **survive on six out of seven continents** and has made the **International Union for Conservation of Nature declare Gambusia one of the 100 worst invasive alien species in the world**.

8.21 CICADAS

- ❖ Recently, a 'foreign' cicada that is commonly found in several parts of South India **has assumed an Indian identity**.
- ❖ The insect species that **has now been christened Purana cheeveeda** (after its Malayalam name Cheeveedu) **used to be mistaken for Purana tigrina**, a species that was first described in **Malaysia in 1850**.
- ❖ Cicadas are **hemipteran insects** known for **their loud, complex and species-specific acoustic signals or songs**.
 - ✓ **Hemipteran insects, also called true bugs, have mouthparts used for piercing and sucking and have two pairs of wings**.
- ❖ The **generic diversity of cicadas in India and Bangladesh ranks the highest in the world**, followed by **China**.
- ❖ Most cicadas are **canopy dwellers** and are found in **natural forests with large trees**.
- ❖ **Two types of cicadas commonly exist: annual cicadas and periodical cicadas**.
- ❖ They act as **indicators of a healthy forest ecosystem**.
- ❖ Environmental benefits of Cicadas - **valuable food source for birds, aerate lawns and improve water filtration into the ground, add nutrients to the soil etc**.

8.22 BURA CHAPORI WILDLIFE SANCTUARY

- ❖ A **violent clash** between forest team and illegal poachers was reported from Bura Chapori Wildlife Sanctuary.

ABOUT BURA CHAPORI WILDLIFE SANCTUARY

- ❖ It is **geographically located on southern bank of Brahmaputra in Sonitpur district of Assam.**
- ❖ It is a **part of Laokhowa wildlife sanctuary** (centrally located Protected Area of Assam) and is a **notified buffer of the Kazairanga Tiger reserve.**
- ❖ Recent efforts to safeguard the Bura Chapori Wildlife Sanctuary have led to the **recovery of around 16,000 bighas of land from illegal encroachers.**
- ❖ **Vegetation comprises of a mosaic of wet alluvial grassland, riparian and semi-evergreen forests dotted by wetland and river systems.**
- ❖ Fauna include **Great Indian one-horned rhinoceros, Tiger, Leopard, wild buffalo, hog deer, wild pigs, Bengal Florican, Black-necked Stork, Whistling Duck** etc.
- ❖ It is also considered an **ideal habitat for the Bengal Florican (Houbaropsis bengalensis).**

ABOUT BENGAL FLORICAN

- ❖ Restricted to **tiny fragments of grassland scattered across South and Southeast Asia**, the Bengal florican is **the world's rarest bustard.**
- ❖ IUCN Red List- **Critically Endangered**

8.23 GHARIAL

- ❖ **America's largest reptile sanctuary, The Phoenix Herpetological Society** has requested a permit to import **6 gharials and 6 crocodiles from Madras Crocodile Bank Trust.**

ABOUT GHARIAL

- ❖ Habitat- It is a **fresh-water crocodile** which lives in **deep fast-flowing rivers.**
- ❖ It has a **very long and narrow snout.**
- ❖ Globally Gharial is found **only in India and Nepal.**
- ❖ In India their **major population occur in three tributaries of the Ganga River: the Chambal and the Girwa Rivers in India and the Rapti-Naryani River in Nepal.**
- ❖ The **Gharial reserves** of India are located in three States – **Uttar Pradesh, Madhya Pradesh and Rajasthan.**
- ❖ Protection status
 - ✓ IUCN red list: **Critically endangered.**
 - ✓ Wildlife (Protection) Act, 1972: **Schedule I**
 - ✓ CITES: **Appendix I**

ABOUT MUGGER CROCODILE

- ❖ It is **mainly restricted to the Indian subcontinent** and is found in a **number of freshwater habitat types and also in coastal saltwater lagoons and estuaries.**
- ❖ It is **already extinct in Bhutan and Myanmar.**
- ❖ It is an **egg-laying and hole-nesting species, known to be dangerous.**
- ❖ **Threats** include **habitat destruction, fragmentation, and transformation, fishing activities and use of crocodile parts for medicinal purposes.**
- ❖ Protection Status:
 - ✓ IUCN red list: **Vulnerable**
 - ✓ CITES: **Appendix I**
 - ✓ Wildlife Protection Act, 1972: **Schedule I**

8.24 SRIVILLIPUTHUR MEGAMALAI TIGER RESERVE (SMTR)

- ❖ The forest department has identified 12 illegal, unauthorised or unrecognised resorts in SMTR.

ABOUT SRIVILLIPUTHUR MEGAMALAI TIGER RESERVE (SMTR)

- ❖ It is spread across the districts of Theni, Virudhunagar and Madurai in Tamil Nadu.
- ❖ It lies in the **Western Ghats region**.
- ❖ SMTR is the **country's 51st and 5th tiger reserve of Tamil Nadu**.
 - ✓ Other 4 include **Mudumalai, Anamalai, Sathyamangalam and Kalakkad Mundanthurai**.
- ❖ SMTR was **formed by combining Srivilliputhur Grizzled Giant Squirrel Sanctuary and Megamalai Wildlife Sanctuary**.
- ❖ It functions as a **connecting link between Kerala's Periyar Tiger Reserve and Tamil Nadu's Southern Kalakkad-Mundanthurai Tiger Reserve**.
- ❖ SMTR will provide protection to **Megamalai, the Vaigai River's primary catchment**, in turn helping **water levels to rise in the river**.
- ❖ **Vegetation is a blend of tropical evergreen and semi-evergreen forests, dry deciduous and moist mixed deciduous woods, and grasslands**.
- ❖ **Fauna includes elephants, tiger, leopard, nilgiri tahr, gaur, spotted deer, barking deer, sambar deer, wild boar, porcupine, nilgiri langur, lion-tailed macaque**.

8.25 SOLAR TECHNOLOGY APPLICATION RESOURCE CENTRE INITIATIVE

- ❖ India is **considering expanding its solar STAR-C initiative**, run by the International Solar Alliance, to a number of Pacific Island countries.
- ❖ India's **efforts will primarily be focused on economic development, connectivity and climate change**. The expansion of the STAR-C initiative will form a key part of that outreach.

ABOUT SOLAR TECHNOLOGY APPLICATION RESOURCE CENTRE [STAR C] INITIATIVE

- ❖ It is a **project to build STAR centres** which will act as **hubs of technology, knowledge, and expertise on solar energy**.
- ❖ The **International Solar Alliance (ISA)** and the **United Nations Industrial Development Organization (UNIDO)**, with **funding of the Government of France**, are implementing the project.
- ❖ The **overall objective** of the STAR-C initiative is to **create a strong network of institutional capacities** within **ISA Member States** to enhance **quality infrastructure (QI)** for the **uptake of solar energy product and service markets**, particularly in **least developed countries (LDCs)** and **small island developing states (SIDS)**.
- ❖ The programme **aims to boost solar power ecosystems in the poorest countries**.
- ❖ In the **Pacific**, it **currently runs in Tonga**.

8.26 INDIA CLIMATE ENERGY DASHBOARD (ICED) 3.0

- ❖ **NITI Aayog** released the **India Climate Energy Dashboard (ICED) 3.0** recently.
- ❖ The ICED is the **country's one-stop platform for near real-time data** on the **energy sector, climate, and related economic datasets** based on government published sources.
- ❖ Developed as a user-friendly platform, **ICED 3.0 enables users to freely access and analyse datasets using an analytical engine**.
- ❖ It will **facilitate insights and enhance understanding about the energy and climate sectors** while identifying the key challenges.
- ❖ The Portal will draw insights from the available data parameters and hence immensely useful in monitoring the progress of India's clean energy transition journey.
- ❖ This dashboard **offers more than 500 parameters, over 2000 infographics, and a number of interactive visualizations**, allowing users to gain a holistic understanding of India's energy sector.

8.27 INDRAVATI TIGER RESERVE

- ❖ Chhattisgarh Forest Department has so far arrested 39 persons for poaching in Indravati Tiger Reserve.

ABOUT INDRAVATI TIGER RESERVE

- ❖ The tiger reserve is located in the Bijapur district, Chhattisgarh.
- ❖ The perennial river 'Indravati' forms the boundary of the reserve on the Northern and Western side.
- ❖ Indravati TR attained the status of a national park in 1981 and a tiger reserve in 1983 under Project Tiger.
- ❖ It is home to one of the last remaining populations of the 'endangered' wild water buffalo.
- ❖ The topography of the park mainly comprises undulating hilly terrain.
- ❖ The vegetation is mainly of the tropical moist and dry deciduous type with common species including teak, achar, karra, kullu, shisham, semal, haldu, arjun, bel and Jamun.
- ❖ Fauna- It is home to gaur (Indian bison), nilgai, blackbuck, chausingha (four-horned antelope), sambar, chital, Indian muntjac, Indian spotted chevrotain, wild boar, tigers, leopards, sloth bears, dholes (wild dog) and striped hyenas.

8.28 WHITE'S SEAHORSES

- ❖ Australia's 'seahorse hotels' are set up aimed to save endangered species.
- ❖ Made from biodegradable metal, the eight new hotels installed will provide much needed homes for the endangered seahorses.
- ❖ Designed to mimic discarded crab traps, a common home for seahorses, the hotels are installed at least a month before the release, to allow the accumulation of algae, sponges and other marine fouling.
- ❖ Over the years, the metal breaks down and disappears, leaving behind a semi-natural reef, benefiting not only the seahorses but the broader ecosystem of the harbour.
- ❖ The Sydney Seahorse Project is a collaboration between the Sydney Institute of Marine Science, the University of Technology Sydney and the New South Wales (NSW) Department of Primary Industries, which focuses on the conservation of the species.

ABOUT WHITE'S SEAHORSES

- ❖ White's Seahorses are endemic to the waters surrounding Australia's east coast and were classified as 'endangered' on the IUCN Red List in 2017 due to loss of habitat.
- ❖ The species was named after John White, Surgeon General to the First Fleet.
- ❖ Seahorses are often considered a flagship species for conservation.

8.29 LUDWIGIA PERUVIANA

- ❖ Ludwigia peruviana is an invasive weed that is threatening elephant habitats and foraging grounds in Valaprai, Tamil Nadu.
- ❖ It has infested the majority of the hill station's swamps, locally known as vayals.
- ❖ It is popularly called primrose willow and is a native of Central and South America including Peru.
- ❖ It was probably introduced as an ornamental plant for its tiny yellow flowers.
- ❖ It grows fast along water bodies and is among the 22 priority invasive plants in Tamil Nadu.
- ❖ It mainly spreads along the swamps in the middle of the tea estates and forms thickets.
 - ✓ These swamps are known for excellent grass covers, sedges and water sources that are very good for herbivores like gaur and elephant in particular.
- ❖ Ludwigia poses a unique challenge as it grows in swamps and there is little scope to use machinery which may further destroy the ecosystem.
- ❖ Even if Ludwigia is pulled out manually, the soft plant easily breaks and it spreads again from the root or broken stems that fall in the swamp.

8.30 MERI MAATI MERA DESH CAMPAIGN

- ❖ The Union government has launched the Meri Maati, Mera Desh campaign.

- ❖ It is envisaged as a **culminating event of the Azadi Ka Amrit Mahotsav celebration.**
- ❖ Under the campaign, **soil collected from different parts of the country will be used to develop a garden along the Kartavya Path** in Delhi.
- ❖ Events have been **planned at the panchayat, village, block, urban local body, and State and national levels, respectively.**
- ❖ The five-point agenda includes the installation of a **shilaphalakam (memorial plaque), bearing the names of those who have made the supreme sacrifice.**
- ❖ For this purpose, **veers (bravehearts) include freedom fighters, defence personnel, CAPF personnel, and State Police.**

8.31 SILVOPASTURE

- ❖ Silvopasture is an **ancient and proven practice that harmoniously integrates trees, forage and livestock on the same land.** By combining these elements, silvopasture **brings numerous environmental advantages,** including improved local climate resilience.
- ❖ Moreover, the **trees on silvopasture lands act as natural carbon sinks,** sequestering significantly **5-10 times more carbon than pastures without trees,** all while maintaining or enhancing productivity.
- ❖ Silvopasture systems **also regulate local climatic conditions, buffering against temperature and wind extremes, providing a favourable living environment for livestock.**
- ❖ Moreover, the **extensive root systems of trees within silvopasture plots contribute to nutrient cycling, improved soil stability and quality, while effectively combating erosion.**
- ❖ **Soil infiltration rates in silvopasture systems surpass those of open pastures,** enhancing water storage potential.
- ❖ A study revealed that more than 70 % of deforestation in South America was driven by an increased demand for pasture. Thus **Silvopasture provides a sustainable alternative**

8.32 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

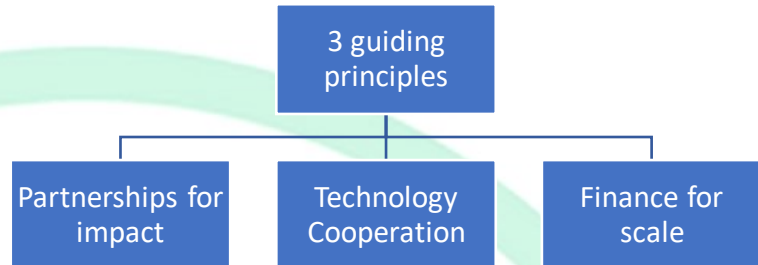
- ❖ **James Ferguson 'Jim' Skea of the United Kingdom** was elected as the **new chair of the Intergovernmental Panel on Climate Change (IPCC).**
- ❖ Skea is Professor of Sustainable Energy at **Imperial College in London.**
- ❖ He will **lead the IPCC through its seventh assessment cycle.**

ABOUT IPCC

- ❖ It is an **intergovernmental organization** created by the **World Meteorological Organization (WMO)** and the **United Nations Environment Programme (UNEP)** in **1988.**
- ❖ It aims **to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.**
- ❖ It is the **UN body for assessing the science related to climate change.**
- ❖ HQ- **Geneva, Switzerland.**
- ❖ It has **195 members.**
- ❖ The main activity of the IPCC is the **preparation of reports assessing the state of knowledge of climate change.** These include **assessment reports, special reports and methodology reports.**
 - ✓ However, **IPCC does not itself engage in scientific research.**
- ❖ It comprises **3 working groups-**
 - ✓ **Working Group I:** looks at the **physics of climate change;**
 - ✓ **Working Group II:** examines **climate change impacts and adaptation;**
 - ✓ **Working Group III:** focuses on **climate change mitigation;**
 - ✓ The **three separate reports** prepared by three working groups are **later compiled into a synthesis report.**
- ❖ The IPCC was awarded the **Nobel Peace Prize in 2007.**

8.33 RESOURCE EFFICIENCY CIRCULAR ECONOMY INDUSTRY COALITION (RECEIC)

- ❖ RECEIC was launched recently on the sidelines of the 4th G-20 Environment and Climate Sustainability Working Group (ECSWG) and Environment and Climate Ministers' meeting in Chennai.
- ❖ Conceptualized under India's G20 Presidency, RECEIC is an industry-driven initiative aimed at promoting resource efficiency and circular economy practices globally.
- ❖ The government would only play a supporting role.
- ❖ 39 companies headquartered in 11 different countries have joined the coalition as its founding members.
- ❖ The MNCs from sectors such as steel, FMCG, electronics came together to pledge to adopt resource efficiency and circular economy principles to address environmental challenges rising from waste, including plastics, microplastics, e-waste, and chemical waste.
- ❖ The coalition is envisioned to be a self-sustaining entity that will continue to operate beyond India's G20 Presidency, making a lasting impact on environmental sustainability.
- ❖ As a collaborative platform, RECEIC aims to facilitate knowledge-sharing, best practice sharing, and sustainable practices among the participating industries.



8.34 PROJECT TIGER AND PROJECT ELEPHANT MERGED

- ❖ As per an order on June 23, 2023— Project Tiger and Project Elephant have been merged, meaning a common allocation will fund both beginning this year.
- ❖ The merger was announced in April 2023.
- ❖ A new division, 'Project Tiger and Elephant Division,' has been notified under the Ministry of Environment, Forest and Climate Change (MoEFCC).
- ❖ The staff and divisional heads of Project Elephant (PE) will now report to the additional director general of forests (ADGF), Project Tiger (PT), who has now been designated as ADGF (PT&E).

International Tiger Day has been observed annually on July 29th since its inception in 2010 during the Saint Petersburg Tiger Summit.

PROJECT TIGER

- ❖ Launched in 1973, Project Tiger is probably one of the most successful species conservation programmes in the world.
- ❖ Started with 9 tiger reserves, today the Project Tiger has 53 tiger reserves spread over 75,000 km and more than 70 per cent of the world's wild tigers are thriving in Indian forests.
- ❖ Precursor for the launch of other species conservation projects such as Project Elephant and recently Project Lion and Project Cheetah.
- ❖ Implementing Agency: National Tiger Conservation Authority, which is a statutory body.

PROJECT ELEPHANT

- ❖ It was launched in 1992 as a Centrally Sponsored Scheme by MoEFCC.
- ❖ Aims to provide financial and technical support to major elephant-bearing States in the country.

9. POLICY AND PROGRAMME

9.1 E-SARAS MOBILE APP

- ❖ **Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM)** has launched **eSARAS mobile App**.
- ❖ It is an **e-commerce mobile app** will be used as a **more effective platform for marketing of the products made by women of self-help groups**.
- ❖ **eSARAS fulfillment centre** will be used for **processing, packaging and shipping of products** that customers purchase through eSARAS Portal and eSARAS mobile App.

ABOUT DAY-NRLM SCHEME

- ❖ **Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM)** is the flagship program of the **Ministry of Rural Development**.
- ❖ Its aim is **poverty reduction through building strong institutions for the poor, particularly women**, and enabling these institutions to access a range of financial services and livelihoods.
- ❖ Under this, **at least one woman member from each identified rural poor household**, is to be **brought under the Self Help Group (SHG) network** in a time bound manner.
- ❖ All households identified as poor through the **Participatory Identification of Poor (PIP) process** is the NRLM Target Group and is **eligible for all the benefits under the programme**.
- ❖ NRLM provides **Revolving Fund (RF) and Community Investment Fund (CIF) as resources in perpetuity to the institutions of the poor**, to strengthen their institutional and financial management capacity.

9.2 ANNAPURTI

- ❖ A demonstration of the **Automated Multi-Commodity Grain Dispensing Machine – ‘Annapurti’** developed by the **UN World Food Programme (UN-WFP)** and **Automatic Grain Analyzers** developed for automated quality checking of grains was conducted recently.

ABOUT ANNAPURTI

- ❖ GrainATM, Annapurti, is an automated multi-commodity dispensing solution that provides fast, clean, and precise access to commodities (rice, wheat, grains) to beneficiaries, post biometric authentication.
- ❖ It has been **developed by World Food Programme (WFP) India**.
- ❖ GrainATM ensures **24x7 access to full entitlements for people entitled to monthly subsidized grains** through India's **Public Distribution System**.
- ❖ Annapurti, which **dispenses the type and quantity of the selected grain** (wheat, rice or millet) commodity to **each beneficiary after biometric authentication**, does away with the possibility of spillage, waste and short-weighing.
- ❖ It leads to a **reduction in waiting time of up to 70%**.
- ❖ It can **dispense one or two grain commodities**, up to **50 kgs in five minutes**, with an error rate of **0.01%**.
- ❖ It is **easily assembled** and **designed to consume only 0.6 Watt per hour**.
- ❖ It can also be attached to solar panels, inverter batteries and elevators for automatic refilling.

9.3 NESDA PORTAL

- ❖ The **Department of Administrative Reforms & Public Grievances (DAPRG)** has recently launched the third edition of the NeSDA portal.
- ❖ The 2023 framework also proposes to **evaluate the e-Governance at the City level** by assessing City Portal.

About National e-Governance Service Delivery Assessment (NeSDA) Portal

- ❖ NeSDA framework was launched in August **2018**.

- ❖ **Objective-** To measure the depth and effectiveness of existing e-Governance service delivery mechanisms.
- ❖ This framework is based on the **Online Service Index (OSI)** of **UN eGovernment Survey**.
- ❖ The framework covers **six sectors, Finance, Labour & Employment, Education, Local Government & Utilities, Social Welfare (including Agriculture & Health) and Environment (including Fire) sectors**.
- ❖ The Department has **successfully released 2 editions of NeSDA study**, viz., NeSDA 2019 and NeSDA 2021.
- ❖ **Improvement in the country's e-Governance landscape** due to last 2 editions of NESDA study may be summarized in the following key take aways:
 - ✓ **Increase in e-Service Delivery**
 - ✓ **Rise in use of Integrated / Centralized Portals for delivery of e-Services**
 - ✓ **Improvement across assessment parameter scores**
- ❖ DARPG undertakes NeSDA study **biennially**.
- ❖ This study **assesses States, Union Territories (UTs), and focus Central Ministries** on the effectiveness of e-Governance service delivery.
- ❖ NeSDA helps the **respective governments improve their delivery of citizen centric services** and **shares best practices across the country** for all States, UTs and Central Ministries to emulate.

9.4 SAMARTH SCHEME

- ❖ The Textiles Ministry recently revealed that **43 new implementing partners** have been empanelled under the **SAMARTH scheme** with an **additional training target of 75,000 beneficiaries** and **5% increment in support to implementing partners**.
- ❖ **Scheme for Capacity Building in Textiles Sector (SAMARTH)** is a **demand driven and placement-oriented umbrella skilling programme** of Ministry of Textiles.
- ❖ The implementation period of the scheme has been **extended up to March 2024**.
- ❖ More than **85% of the beneficiaries trained** so far under the scheme **are women**.
- ❖ More than **70% of the beneficiaries trained in organized sector courses** have been provided **placement**.
- ❖ **Objectives**
 - ✓ To provide **demand-driven, placement-oriented skilling programmes** to incentivize the efforts of the industry in creating jobs in the organized textile and related sectors.
 - ✓ **To promote skilling and skill up-gradation** in the traditional sectors such as handloom, handicraft, silk and jute.
 - ✓ To **provide livelihood to all sections of the society** across the country.
- ❖ Under this scheme **skilling programme is implemented through**:
 - ✓ **Textile Industry**.
 - ✓ **Institutions/Organizations of the Ministry of Textiles/State Governments** having training infrastructure and placement tie-ups with the textile industry.
 - ✓ **Reputed training institutions/ NGOs/ Societies/ Trusts/ Organizations/ Companies /Start-Ups / Entrepreneurs active in the textile sector** having placement tie-ups with the textile industry.

9.5 ONGC GETS ABMS CERTIFICATION

- ❖ **Oil and Natural Gas Corporation (ONGC)** has made history by **becoming the first Central Public Sector Enterprise (CPSE)** in India to receive certification for its **Anti-Bribery Management System (ABMS)**.
- ❖ The certification was awarded by the **internationally accredited certification body InterCert USA**.
- ❖ ONGC was **also the first organization in India to adopt the Integrity Pact (IP)** initiated by **Transparency International** in 2005.

9.6 PRADHAN MANTRI BHARTIYA JANAUSHADHI PARIYOJANA

- ❖ The **product basket of Pradhan Mantri Bhartiya Janaushadhi Pariyojana** has increased to **1,800 medicines and 285 Surgical equipment**.
- ❖ These products are available at **50 to 90 % lower prices** compared to the market.

- ❖ Also the Government has decided to **open 10,000 Jan Aushadhi Kendras by 31st December 2023** in the country. A **total 9512 Jan Aushadhi Kendras** have been opened across the country till 30th June 2023.

ABOUT PRADHAN MANTRI BHARTIYA JANAUSHADHI PARIYOJANA

- ❖ **PMBJP** was launched as **“Jan Aushadhi Scheme”** by Department of Pharmaceuticals in 2008 with objective of making quality generic medicines available at affordable prices to people.
- ❖ **Pharmaceuticals & Medical Devices Bureau of India (PMBI)**, erstwhile Bureau of Pharma PSUs of India (**BPPI**) is implementing agency of PMBJP.
 - ✓ It **regularly analyses various trends of the market** and based on the analysis, includes medicines and other products to sell through these Kendras at affordable prices.
- ❖ Nodal Ministry: – **Ministry of Chemicals & Fertilizers.**
- ❖ **Objectives**
 - ✓ To make **available quality medicines, consumables and surgical items** at affordable prices for all.
 - ✓ To **popularise generic medicines** among the masses.
 - ✓ To ensure **easy availability of the menstrual health services** (Janaushadhi ‘Suvidha’ sanitary napkins)
 - ✓ **Generate employment** by engaging individual entrepreneurs in the opening of PMBJP Kendras.

10. INDEX AND REPORTS

10.1 ENERGY TRANSITION INDEX 2023

- ❖ It is released by **World Economic Forum (WEF).**
- ❖ **ETI benchmarks the countries on the performance of their energy systems**, and also their **readiness to secure sustainable energy systems.**
- ❖ **Sweden topped the list and was followed by Denmark and Norway.**
- ❖ **India jumped 20 places and is ranked 67th** out of 120 countries
- ❖ **India is the only major economy with energy transition momentum accelerating across all the Index’s dimensions** namely equitable, secure and sustainable transitions.
- ❖ **Only 55 countries, including India, have improved their scores by more than 10% points.**

Other major reports published by WEF include

- **Global Competitiveness Report.**
- **Global Gender Gap Report.**
- **Global Risk Report.**
- **Global Travel and Tourism**

ABOUT WORLD ECONOMIC FORUM

- ❖ It is a **Swiss non-profit foundation, founded by Klaus Schwab in 1971.**
- ❖ WEF is based in **Cologny-Geneva, Switzerland.**
- ❖ Recognized by the Switzerland government as the **International Institution for public-private cooperation.**

10.2 PANCHAYAT DEVELOPMENT INDEX

- ❖ It is released by **Ministry of Panchayati Raj.**
- ❖ It provides a **matrix to monitor and evaluate the progress of panchayats through the scores achieved by them.**
- ❖ 9 themes- **Poverty-free, Healthy, Child-friendly, Water-sufficient, Clean and green, Self-sufficient, Socially just and secure, Well-governed, and Women-friendly.**
- ❖ It ranks panchayats on the basis of scores, and categorize them into four grades. Grades include
 - ✓ **A (75 to 90%),**
 - ✓ **B (60-75%),**
 - ✓ **C (40-60%) and**
 - ✓ **D (under 40%).**

10.3 WORLD INVESTMENT REPORT 2023

- ❖ World Investment Report was recently released by United Nations Conference on Trade and Development (UNCTAD).

MAJOR FINDINGS

- ❖ Global **foreign direct investment (FDI)** fell **12%** in 2022.
- ❖ **India and ASEAN** were the most buoyant recipients of the FDI, with **increases of 10 and 5%, respectively.**
- ❖ **FDI inflows in Asia** were **highly concentrated**, with **5 economies- India, China, Singapore, Hong Kong, and the UAE** , accounting for **nearly 80% of the total investment.**
- ❖ FDI inflows were **higher in developing countries compared with those in developed economies.**
- ❖ **Inflows in many smaller developing countries were stagnant**, and **FDI to the least developed countries (LDCs) declined.**
- ❖ Much of the **growth in international investment in renewable energy** has been concentrated in **developed countries.**
- ❖ **Annual investment deficit** that developing countries face as they work to achieve the Sustainable Development Goals (SDGs) by 2030, is now about **\$4 trillion per year.**
- ❖ The **largest gaps are in energy, water and transport infrastructure.**

Other reports published by the UNCTAD

- ❖ Trade and Development Report,
- ❖ The Least Developed Countries Report.
- ❖ Information and Economy Report
- ❖ Technology and Innovation Report
- ❖ Commodities and Development Report

ABOUT THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

- ❖ **UNCTAD** is a **permanent inter-governmental body** established by the **United Nations General Assembly in 1964.**
- ❖ Headquarters: **Geneva, Switzerland.**
- ❖ **Members:** 195 countries
- ❖ It is **responsible for dealing with development issues, particularly international trade.**
- ❖ **Framing policies** in various domains such as **trade, technology, finance, aid, and transport are the most important priorities of UNCTAD.**
- ❖ The Conference usually meets **once in four years.**
 - ✓ India hosted the **second UNCTAD Conference in 1968, at New Delhi.**

10.4 GLOBAL PEACE INDEX

- ❖ The world has become a little less safe than last year, as reported by **Institute of Economics and Peace** in its flagship **Global Peace Index 2023 report.**
- ❖ The 17th edition of the GPI ranked **163 independent states and territories**, comprising **99.7% of the world's population**, according to their level of peacefulness.
- ❖ It measures the state of peace across three domains:
 - ✓ **Societal safety and security;**
 - ✓ **Ongoing domestic and international conflict;**
 - ✓ **Militarization.**

MAJOR FINDINGS

- ❖ The average level of **global peacefulness deteriorated by 0.42%.**
- ❖ Top 5- **Iceland** is the **most peaceful country in the world** – a title it has held **since 2008.**
 - ✓ It is **accompanied at the top by Denmark, Ireland, New Zealand, and Austria.**
- ❖ **Bottom 5- Afghanistan** is the **least peaceful country** in the world for the eighth consecutive year.
 - ✓ It is **followed by Yemen, Syria, South Sudan, and the Democratic Republic of the Congo.**
- ❖ **India** has occupied the **126th spot in the rankings**, two higher than its previous position.

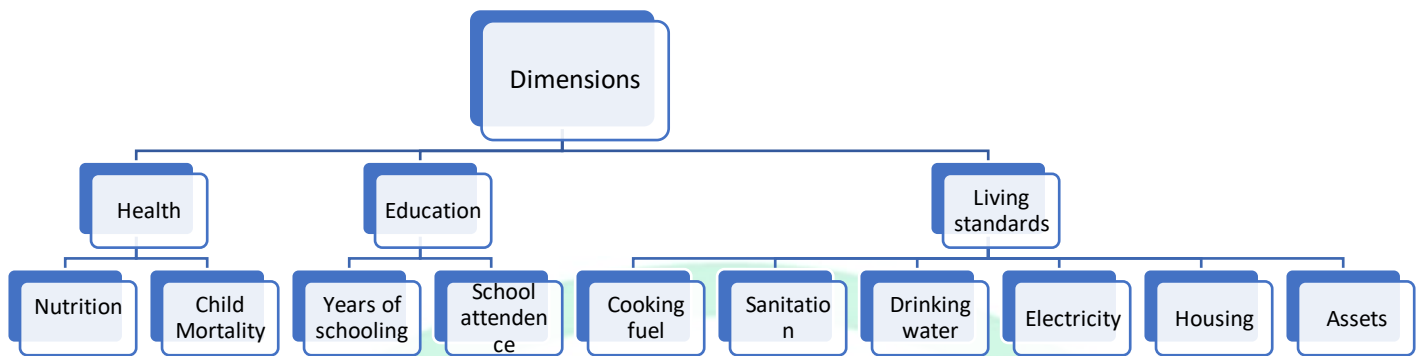
- ❖ The report stated that **India experienced an improvement of 3.5 per cent in overall peacefulness over the past year**, owing to improvements in violent crime, neighbouring countries' relations, and political instability.
- ❖ Among other countries, **Nepal, China, Sri Lanka, United States of America, and Pakistan**, and have been ranked **79, 80, 107, 131, 146, respectively**.

10.5 PERFORMANCE GRADING INDEX 2.0

- ❖ **Performance Grading Index 2.0**, for the year 2021-22, was recently released by **Ministry of Education for States/UTs**.
- ❖ Performance Grading Index (PGI) is a **tool to provide insights on the status of school education in States and UTs** including key levers that drive their performance and critical areas for improvement.
- ❖ **The first PGI** was released in **2017-18**.
- ❖ **Department of School Education and Literacy (DoSEL)** has designed the PGI to catalyse transformational change in the field of school education.
- ❖ The PGI evaluation **classifies States and UTs into grade/ levels**, as opposed to ranking.
- ❖ The PGI 2.0 structure **comprises of 1000 points** across **73 indicators** grouped into **2 categories** viz., **Outcomes, Governance Management (GM)**.
- ❖ These categories are further **divided into 6 domains**, viz.,
 - ✓ **Learning Outcomes (LO)**,
 - ✓ **Access (A)**,
 - ✓ **Infrastructure & Facilities (IF)**,
 - ✓ **Equity (E)**,
 - ✓ **Governance Process (GP) &**
 - ✓ **Teachers Education and Training (TE&T)**.
- ❖ PGI 2.0 **aims to propel States & UTs towards undertaking multi-pronged interventions** to achieve **optimal education outcomes** in terms of improving quality.
- ❖ PGI 2.0 is aligned with **new initiatives of National Education Policy (NEP) 2020**, to monitor indicators relating to **Goal 4 of Sustainable Development Goals**.
- ❖ PGI 2.0 classified states/UTs into **10 grades**, where **highest achievable grade is 'Daksh'** and **lowest grade is 'Akanshi-3'**.
- ❖ Grades have been **aligned with the PGI - District to have uniformity and better comparability**.
- ❖ In PGI 2.0, the **data source for many of the indicators** has been the data from **UDISE+ and the grades** have been aligned with the PGI - District to have uniformity and better comparability.
- ❖ **Chandigarh and Punjab** have been **adjudged the best performers**.
 - ✓ Both fall in the 6th grade – **Prachesta 2 (score 641-700)**
- ❖ The 3 **poorest performing States/UTs Akanshi – 3** in PGI 2.0 are **Arunachal Pradesh, Meghalaya and Mizoram**.

10.6 GLOBAL MULTI-DIMENSIONAL POVERTY INDEX

- ❖ **Global Multi-Dimensional Poverty Index 2023** titled – '**Unstacking global poverty: Data for high impact action**' was recently released by **United Nations Development Program (UNDP)** and **Oxford Poverty and Human Development Initiative (OPHI)**.
- ❖ The index is designed to **measure acute poverty, understood as a person's inability to meet minimum internationally agreed standards**.
- ❖ It focuses on **SDG 1, i.e. ending poverty in all its form**.
- ❖ The MPI tracks **deprivations in 10 indicators across 3 dimensions for 110 countries**.
- ❖ It was **first launched in 2010**.



MAJOR FINDINGS

- ❖ **25 Countries** have halved **Multidimensional Poverty** within **15 Years**.
- ❖ About **1.11 Billion** of total population of **6.6 Billion** in **110 countries** (near **18%**) remains **Multidimensionally poor**.
- ❖ **Sub Saharan Africa and South Asia** are home to approximately five out of every six poor people.
- ❖ Nearly **two-thirds** of all poor people (**730 million**) live in **middle-income countries**, and **low-income countries** constitute only **10%** of MPI.

WITH RESPECT TO INDIA

- ❖ **India** is one of the **25 nations** that halved its **multidimensional poverty** within 15 years.
- ❖ India still has more than **230 million** people who are poor.
- ❖ Almost **415 million** poor people moved out of poverty from **2005-06 to 2019-21**.
- ❖ Incidence of poverty declined significantly from **55.1% to 16.4%** over the same period.
- ❖ India progressed significantly in all the three deprivation indicators: Health, Education, Standard of living.
- ❖ The **poorest states and groups, including children and people in disadvantaged caste groups**, had the fastest absolute progress.

10.7 EXPORT PREPAREDNESS INDEX

- ❖ **NITI Aayog** in association with **Institute for Competitiveness**, released the **third edition** of the report titled '**Export Preparedness Index (EPI) 2022**' for States/UTs of India.
- ❖ The **overview of the four pillars** in the index is –
 - ✓ **Policy Pillar** evaluates states and UTs' performance based on its adoption of export-related policy ecosystem at a state and district level as well as the institutional framework surrounding the ecosystem.
 - ✓ **Business Ecosystem** assesses the prevailing business environment in a state/UT, along with the extent of business-supportive infrastructure, and a state/UTs' transport connectivity.
 - ✓ **Export Ecosystem** focuses on the export-related infrastructure in a state along with the trade support provided to the exporters, and the prevalence of Research and Development in the state to foster innovation.
 - ✓ **Export Performance** is an output-based indicator which gauges the growth of a state's export over the previous year and analyses its export concentration and footprint on the global markets.
- ❖ **States are classified** as: **coastal, landlocked, Himalayan, and UTs/small states**.

MAJOR FINDINGS

- ❖ **Most 'Coastal States'** performed well, with **Tamil Nadu, Maharashtra, Karnataka** being top-performers.
- ❖ **Haryana, Uttarakhand and Goa** topped under **landlocked, Himalayan, and UTs/small states** categories respectively.
- ❖ Over **99% districts** are covered under '**One District One Product**' scheme.

- ❖ Ten commodities (engineering goods, petroleum products etc) accounting for nearly 80% of India's total exports.
- ❖ **Among export districts, Jamnagar in Gujarat topped the chart which was followed by Surat and Mumbai Suburban.**
- ❖ **100 districts in the country are responsible for nearly 87 percent of the country's export.**
- ❖ **49% of India's exports go to only ten destinations.**

10.8 GLOBAL EDUCATION MONITORING REPORT, 2023

- ❖ **UNESCO** recently released the **Global Education Monitoring Report, 2023.**
- ❖ The report has been titled **"Technology in education: a tool on whose terms?"**

MAJOR FINDINGS

POSITIVES

- ❖ **Digital technology** has dramatically increased access to teaching and learning resources like digital libraries, educational portals e.g National Digital Library of India.
- ❖ Technology in Education such as radio and mobile phones, has opened up opportunities for hard-to-reach populations.
- ❖ **Online learning became a lifeline for almost 1 billion students** during the COVID-19 school closures.
- ❖ Technology has opened up opportunities for learners with disabilities by reducing barriers to learning.
- ❖ **Digital literacy and critical thinking are now increasingly important**, particularly with the growth of generative AI.

NEGATIVES

- ❖ It showed that **higher screen time** was associated with **poorer well-being; less curiosity, self-control and emotional stability; higher anxiety; and depression diagnoses**".
- ❖ It highlighted that **"mere proximity to a mobile device was found to distract students and to have a negative impact on learning in 14 countries."**
- ❖ Access to the internet and digital devices remains highly unequal, especially in low-income and marginalized communities.
- ❖ Another major concern around the **indiscriminate use of digital technology in education was children's privacy.**
- ❖ The Report has endorsed banning smartphones in schools.

10.9 GLOBAL CLIMATE LITIGATION REPORT- STATUS REVIEW

- ❖ The report, **Global Climate Litigation Report: 2023 Status Review**, was published by the **United Nations Environment Programme (UNEP)** and the **Sabin Center for Climate Change Law at Columbia University.**
- ❖ The report provides an overview of key climate litigation cases from the past two years (2020–2022 period).
- ❖ It shows that the **number of lawsuits over climate change has more than doubled since 2017**, showing that climate litigation is becoming an integral part of securing climate action and justice.
 - ✓ **Climate change litigation** includes cases that raise material issues of law or fact relating to climate change mitigation, adaptation or the science of climate change.
- ❖ While most cases have been brought in the US, climate litigation is taking root all over the world, with about **17% of cases now being reported in developing countries, including the Small Island Developing States.**
- ❖ These legal actions were brought in 65 bodies worldwide: International, regional and national courts, tribunals, quasi-judicial bodies and other adjudicatory bodies, including special procedures of the UN and arbitration tribunals.

11. INTERNATIONAL, SUMMITS

11.1 SCO SUMMIT HELD

- ❖ India chaired the Shanghai Cooperation Organization (SCO) **Heads of State Council Meeting** virtual Summit recently.
- ❖ The theme of India's chairpersonship of SCO is '**Towards a SECURE SCO**'.
 - ✓ **SECURE** stands for **S: Security, E: Economic development, C: Connectivity, U: Unity, R: Respect for sovereignty and territorial integrity, E: Environmental protection.**

MAJOR HIGHLIGHTS

- ❖ **Iran** officially joined the SCO as the **9th Member Country**.
- ❖ **New Delhi Declaration** was signed by member nations **to counter activities of terrorist, separatist and extremist groups, preventing spread of religious intolerance, aggressive nationalism, ethnic and racial discrimination, xenophobia** etc.
- ❖ India **refused to be part of the BRI (Belt and Road Initiative)** of the SCO members' economic strategy statement, mentioning "interested member states".
- ❖ Members agreed to declare **2024** as the **SCO Year of Environment**.
- ❖ Statement on Cooperation in Digital Transformation to unlock full potential of digitalization across all sectors of the economy.
- ❖ India has created **five new pillars and focus area for cooperation** in the SCO, which include,
 - ✓ **Startups and Innovation**
 - ✓ **Traditional Medicine**
 - ✓ **Youth Empowerment**
 - ✓ **Digital Inclusion**
 - ✓ **Shared Buddhist Heritage**
- ❖ Earlier, **Varanasi** was declared **first tourism and cultural capital of SCO**.

11.2 ICJ

- ❖ **Canada, Sweden, Ukraine and Britain** have asked the **International Court of Justice (ICJ)** to **open proceedings against Iran** over the **shooting down of a Ukrainian passenger plane** in 2020 that killed all 176 people on board.

ABOUT INTERNATIONAL COURT OF JUSTICE (ICJ)

- ❖ ICJ was **established in 1945 by the United Nations charter** and **started working in April 1946**.
- ❖ **ICJ**, also known as the **World Court**, is the **principal judicial organ of the UN**.
- ❖ It is situated at the **Peace Palace in The Hague (Netherlands)** and is the **only one of six principal organs of the United Nations, not located in New York (USA)**.
- ❖ ICJ is composed of **15 judges**, who are **elected for terms of office of 9 years by UNGA and UNSC**.
- ❖ ICJ entertain 2 types of cases:
 - ✓ **legal disputes between States** submitted to it by them (**contentious cases**) and
 - ✓ requests for **advisory opinions on legal questions** referred to it by United Nations organs and specialized agencies (advisory proceedings).
- ❖ Members- **193 state parties** (including India)

11.3 STARTUP20 TORCH HANDOVER TO BRAZIL

- ❖ The closing ceremony of **The Startup20 Shikhar Summit**, organized by the Startup20 Engagement Group under the India G20 Presidency, in **Gurugram**, witnessed the official torch handover to **Brazil**, the **next G20 presidency country**, which committed to **continuing the Startup20 initiative in 2024**.

11.4 FIRST OVERSEAS IIT CAMPUS

- ❖ The **first IIT campus outside** the country **will be set up in Tanzania** following the signing of an **agreement between the both sides of education authorities**.
- ❖ The **IIT campus** will be set up in **Zanzibar** under the name **IIT Madras at Zanzibar (Tanzania)**.

11.5 CHEMICAL WEAPONS CONVENTION

- ❖ **US Department of Defense** announced recently that the **last of the country's "obsolete" stockpile of chemical weapons was safely destroyed**, meeting **commitments that were ratified in 1997's Chemical Weapons Convention**.
- ❖ **US and the Soviet Union** agreed in principle in 1989 to destroy their chemical weapons stockpiles and later the **US ratified the Chemical Weapons Convention (CWC) in 1997**.

ABOUT CWC

- ❖ It is the **world's first multilateral disarmament agreement** to provide for the **elimination of an entire category of weapons of mass destruction** within a **fixed time frame**.
- ❖ It has **192 state parties and 165 signatories including India**.
- ❖ It is **administered by the Organisation for the Prohibition of Chemical Weapons (OPCW)**.

ABOUT ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS

- ❖ It is an **international organization established by the CWC in 1997** to implement and enforce the terms of the CWC.
- ❖ **HQs- Hague, Netherlands**.
- ❖ It is **authorized to perform inspections** to verify that signatory states are complying with the convention.
- ❖ It also **performs testing of sites and victims of suspected chemical weapons attacks**.
- ❖ The **OPCW was awarded the Nobel Peace Prize in 2013**.

11.6 GROUP OF GLOBAL CRISIS RESPONSE GROUP (GCRG)

- ❖ **India has recently joined the United Nation's GCRG**.

ABOUT GLOBAL CRISIS RESPONSE GROUP (GCRG)

- ❖ The GCRG was set up by the **UN Secretary General (UNSG)** in March 2022 to **address urgent and critical global issues** pertaining to interlinked crises in **food security, energy, and finance and to coordinate a global response**.
- ❖ The **32-member Group** ensures **high-level political leadership** to get ahead of the **immense inter-connected challenges**.
- ❖ The **UN Deputy-Secretary-General** leads the **Steering Committee** of the GCRG.
- ❖ It is overseen by the **Champions Group** comprising of **Head of state/Head of government of Bangladesh, Barbados, Denmark, Germany, Indonesia and Senegal**.
- ❖ It **will help decision-makers to mobilize solutions and develop strategies to help vulnerable countries**.
- ❖ Within the Group, **3 work streams on Food, Energy and Finance** will **collate data and generate analysis, policy recommendations and solutions to support decision-making and advocacy** for consideration of the Steering Committee.

11.7 EUROPEAN SKY SHIELD INITIATIVE (ESSI)

- ❖ **Switzerland**, which is known for its **foreign-policy neutrality**, along with **Austria** signed a **declaration of intent to join the European air defence system Sky Shield**.

ABOUT ESSI

- ❖ ESSI aims to create a European air and missile defence system through common acquisition of air defence equipment and missiles by European nations to strengthen NATO's Integrated Air and Missile Defence.
- ❖ Initiative was last year spearheaded by Germany after Russia invaded Ukraine.
- ❖ 19 countries have joined the Europe-wide defence system which also involves countries including the United Kingdom, the Nordic and Baltic countries, Hungary, Romania and Bulgaria.

11.8 MUSLIM WORLD LEAGUE

- ❖ Muslim World League chief Mohammad Bin Abdulkarim Al-Issa lauded Indian philosophy and tradition that taught harmony to the world. He met PM Modi and president along with other dignitaries.

ABOUT MWL

- ❖ MWL is an international NGO, with members from all Islamic countries and sects.
- ❖ The Muslim World League was founded in 1962.
- ❖ HQ- Mecca, Saudi Arabia.
- ❖ It aims to present the true Islam and its tolerant principles, provide humanitarian aid, realize the message of Islam and ward off movements calling for extremism, violence and exclusion etc.
- ❖ MWL is a member of UNESCO and UNICEF and an Observer in consultative status with UN Economic and Social Council (ECOSOC).
- ❖ Secretariat General is the executive wing of the organization.

11.9 EUROPEAN FREE TRADE ASSOCIATION (EFTA)

- ❖ India and European Free Trade Association (EFTA) states which are negotiating the Trade and Economic Partnership Agreement (TEPA), have agreed for early conclusion of negotiations for a free trade agreement.
- ❖ The primary objective of these negotiations is to establish a fair, mutually beneficial, and comprehensive trade deal between India and EFTA.
- ❖ The TEPA aims to create opportunities for trade and investment between India and EFTA by eliminating/reducing tariffs and non-tariff barriers on a wide range of products.

ABOUT EFTA

- ❖ EFTA is an inter-governmental organisation for the promotion and intensification of free trade.
- ❖ It was founded as an alternative for states that did not wish to join the European Community.
- ❖ Established -1960
- ❖ Members – Norway, Iceland, Liechtenstein and Switzerland (remember mnemonic - NILS)
- ❖ EFTA is India's 9th largest trading partner, accounting for about 2.5% of India's total merchandise trade in 2020-21.
- ❖ EFTA countries are not part of the European Union.

11.10 UNHRC

- ❖ India recently voted in favour of a draft resolution tabled in the UN Human Rights Council that condemns and strongly rejects recent "public and premeditated" acts of desecration of the Holy Quran.
- ❖ The draft resolution was brought by Pakistan on "behalf of the States Members of the United Nations that are members of the Organisation of Islamic Cooperation" as well as by the State of Palestine.
- ❖ Nations voting against the resolution included Belgium, Finland, France, Germany, the U.K. and the U.S.

ABOUT UNHRC

- ❖ The Human Rights Council is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the world.
- ❖ It was created by the General Assembly on 15 March 2006 by replacing the Commission on Human Rights.

- ❖ The **Office of the High Commissioner for Human Rights (OHCHR)** serves as the **Secretariat of the Human Rights Council**.
- ❖ **HQ- Geneva, Switzerland.**
- ❖ It is made up of **47 United Nations Member States** which are elected by the UN General Assembly (UNGA).
- ❖ **Seats are distributed on equitable geographical distribution:**
 - ✓ African States: 13 seats
 - ✓ Asia-Pacific States: 13 seats
 - ✓ Latin American and Caribbean States: 8 seats
 - ✓ Western European and other States: 7 seats
 - ✓ Eastern European States: 6 seats
- ❖ **Members of the Council serve for a period of three years and are not eligible for immediate re-election after serving two consecutive terms.**

11.11 BASTILLE DAY AND LEGION OF HONOUR

- ❖ PM Modi attended **National Day of France**.
- ❖ France celebrates its national day on **July 14th**, also known as **Bastille Day** which is popularly associated with **storming of Bastille in 1789**.
 - ✓ The **Commander of the Bastille was killed** and the **prisoners were released by mob**.
- ❖ It is also the anniversary of **Fête de la Fédération**, an event held in **1790** to celebrate the unity of French people.
- ❖ Bastille was a **14th century fortress prison in Paris** that was used to **incarcerate prisoners on King orders without trial and publicly stating the causes**.
- ❖ **PM Modi** was conferred upon with **France's highest honour, the Grand Cross of the Legion of Honour**.

ABOUT LEGION OF HONOUR

- ❖ The Legion of Honour is the **highest French decoration, both civil and military**.
- ❖ The Legion of Honour has **five degrees of increasing distinction: three ranks — Chevalier (Knight), Officier (Officer), and Commandeur (Commander) — and two titles — Grand Officier (Grand Officer) and Grand-croix (Grand Cross)**.
- ❖ The Prime Minister has been honoured with the **highest French honour, akin to the Bharat Ratna in India**.
- ❖ The **Order was established by Napoleon Bonaparte in 1802**, and has been presented for more than the **past two centuries on behalf of the French Head of State to its most deserving citizens** in all fields of activity.
- ❖ **Foreigners may be decorated with the Legion of Honour “if they have rendered services (e.g. cultural or economic) to France or supported causes defended by France, such as human rights, freedom of the press, or humanitarian action”.**
- ❖ The motto of the Order is: **Honneur et Patrie**, which in French means **‘Honour and Fatherland’**.

11.12 MAPUTO PROTOCOL

- ❖ This year marks the **20th anniversary of Maputo Protocol**.
- ❖ It was adopted by the **African Union in Maputo, Mozambique in 2003** in the form of a **Protocol to the African Charter on Human and People's Rights**.
 - ✓ It came into effect in **2005**.
- ❖ It covers a wide range of issues, including **political, economic, social, and cultural rights of women**.
- ❖ It **guarantees women's rights to dignity, equality, and non-discrimination**, as well as emphasizes their right to **participate in decision-making processes at all level**.
- ❖ Of the **55 AU member states, 44 have ratified the protocol**.
- ❖ **Full domestication of the Protocol provisions into the national legislature has, in many cases, been slow or ineffective**.
- ❖ The Protocol **guarantees extensive rights to African women and girls and includes progressive provisions on-**

- ✓ Harmful traditional practices, e.g. child marriage and female genital mutilation (FGM).
- ✓ Reproductive health and rights.
- ✓ Roles in political processes.
- ✓ Economic empowerment.
- ✓ Ending violence against women.

11.13 ASSOCIATION OF WORLD ELECTION BODIES (A-WEB)

- ❖ Chief Election Commissioner Shri Rajiv Kumar led a three-member Election Commission of India (ECI) delegation to Cartagena, Colombia to attend the 11th meeting of the Executive Board of the Association of World Election Bodies (A-WEB).

ABOUT A-WEB

- ❖ The Association of World Election Bodies is the largest association of Election Management Bodies (EMBs) worldwide with 119 EMBs as Members & 20 Regional Associations/Organisations as Associate Members.
- ❖ A-WEB was founded in October, 2013 in Seoul, South Korea on the shared vision among its members of achieving sustainable democracy around the world through the strengthening of the processes of election management in member countries.
- ❖ ECI has been very closely associated with the process of formation of A-WEB since 2011-12 and has been its Executive Board Member, since its inception in October 2013 for two consecutive terms (2013-15 and 2015-17).
- ❖ ECI took over as Vice-Chairperson of A-WEB for 2017-19 term; as Chair for 2019-22 term and is presently a member of its Executive Board for 2022-24 in its capacity as immediate former Chair of A-WEB.
- ❖ In November 2022 ECI handed over the A-WEB Chairmanship from ECI to Election Commission of South Africa, after leading the EMBs successfully during the covid pandemic (2019-2022).
- ❖ A-WEB organises capacity building programmes for its member EMBs and undertakes Election Visitor and Observation Programmes in various countries to study election management practices and share knowledge with other member EMBs.
- ❖ In India A-WEB Centre has been established at New Delhi for documentation and research for sharing the best practices and training and capacity building of officials of A-WEB members.

11.14 UK JOINS CPTPP

- ❖ The United Kingdom has formally agreed to become the first European country to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

ABOUT CPTPP

- ❖ CPTPP succeeded Trans-Pacific Partnership (TPP) after US withdrew from TPP in 2017.
- ❖ It was signed in March 2018 in Santiago, Chile.
- ❖ It is a free trade agreement (FTA) between 11 nations: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam.
 - ✓ All 11 countries of CPTPP are members of Asia-Pacific Economic Cooperation.
 - ✓ UK will become 12th member, and first in Europe to join since its inception.
 - ✓ India is not a member.
- ❖ CPTPP forms a trading bloc representing 500 million consumers and 13.5% of global GDP.
- ❖ It aims to eliminate tariffs and reduces barriers for 98% of exports within CPTPP member countries.
- ❖ It also prevents environmental abuses, such as unsustainable logging and fishing.
 - ✓ Countries that don't comply will face trade penalties.

11.15 NIGERIA DECLARES EMERGENCY

- ❖ Nigeria has **declared a State of Emergency over food security** as record inflation has made basic foods **unaffordable for many** and has **increased malnutrition rates**.
- ❖ It is **Africa's most populous country** and is often called as **Giant of Africa**.

11.16 IIT IN ABU DHABI

- ❖ **India and UAE** signed a MoU recently to **establish IIT-Delhi campus in Abu Dhabi**.
- ❖ It would be **second IIT abroad after IIT Madras** set up campus at **Zanzibar in Tanzania**.

11.17 SINGAPORE TOPS HENLEY PASSPORT INDEX

- ❖ According to the Henley Passport Index, **Singapore now holds the title of the world's most powerful passport**.
- ❖ It **grants visa-free access to 192 out of 227 global travel destinations**.
- ❖ **Germany, Italy, and Spain share the second position, with visa-free access to 190 destinations**.
- ❖ **Japan now ranks third, with its passport providing visa-free access to 189 destinations**.
- ❖ **India currently shares the 80th position on the index with Togo and Senegal**.
- ❖ **Indian passport holders now enjoy visa-free access to 57 countries**.

11.18 UNIVERSAL POSTAL UNION

- ❖ The **Universal Postal Union will evaluate UPI for integrating the unified payment interface with cross-border remittances** using global postal network.

ABOUT UNIVERSAL POSTAL UNION

- ❖ UPU aim is **to establish international regulations for postal services and to promote cooperation in postal matters**.
- ❖ HQ - **Bern, Switzerland**
- ❖ **Established by Treaty of Bern in 1874**, it is a specialized agency of UN with **192 member countries including India**.
 - ✓ **India joined the UPU in 1876**.
- ❖ It is the **second oldest international organization worldwide**, after **International Telecommunication Union** (founded in **1864**).
- ❖ The UPU contains **four bodies** consisting of-
 - ✓ **The Congress**.
 - ✓ **The Council of Administration (CA)**.
 - ✓ **The Postal Operations Council (POC) and**
 - ✓ **The International Bureau (IB)**.
- ❖ Any **non-member country of United Nations may become a UPU member** provided that such request is **approved by at least two-thirds of the member countries of the UPU**.

11.19 BIMSTEC

- ❖ **India** recently participated in the **first-ever Foreign Ministers' meeting of BIMSTEC in Bangkok, Thailand**.

ABOUT BIMSTEC

- ❖ **BIMSTEC is a regional organisation that was established in 1997**, with the signing of **Bangkok Declaration**.
- ❖ The Secretariat is located in **Dhaka, Bangladesh**.
- ❖ Initially, it was **established with four countries Bangladesh, India, Sri Lanka and Thailand** as members.
 - ✓ **Myanmar, Nepal and Bhutan** joined it **subsequently**.
- ❖ The **BIMSTEC Charter was signed and adopted** during the **Fifth BIMSTEC Summit** held in virtual format in **Colombo, Sri Lanka, on 30 March 2022**.
- ❖ **BIMSTEC also connects the ecologies of the Great Himalayas and the Bay of Bengal**.
- ❖ There are **14 priority sectors that have been identified for BIMSTEC Cooperation-**

- ✓ Counter terrorism and transnational crime,
 - ✓ Transport & Communication,
 - ✓ Tourism,
 - ✓ Environment and Disaster Management,
 - ✓ Trade and Investment,
 - ✓ Cultural Cooperation,
 - ✓ Energy,
 - ✓ Agriculture,
 - ✓ Poverty Alleviation,
 - ✓ Technology,
 - ✓ Fisheries,
 - ✓ Public Health,
 - ✓ People-to-People contact
 - ✓ Climate Change.
- ❖ Each of the **Member States leads in certain sectors.**
- ✓ India focuses on **security, counter-terrorism and transnational crime, disaster management and energy.**

SOME FACTS

- ❖ BIMSTEC grouping accounts for **22% of the world's population.**
- ❖ **Combined GDP of \$2.7 trillion**
- ❖ **Almost 25% of the world's traded goods** cross the Bay of Bengal annually.

11.20 LNG EXPLORATION IN IRAQ

- ❖ **India is looking to strengthen its energy ties with Iraq with plans for an LNG terminal in the West Asian nation and ONGC Videsh resuming exploration in a block under force majeure since 2003.**
- ❖ **Iraq does not possess the technology to capture gas from its hydrocarbon blocks, which are burnt and released into the environment.**
- ❖ **Iraq is one of the biggest gas-flaring countries as it lacks facilities to capture and process the gas to convert it into fuels or export it as LNG.**
- ❖ **“Block 20”, earlier known as Block 8, is a large on-land exploration block in the western desert of Iraq, spread over 10,500 sq km.**
- ❖ **OVL had acquired a 100 % stake in the block by signing the exploration and development contract in November 2000. However, force majeure was declared in 2003 amid security concerns.**

ABOUT FORCE MAJEURE

- ❖ Force majeure means **“greater force”** in French.
- ❖ It refers to **an extraordinary event rendering the legal obligations between two or more contractually bound parties impossible to fulfill.**
- ❖ It is **related to the concept of an act of God, an event for which no party can be held accountable.**
- ❖ This **type of event must be entirely beyond the parties' reasonable control.**
- ❖ Notable events **include war, riots, criminal activity, epidemics, pandemics, and other unforeseeable events.**
- ❖ Force majeure **conflicts with** the concept of **“pacta sunt servanda,”** a principle in international law that **agreements must be kept and not wriggled out of.**

11.21 JAPAN SIGNS SEMICONDUCTOR PACT WITH INDIA

- ❖ **India and Japan** have recently signed an agreement to jointly develop the semiconductor ecosystem.
- ❖ The deal aims to **bolster the resilience of the global supply chain, particularly in the crucial semiconductor industry.**

- ❖ This makes Japan the second Quad partner, after the United States, to join hands with India in semiconductor development.

11.22 BLACK SEA GRAIN INITIATIVE

- ❖ India has voiced support for the U.N.'s efforts in continuing the Black Sea Grain initiative and expressed hope for an early resolution to the present impasse.
- ❖ Russia had announced it was terminating its implementation including the withdrawal of Russian security guarantees for navigation in the North-Western part of the Black Sea.

ABOUT BLACK SEA GRAIN INITIATIVE

- ❖ Black sea grain initiative was brokered by UN and Turkey in July 2022 between Russia and Ukraine.
 - ✓ Ukraine is among the world's biggest exporter of foodgrains, such as wheat and corn, and a major contributor to the UN's food aid programmes.
- ❖ It allows for commercial food and fertiliser (including ammonia) exports from three key Ukrainian ports in Black Sea – Odesa, Chornomorsk, and Pivdennyi/Yuzhny.
- ❖ A Joint Coordination Centre, including representatives from Russia, Türkiye, Ukraine and UN, was established to monitor its implementation.
- ❖ JCC Centre is hosted in Istanbul.
- ❖ The UN acts as the Secretariat for the Centre.

11.23 AFRICAN UNION

- ❖ PM Modi's proposal to make the African Union a permanent member of the G-20 has received overwhelming response from the grouping.
- ❖ The G-20 operates under the principle of consensus and any dissenting voice at the leaders' summit may create difficulties.

ABOUT AFRICAN UNION

- ❖ The African Union is considered the top grouping representing the voice of Africa.
- ❖ It consists of 55 member states that make up the countries of the African continent.
- ❖ HQ- Addis Ababa, Ethiopia.
- ❖ It was officially launched in 2002 as a successor to the Organisation of African Unity (OAU).
 - ✓ OAU was founded in 1963.
- ❖ It has been working towards ensuring the progress and economic growth of African nations.
- ❖ The Assembly of the African Union is the highest decision-making body, comprising the heads of state and government of member countries.
- ❖ Executive Council, composed of foreign ministers, assists the Assembly in making policy decisions.

11.24 WAR MEMORIAL IN ITALY

- ❖ A memorial to commemorate the 50,000 Indian Army soldiers who fought for the liberation of Italy from Nazi occupation during the Italian Campaign in World War II was unveiled in Italy.
- ❖ The 'V.C. Yeshwant Ghadge Sundial Memorial' was unveiled by the Commune of Montone (in Italy) and Italian military historians at Montone in Perugia as a tribute to Indian troops who died in action during the Italian Campaign.
 - ✓ The Italian Campaign refers to the 2-year campaign (1943-1945) by the Allied power — Great Britain, the US and the Soviet Union — to liberate Italy from German occupation.
- ❖ The soldiers were part of the 4th, 8th and 10th Divisions of the British Commonwealth forces that fought against the Axis powers — Germany, Italy and Japan.

ELSEWHERE

- ❖ Indian forces fought with Germany in Africa, Japanese in Burma, and took part in the invasion of Italy.

- ❖ They also played a significant part in **battles in the Middle East.**

ABOUT

- ❖ Naik Ghadge was a **soldier of the Mahratta Light Infantry** who served in Italy during World War II (1939-1945).
- ❖ According to the **National Army Museum of the UK**, he was **only 22 when he died in action** while fighting the Axis powers.
- ❖ He **received the Victoria Cross posthumously in 1944.**

11.25 INDIA ARGENTINA BILATERAL EXCHANGE

- ❖ India and Argentina have agreed for **bilateral exchange of young researchers and Start-ups, particularly in Biotechnology and Agriculture field.**
- ❖ The two countries also **decided to hold comprehensive talks between delegations comprising academia, R&D Institutes and Industry** in the field of Science & Technology and Biotechnology.
- ❖ India and Argentina have **an Inter-governmental Agreement to promote technical and scientific cooperation signed in 1985.**

11.26 FREE MOVEMENT REGIME

- ❖ The border between India and Myanmar **runs for 1,643 km** in the **four states of Mizoram, Manipur, Nagaland, and Arunachal Pradesh.**
- ❖ The **FMR is a mutually agreed arrangement** between the **two countries** that allows **tribes living along the border on either side to travel up to 16 km inside the other country without a visa.**
- ❖ The **FMR was implemented in 2018** as part of the **Act East policy** at a time when **diplomatic relations between India and Myanmar** were on the upswing.
- ❖ **Background**
 - ✓ The border between India and Myanmar was **demarcated by the British in 1826, without seeking the opinion of the people living in the region.**
 - ✓ People in the region have **strong ethnic and familial ties** across the border. In **Manipur's Moreh region**, there are **villages where some homes are in Myanmar.** In **Nagaland's Mon district**, the **border actually passes through the house of the chief of Longwa village**, splitting his home into two.
- ❖ **Concerns**
 - ✓ Although beneficial to local people and helpful in improving Indo-Myanmar ties, the FMR has been criticised for **unintentionally aiding illegal immigration, drug trafficking, and gun running.**

12. PLACES IN NEWS

12.1 ORKNEY ISLANDS

- ❖ Orkney Islands has **proposed its intent to split from U.K. and become a self-governing territory of Norway.**
- ❖ It is **situated on the North-Eastern coast of Scotland.**
- ❖ It is **an archipelago of nearly 70 islands, of which only 20 are inhabited.**
- ❖ It was **under Norwegian and Danish rule until late 15th century** after which it came under Scotland.
- ❖ It houses **four UNESCO world heritage sites** namely – **Skara Brae, Ring of Brodgar, Standing Stones of Stenness, and Maeshowe cham.**

12.2 ZAPORIZHZHIA NUCLEAR POWER PLANT

- ❖ Zaporizhzhia is **Europe's largest nuclear power plant** located in **eastern Ukraine but presently under the control of Russia.**
- ❖ With six nuclear reactors, it is located on the **south bank of the Dnieper River.**

12.3 STRAIT OF HORMUZ

- ❖ Strait of Hormuz, also called Strait of Ormuz is **a channel linking the Persian Gulf with the Gulf of Oman and the Arabian Sea.**
 - ✓ Gulf of Oman is also known as **the Gulf or Sea of Makran.**
- ❖ Islands- **Qeshm (Qishm), Hormuz, and Hengām.**

12.4 CABO DELGADO GAS FIELDS

- ❖ The Cabo Delgado gasfield in **Mozambique**, in which **Indian energy majors (ONGC Videsh, BPCL, Oil India Ltd) hold 30% stake**, is expected to resume production.

12.5 TAYLOR GLACIER

- ❖ Scientists have discovered why **Taylor Glacier in Antarctica** bleeds '**crimson red**' drool from its tongue.
- ❖ Also known as **Blood Falls**, it was **first discovered in 1911 by a British geologist Thomas Griffith Taylor.**
- ❖ The reason for the iconic red hue was the presence of little '**iron-rich nanospheres**'.
 - ✓ **Nanospheres are tiny round objects—100th the size of the average human red blood cell—with unique physical and chemical characteristics.**

12.6 UBINAS VOLCANO

- ❖ **Peru** recently announced a **state of emergency in the Moquegua region due to the ongoing activity of the Ubinas volcano.**
- ❖ It is a **stratovolcano located in the Central Volcanic Zone** of the Andes.

12.7 TAKESHIMA ISLANDS

- ❖ Recently, Japan lodged a protest with South Korea over military drills it conducted on disputed Takeshima islands.
- ❖ The island is situated in the middle of the Sea of Japan.
- ❖ It is lying almost equidistant between the Korean Peninsula and Japan.
- ❖ It is called Dokdo in South Korea and Takeshima in Japan.

12.8 SOLOMON ISLANDS

- ❖ **China and Solomon Islands** signed diplomatic agreements recently.
- ❖ **Solomon Islands** are an archipelagic state comprising of volcanic islands and coral atolls in Melanesia, located in southwest Pacific Ocean.

12.9 CHAVIN DE HUANTAR

- ❖ Archaeologists working in **Peru** have **uncovered a 3,000-year-old sealed corridor** dubbed "the condor's passageway" that likely leads to other chambers inside what was once a massive temple complex pertaining to the ancient Chavin culture.
- ❖ The temple complex features terraces as well as a network of passageways.
- ❖ The **Chavin de Huantar** archeological site is among the culture's most important centers, thriving from around 1,500-550 B.C.
- ❖ The **Chavin** are well-known for their advanced art, often featuring depictions of birds and felines.
 - ✓ The **condor**, one of the largest birds in the world, was associated with power and prosperity in ancient Andean cultures.
- ❖ They **date back to the first sedentary farming communities** in the northern highlands of the Peruvian Andes, more than 2,000 years before the Inca Empire rose to power.

12.10 ALASKAN PENINSULA

- ❖ A **powerful 7.2 magnitude earthquake** recently struck the **Alaskan Peninsula**.
- ❖ It is a **long, narrow strip of land** located in the southwestern part of the U.S. state of Alaska.
- ❖ It **extends about 800 kilometres (500 miles)** in a southwest direction from the mainland of Alaska.
- ❖ It **separates the Pacific Ocean** from **Bristol Bay**, an arm of the Bering Sea.
- ❖ **Aleut and Alutiiq (Sugpiaq) indigenous communities** live here.

12.11 BLACK SEA

- ❖ It is a **large inland sea** located in **southeastern Europe**.
- ❖ Bordered by **six countries**, Turkey, Bulgaria, Ukraine, Russia, Georgia and Romania.
 - ✓ **Acronym to recall is T-BURGR**
- ❖ It is connected to the Mediterranean Sea through the **Bosporus Strait**, the **Sea of Marmara**, and the **Dardanelles Strait**.
- ❖ It covers an area of approx. **436,000 sq km**.
- ❖ **Danube, Dniepr and Dniestr** are major rivers that drain into it.
- ❖ The Black Sea's deeper waters have **lower levels of oxygen** due to its unique geological and hydrological conditions.

12.12 RHODES AND CORFU ISLANDS

- ❖ The **Greek islands** of **Rhodes and Corfu** have been **scorched by wildfires** in recent days.
- ❖ Greece is often hit by wildfires during the summer but **climate change has led to more extreme heatwaves across southern Europe**.

12.13 TUVALU

- ❖ Tuvalu, **the world's least visited nation**, is likely to **disappear soon** due to rising sea levels.
- ❖ Although the **entire nation is coral atolls**, the **inhabitable stretches of land** are maximum just **2 m above sea level**.
- ❖ It's an **island country** in the **west-central Pacific Ocean**, and **sits around halfway** between **Hawaii and Australia**.

- ❖ **Tuvalu**, formerly called the **Ellice Islands**, receives **just more than two thousand tourists a year**, has **only one international airport**.

12.14 PAPUA NEW GUINEA

- ❖ The **Ministry of Electronics and IT (MeitY)** and the **Ministry of Information and Communication Technology (MICT)** of **Papua New Guinea** signed a **MoU for sharing India Stack**.
- ❖ **India Stack** is the moniker for a **set of open Application Programming Interface (APIs)** and **digital public goods** that aim to **unlock the economic primitives of identity, data, and payments at population scale**. Although the name of this project bears the word **India**, the **vision of India Stack can be applied to any nation**.

ABOUT PAPUA NEW GUINEA

- ❖ It is an **island country** that lies in the **south-western Pacific**.
- ❖ It includes the **eastern half of New Guinea** (the **world's second largest island** after **Greenland**) and many small offshore islands.
 - **Land boundary** with **Indonesia** to the west,
 - **Marine neighbors-** **Australia** to the south and **Solomon Islands** to the south-east.
- ❖ Capital: **Port Moresby**
- ❖ **Linguistically**, it is the **world's most diverse country**, with **more than 800 languages**.

CivilsTap Hlmachal

13. DAYS TO REMEMBER

13.1 NATIONAL POSTAL WORKER DAY- JULY 1ST

- ❖ **National Postal Worker Day** is observed on **July 1st** every year to show gratitude and recognize the tireless efforts of postal workers.

13.2 INTERNATIONAL PLASTIC BAG FREE DAY- JULY 3RD

- ❖ International Plastic Bag Free Day is observed every year on **July 3rd** to increase awareness about the detrimental effects of disposable plastic bags on the environment.

13.3 INTERNATIONAL DAY OF COOPERATIVES-JULY 1ST

- ❖ The International Day of Cooperatives is commemorated on **July 1st**.
- ❖ **Theme** for the International Day of Cooperatives 2023 is **“Cooperatives for Sustainable Development.”**
- ❖ **In 1923**, the **International Cooperative Alliance (ICA)**, an international umbrella organization representing cooperative enterprises, established the **first International Cooperative Day**.

13.4 WORLD ZONOSIS DAY 2023 – JULY 6TH

- ❖ World Zoonosis Day is **observed annually on July 6th**
- ❖ World Zoonosis Day **traces its origins back to 1885** when **Louis Pasteur administered the inaugural rabies vaccine**, marking a groundbreaking milestone in the prevention of zoonotic diseases.
- ❖ **Zoonoses are infectious diseases** that can be transmitted from animals to humans, either directly or through insect vectors.
- ❖ There are **more than 200 identified zoonotic diseases**, categorized by their causative agents: bacteria, parasites, fungi, and viruses.
- ❖ **"One World, One Health: Prevent Zoonoses, Stop the Spread"** is the focus of this year's World Zoonoses Day 2023.

13.5 WORLD POPULATION DAY- JULY 11TH

- ❖ World Population Day is commemorated annually on **July 11th** to raise awareness and educate individuals about the challenges and consequences associated with global population growth.
- ❖ The theme for World Population Day 2023 is – **Unleashing the Power of gender equality: Uplifting the voices of women and girls to unlock our world’s infinite possibilities.**
- ❖ The first World Population Day was observed on July 11, **1990**.

13.6 INTERNATIONAL MALALA DAY-JULY 12

- ❖ International Malala Day is observed on **July 12** each year to honor the bravery and activism of Malala Yousafzai, a Pakistani advocate for girls’ education and the youngest person to receive the Nobel Prize.
- ❖ Malala Yousafzai was born on **July 12, 1997, in Mingora, Pakistan**.
- ❖ On October 9th, 2012, gunmen from the Taliban targeted Malala, shooting her in the head. However, she survived the attack.

13.7 NATIONAL FISH FARMERS DAY

- ❖ National Fish Farmer's Day is an **annually observed on July 10th** to honor and appreciate the vital role played by fish farmers, aquaculture industry professionals, and other stakeholders in developing a sustainable and successful fisheries sector.
- ❖ **10th July** also marks the **observance of the National Fisheries Development Board (NFDB) Foundation Day**.
- ❖ **NFDB was established in 2006** as an **autonomous organization under the Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying (MoFAH&D)**.
- ❖ The **first Fish Farmers Day was observed in 2001** by the **Indian Council of Agriculture Research (ICAR)-Central Institute of Fisheries Education (LIFE)**, a premier institute of Fisheries Education in India based in **Mumbai, Maharashtra**.

13.8 INTERNATIONAL MOON DAY- JULY 20TH

- ❖ International Moon Day is observed **every year on the 20th of July**, which marks the anniversary of the day on **which astronauts Neil Armstrong and Buzz Aldrin famously set foot on the Moon in 1969** as part of the **Apollo 11 lunar mission**.

13.9 WORLD CHESS DAY- JULY 20TH

- ❖ 20th July is observed as **World Chess Day to commemorate the establishment of Fédération Internationale des Échecs (FIDE) or World Chess Federation in 1924**.
- ❖ Under initiative of FIDE, July 20 has been observed as International Chess Day by chess players around the world **since 1966**.

13.10 NATIONAL FLAG ADOPTION DAY

- ❖ **National Flag Adoption Day** is celebrated on **July 22nd**, to **commemorate Constituent Assembly's adoption of Tricolour in 1947**.

13.11 NATIONAL MANGO DAY- JULY 22ND

- ❖ **National Mango Day** is annually observed on **July 22nd**.
- ❖ The **roots of the International Mango Festival** can be **traced back to 1987** when the **National Horticulture Board of India** decided to **celebrate mango**.
- ❖ Mangoes were **first grown in India over 5,000 years ago**.

13.12 KARGIL VIJAY DIWAS

- ❖ It is **celebrated on July 26th every year**.
- ❖ The day **commemorates the victory of the Indian armed forces in the Kargil War** fought against Pakistan.
- ❖ The day is observed to **pay tribute and honour the bravery and sacrifice of the soldiers in the war of 1999**.
- ❖ The year 2023 **marks the 24th anniversary of Kargil Vijay Diwas**.

13.13 INTERNATIONAL DAY FOR THE CONSERVATION OF THE MANGROVE ECOSYSTEM

- ❖ It is celebrated **annually on July 26th**.
- ❖ This International Day was **adopted by the General Conference of the UN Educational, Scientific and Cultural Organization (UNESCO) in 2015**.
- ❖ The day commemorates the Greenpeace activist **Hayhow Daniel Nonoto**.
- ❖ **On July 26, 1998**, the **activist died of a heart attack while protesting for re-establishment of mangrove wetlands in Muisne, Ecuador**.
- ❖ It aims to **raise awareness of the importance of mangrove ecosystems** as "a unique, special and vulnerable ecosystem" and to promote solutions for their sustainable management, conservation and uses.

13.14 WORLD HEPATITIS DAY- JULY 28TH

- ❖ July 28th is observed annually by the world as World Hepatitis Day to raise global awareness about hepatitis.
- ❖ Hepatitis virus has five commonly known strains: Type A, B, C, D and E.
- ❖ The theme for World Hepatitis Day 2023 is "One life, one liver" focusing on creating awareness about viral hepatitis.

13.15 WORLD DAY AGAINST TRAFFICKING IN PERSONS- JULY 30TH

- ❖ World Day against Trafficking in Persons is held annually on July 30th.
- ❖ Theme for 2023 is, "Reach every victim of trafficking, leave no one behind".

14. APPOINTMENTS

14.1 BRAJENDRA NAVNIT IS INDIA'S AMBASSADOR TO WTO

- ❖ Indian government announced the extension of Brajendra Navnit's tenure as Ambassador and Permanent Representative of India to the World Trade Organization (WTO).

14.2 RAKESH PAL IS NEW COAST GUARD DG

- ❖ Rakesh Pal has been appointed as the 25th Director General of the Indian Coast Guard (ICG).
- ❖ He is an alumnus of the Indian Naval Academy and joined Indian Coast Guard in January 1989.
- ❖ He holds the recognition of being the First Gunner of ICG.

14.3 LIC GETS NEW MD

- ❖ Sat Pal Bhanoo has been appointed as the new Managing Director of LIC.
- ❖ He currently serves as the Additional Zonal Manager at LIC of India's Zonal Office in Bhopal.

15. PERSON IN NEWS

15.1 ALAN ARKIN

- ❖ Alan Arkin, a veteran US actor known for his remarkable talent and a career that spanned over six decades passed away recently.
- ❖ He is known for his performances in movies like Catch-22, Edward Scissorhands and Little Miss Sunshine (awarded Oscar for Best Supporting Actor in 2007).

15.2 LUIS SUAREZ

- ❖ Luis Suárez Miramontes, the famous footballer, also known as the "Golden Galician, passed away recently.
- ❖ He was the only Spanish man to receive soccer's most prestigious individual accolade, the Ballon d'Or in 1960.

15.3 ARUNA ASAF ALI

- ❖ Aruna Asaf Ali was an Indian independence activist and a prominent figure in the Indian National Congress.
- ❖ She was born on July 16, 1909, in Kalka, Haryana.
- ❖ The event that catapulted her into the national spotlight was her participation in the Salt Satyagraha (Salt March) led by Mahatma Gandhi in 1930.

- ❖ She is known for hoisting the Indian flag at Gowalia Tank Maidan in Mumbai during Quit India Movement in 1942.
- ❖ She is popularly known as 'Grand Old Lady' of Independence Movement.
- ❖ Post-independence, she worked towards upliftment of women status by encouraging women education.
- ❖ She also started a weekly journal 'Weekly' and newspaper 'Patriot'.
- ❖ She also served as the mayor of Delhi from 1958 to 1964.
- ❖ She was awarded the Bharat Ratna, India's highest civilian award, posthumously in 1997.

15.4 MANGALA NARIKAR

- ❖ Noted mathematician and scientist Dr. Mangala Narlikar, wife of renowned astrophysicist Dr. Jayant Narlikar, passed away recently.
- ❖ Dr. Narlikar completed her graduation and post-graduation from Mumbai University.
- ❖ She was an associate researcher in the Mathematics School of the Institute of Fundamental Research in Mumbai between 1964 to 1966.
- ❖ Between 1967 and 1969, she taught mathematics at Cambridge University in England.
- ❖ Author of several books in English and Marathi, Dr. Mangala Narlikar was adept at demystifying mathematics to children.

15.5 MANGAL PANDEY

- ❖ Shaheed Mangal Pandey's birth anniversary was observed on July 19th recently.
- ❖ Often known as First freedom fighter of India, he was born in a town near Faizabad in eastern Uttar Pradesh.
- ❖ He joined the army of the British East India Company in 1849 and he was made a soldier (sepoy) in the 6th Company of the 34th Bengal Native Infantry.
- ❖ He revolted against East India Company in 1857 by attacking British officers at military garrison in Barrackpore.
- ❖ He was sentenced to death and executed on April 7, 1857, in Barrackpore.
- ❖ The revolt was considered as First War of Independence in India against Britishers.
- ❖ A postage stamp was issued in the year 1984 in honour of Shaheed Mangal Pandey by the Government of India for his important role in India's freedom struggle.

15.6 J R OPPENHEIMER

- ❖ J R Oppenheimer was an American scientist who played a key role in the success of Manhattan Project, code name for American-led effort to develop a functional atomic weapon during World War II.
- ❖ He is often known as the "father of the atomic bomb".
- ❖ His research helped in creation of first nuclear bombs.
- ❖ The first atomic bomb was tested roughly 340 km south of Los Alamos. It was known as the 'Trinity Test', and was the culmination of years of work by the group of scientists Oppenheimer put together and led.
- ❖ He was awarded the Enrico Fermi Award of the Atomic Energy Commission.
- ❖ The bombings of Hiroshima and Nagasaki set in motion a nuclear arms race that was to change global geopolitics forever.
 - ✓ The Soviets tested their first atomic bomb in 1949, the British in 1952, the French in 1960, and the Chinese in 1964.
- ❖ Later on, Oppenheimer actively opposed nuclear weapons and their unchecked proliferation.

15.7 VYOMESH CHANDRA BANERJEE

- ❖ July 21st marks the 116th anniversary of the passing of Womesh Chandra Banerjee.
- ❖ He was one of the pioneer leaders of the nationalist movement.

- ❖ He also played a **significant role in establishing a Congress branch in London** and also served as the general secretary of the **London Indian Society**, an organization **founded by Dadabhai Naoroji**.
- ❖ Notably, **Bonnerjee became the first Indian to contest a seat in the British Parliament** as a representative of the Liberal Party, **although he was unsuccessful** in the election.
- ❖ He became the **first Indian to be appointed as a permanent lawyer**.
- ❖ One of his notable cases was **defending Surendranath Banerjee in a contempt of court case in the High Court of Calcutta in 1883**.
- ❖ He holds the distinction of being the **co-founder and inaugural president of the Indian National Congress at Bombay in 1885**, with **72 members in attendance**.
 - ✓ He was **elected as Congress President once again** during its **Allahabad session in 1892**.
- ❖ He was a **strong supporter of the Swadeshi movement**. Among other things, he **dejected the salt tax**, calling it completely unjust.

15.8 BAL GANGADHAR TILAK

- ❖ PM recently paid tributes to Bal Gangadhar Tilak on his Jayanti on 23rd July.
- ❖ The name of **Lokmanya Tilak** stands out as a **colossus for his supreme courage, sacrifice, selflessness** and for his historic role in the early phase of the independence movement.
- ❖ Bal Gangadhar Tilak was born **on July 23, 1856, at Ratnagiri, Maharashtra**.
- ❖ He founded of the **Deccan Education Society in 1884**, he also **established the Fergusson College in 1885**.
- ❖ Tilak emphasized the **need for self-rule or swarajya**.
- ❖ Tilak **joined the Indian National Congress in 1890** and **played a significant role in the Surat Split in 1907**.
- ❖ He **propagated the Swadeshi and Boycott Movement** to promote Indian self-reliance.
- ❖ The **Home Rule League was founded** by him on **April 28, 1916**, with its **headquarters in Pune**.
 - ✓ A similar **Home Rule League was started by Annie Besant** with its **headquarters in Madras**.
- ❖ **Publications-**
 - ✓ **Newspapers- Kesari (Marathi) and Mahratta (English)** and
 - ✓ **Books- Gita Rhasya and Arctic Home of the Vedas**.
- ❖ On **August 1st, 1920**, a day before **Gandhiji launched the Non-Cooperation Movement**, Tilak passed away.
- ❖ **Quotes**
 - ✓ **"Swaraj is my birthright and I shall have it!"**
 - ✓ **"I would not recognise even God if he said that untouchability was ordained by him."**

15.9 CHANDRA SHEKHAR AZAD

- ❖ **July 23rd** marks the birth anniversary of Chandra Shekhar Azad, the fearless freedom fighter of India.
- ❖ He was **born in Bhabhra village** (now in **Alirajpur District of Madhya Pradesh**) in **1906**.
- ❖ Born as **Chandra Shekhar Tiwari**, he joined **Mahatma Gandhi's non-cooperation movement at a young age of 15**.
- ❖ When he was arrested by the British police and presented before a magistrate, he declared his name to be **'Azad'**, his **father's name as 'Swatantra'**, and his **residence as 'prison'**.
- ❖ He was the chief strategist **of the Hindustan Socialist Republican Association (HSRA)**, a revolutionary group dedicated to **armed struggle against the colonial government**.
- ❖ Azad was also involved in **daring acts of resistance**, including the **Kakori train robbery in 1925** and **shooting of JP Saunders at Lahore in 1928 (to avenge the killing of Lala Lajpat Rai)**.
- ❖ Known for his organizational skills and mastery of disguise, **he pledged to never be captured alive**.
- ❖ On **February 27, 1931** Azad met two of his comrades at the **Alfred Park, Allahabad**.
 - ✓ When he got surrounded by British police, **he shot himself**

16. AWARDS AND HONOURS

16.1 PEN PINTER PRIZE

- ❖ **Michael Rosen**, a renowned poet and writer from **Britain**, has been recognized for his literary contributions and honored with the **prestigious PEN Pinter Prize 2023**.
- ❖ Rosen is known for making **poetry accessible to children through his work and performances**.
 - ✓ His **themes** are often **social, political and ethical**. =

ABOUT THE PRIZE

- ❖ The PEN Pinter Prize was **established in 2009** by English PEN, the founding centre of a global literary network that promotes literature and human rights.
- ❖ The **winner must be the author of a significant body of plays, poetry, essays, or fiction** of outstanding literary merit, **written in English**.
- ❖ The Prize is awarded annually to a **writer resident in the United Kingdom, the Republic of Ireland, the Commonwealth or former Commonwealth**.
- ❖ The prize was named after **Nobel-Laureate playwright Harold Pinter**, who was a vice president of English PEN and an active member of the International PEN Writers in Prison Committee (WiPC).

16.2 BHOOMI SAMMAN AWARDS

- ❖ **President of India** presented the **“Bhoomi Samman” 2023** at a function organised recently by the **Union Ministry of Rural Development**.
- ❖ She presented the Bhoomi Samman awards to **68 district collectors and nine state secretaries** for their **accomplishments** in the **Digital India Land Records Modernization Programme (DILRMP)**.
- ❖ In the field of Digital India Land Records modernization, **Madhya Pradesh has secured the first position in the country in both state and district categories**.
- ❖ **15 districts of Madhya Pradesh have been awarded Platinum Grading** for **100 % achievement** in all the components of **Digital India Land Records Management Programme**.

ABOUT DILRMP

- ❖ The **Digital India Land Records Management Programme** is a **central sector scheme** being run by the **Department of Land Resources** (under the Ministry of Rural Development) since **2008-09** with **100% central government funding**.
- ❖ **Objective-** It attempts to **build upon the commonalities that exist in the arena of land records in various States** to develop an **appropriate Integrated Land Information Management System (ILIMS)** across the country.
 - ✓ The **ILIMS integrates all the processes and lands records databases with the banks, financial institutions, circle rates, Registration Offices and other sectors**.
- ❖ **Major components:** **Computerization of land records, Survey/re-survey, Computerization of Registration**.
- ❖ Under the programme, a **monthly grading system** has been implemented, based on the **data recorded on the Management Information System (MIS)** of the programme to reward the districts that have done well since **January 2022**.
 - ✓ It offers **Silver grades ranging from 90% to 95%, Gold from 95% to 99% and Platinum grades at more than 99% work efficiency**.

16.3 BYCULLA RAILWAY STATION GETS UNESCO'S AWARD

- ❖ The heritage **Byculla Railway station** which has been **restored to its original glory**, received the **UNESCO Asia Pacific Cultural Heritage award**.
- ❖ The **169-year-old Byculla railway station in Mumbai** is **one of the oldest railway stations in India still in use**.
- ❖ It was **originally built in 1853**.
- ❖ It has been **restored to its original Gothic, heritage, architectural glory**.

17. SPORTS

17.1 ASIAN KABADDI CHAMPIONSHIP

- ❖ India has won the Asian Kabaddi Championship 2023 by defeating Iran.
- ❖ It was held at the Dong-Eui Institute of Technology Seokdang Cultural Center in Busan, Republic of Korea.

17.2 NEERAJ CHOPRA WINS AT DIAMOND LEAGUE

- ❖ Neeraj Chopra won gold in the javelin throw at the Diamond League in Lausanne (a city on Lake Geneva, in Switzerland).
- ❖ This was his second consecutive Diamond League win in this season following the win at Doha in May 2023.
- ❖ He is the first Indian to win a gold medal in track and field in Olympics (Tokyo 2020-21) and the second Indian to win an individual Olympic gold after Abhinav Bindra (shooting).

ABOUT THE EVENT

- ❖ The Diamond League is an annual series of elite track and field competitions.
- ❖ The Diamond League is organised by World Athletics (formerly IAAF or International Association of Athletics Federations).
- ❖ The 2023 Diamond League: The 14th edition of the Diamond League began in May 2023 in Doha, the capital of Qatar.
- ❖ The 15 meetings in this edition are scheduled at various cities across the world. The finals will be held in September 2023 in Eugene, United States.

17.3 MAX VERSTAPPEN WINS AUSTRIAN GP

- ❖ Max Verstappen, the reigning Formula One champion, continued his impressive performance by securing a commanding victory at the Austrian Grand Prix 2023.
- ❖ Charles Leclerc, finished in second place, while Sergio Perez secured the third position.

17.4 NADA SIGNS MOU WITH SARADO

- ❖ National Anti-Doping Agency, India (NADA India) recently signed a Memorandum of Understanding (MoU) with South Asia Regional Anti-Doping Organization (SARADO).
- ❖ The MoU aims to fulfill the following objectives over a period of three years:
 - ✓ developing an anti-doping education & prevention program in South Asia;
 - ✓ training & upskilling sample collection personnel, educators & other anti-doping education officers;
 - ✓ organizing courses, seminars, workshops, research & exchange tours on anti-doping education & prevention;
 - ✓ facilitating exchange of education officers, program managers, trainers, teachers and specialists on anti-doping education & prevention;
 - ✓ supporting anti-doping education activities and exchanging services of experts; and
 - ✓ producing anti-doping education literature

ABOUT SOUTH ASIA REGIONAL ANTI-DOPING ORGANIZATION (SARADO):

- ❖ It was formed on 16th May 2007 in the South Asian Anti-Doping Program Project Development Meeting held in Maldives.
- ❖ Member countries: Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka.
- ❖ Mission: To promote and co-ordinate the fight against doping in sport in all its forms in among South Asia RADO member countries.

ABOUT NATIONAL ANTI-DOPING AGENCY (NADA)

- ❖ It was **set up as a registered society** under the **Societies Registration Act of 1860** on November 2005.
- ❖ It is **responsible for the detection, deterrence, prevention and elimination of doping** in sports in India.
- ❖ NADA is an **autonomous body under the Ministry of Youth Affairs and Sports**.
- ❖ NADA has the **power to conduct tests, collect samples, investigate doping violations, and impose sanctions on athletes** who are found guilty of doping.
- ❖ It **also has the power to review and modify existing anti-doping regulations and to cooperate with international anti-doping organizations**.

17.5 WORLD ARCHERY YOUTH CHAMPIONSHIPS

- ❖ India has secured the **second position with an impressive haul of 11 medals**, including **six gold, one silver, and four bronze** in the recently concluded biannual event, 2023 World Archery Youth Championships in Limerick, Ireland.
- ❖ **South Korea** emerged as the **top-ranked nation**.
- ❖ **Parth Salunkhe**, a rising Indian archer **created history by becoming the first Indian male archer to win the Youth World Championship in the recurve category**.
- ❖ A grand total of **518 archers (comprising 277 men and 241 women)** from **58 different countries** participated in both individual and team events.

17.6 WIMBLEDON 2023

- ❖ **Spain's Carlos Alcaraz** has defeated **Novak Djokovic** in **2023 Wimbledon men's final**.
- ❖ **Marketa Vondrousova (Czech)** defeated **Ons Jabeur (Tunisia)** in the final to win the **ladies' singles tennis title**.
- ❖ A **Grand Slam** refers to winning **all four major championships of Australia, France, Britain (Wimbledon), and United States** in same calendar season.
- ❖ **Career Grand Slam** refers to the accomplishment of **winning each of the four major championship's during a player's career**.

17.7 SWASTIK MAKES WORLD RECORD

- ❖ **Satwiksairaj Rankireddy** made history in the ongoing **Korea Open 2023** by establishing a **Guinness world record for the fastest hit of 565 km/h in badminton by a male player**.
- ❖ Previously, the record was held by **Malaysian player Tan Boon Heong**, who had recorded a speed of **493 km/h with his smash**.

17.8 VIRAT KOHLI- 500 INTERNATIONAL APPEARANCES

- ❖ Virat Kohli has recently **become the 10th cricketer to make 500 international appearances**.
- ❖ He reached this remarkable feat during **India's second and final Test match against the West Indies**.
- ❖ This includes **274 ODIs, 115 T20Is, and 111 Test matches**.
- ❖ Only **three other Indian cricketers- Sachin Tendulkar, MS Dhoni and Rahul Dravid**, have achieved this feat.

17.9 HUNGARIAN GP

- ❖ **Max Verstappen** has **won the Hungarian GP** at the Hungaroring, by a comfortable **33.731 secs margin over McLaren's Lando Norris**.
- ❖ **Sergio Perez** from Red Bull got **third place**.

17.10 LAHIRU THIRIMANNE RETIRES FROM INTERNATIONAL CRICKET

- ❖ Sri Lankan batsman **Lahiru Thirimanne** has **announced his retirement from international cricket after a 13-year career**.

- ❖ The **33-year-old top-order batter** made his international debut in **2010** and went on to represent Sri Lanka in **44 Tests, 127 ODIs, and 26 T20Is**.

17.11 INDIA'S FIRST ONLINE GAMING ACADEMY IN MP

- ❖ India's first online gaming academy in Madhya Pradesh gets 40,000 registrations for 200 seats.
- ❖ The academy has **200 places**, and the selection process will distribute **80% of these to local youths**.
- ❖ The academy will provide training for competition and also career paths in coding, tournament operations, content creation, game development and more.

18. SOCIAL ISSUES, HEALTH, EDUCATION

18.1 ASPARTAME

- ❖ **Aspartame**, a sweetener used in aerated drinks, is set to be declared a **carcinogenic substance** by **World Health Organisation**.
- ❖ These are also known as **non-nutritive sweeteners** or 'sugar substitutes'.
- ❖ It is the **world's most commonly used low-calorie artificial sweetener** used in cereals, sugar-free chewing gum, low-calorie fruit juices and diet sodas.
- ❖ It is approximately **200 times sweeter than sucrose** (common sugar).
- ❖ It was **discovered by James M. Schlatter, a chemist, in 1965** and was introduced to replace sucrose.
- ❖ **The U.S. Food and Drug Administration (FDA) approved aspartame** for use in some **dry foods in 1981** and for **carbonated beverages in 1983**.
- ❖ Aspartame is a methyl ester of a dipeptide consisting of **two amino acids, aspartic acid, and phenylalanine**.
 - ✓ Both are **naturally occurring amino acids in many protein-rich foods**.
- ❖ In the body, **aspartame is metabolised into its constituent components, aspartic acid, phenylalanine, and a small amount of methanol**.
- ❖ Around **100 countries** around the world, including India, allow the use of aspartame.

18.2 ZOMBIE DRUG

- ❖ In last 18 months, **flesh-rotting 'zombie drug'** has caused **9 deaths and 150 overdoses** in a US County in Florida.

ABOUT ZOMBIE DRUG

- ❖ **Xylazine**, also known as "tranq," "tranq dope" and "zombie drug", has sedative like symptoms such as extreme sleepiness.
- ❖ Tranq, known for its ability to induce a "zombie" like stupor and **cause flesh rot near injection sites**.
- ❖ It can **cause raw wounds on the user's skin**. It starts with **ulcers, hardens to dead skin called eschar**, and if left **untreated can result in amputation**.
- ❖ **Xylazine** can also **cause amnesia and slow down breathing, heart rate, and blood pressure** to extremely low levels, **when combined with opioids like fentanyl, thus increasing the risk of overdose and death**.
- ❖ It is **usually used as a tranquilizer on cows and horses**.
- ❖ It has been **approved by the US FDA for use in animals only**.

18.3 ONE HEALTH

- ❖ **One health Priority Research Agenda for Anti-Microbial Resistance** was recently released by **FAO, UN Environment Programme (UNEP), WHO and World Organisation for Animal Health (WOAH)** to better advocate for increased research and investment in AMR.

- ❖ The One Health Priority Research Agenda identifies **three crucial cross-cutting themes**:
 - ✓ gender,
 - ✓ vulnerable populations, and
 - ✓ sustainability.
- ❖ Recognizing the **interconnectedness of these factors with AMR**, the agenda emphasizes the need for **research that addresses these themes** comprehensively.

ABOUT ONE HEALTH

- ❖ **One Health is an approach** that recognizes that the **health of people is closely connected to the health of animals and our shared environment**.
- ❖ Its **purpose is to encourage collaborations in research and sharing of knowledge at multiple levels** across various disciplines like **human health, animal health, plants, soil, environmental and ecosystem health** in ways that improve, protect and defend the health of all species.

ABOUT AMR

- ❖ It occurs when **bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing risk of disease spread, severe illness and death**.

Note

- ❖ Earlier, **WHO also launched a global research agenda for AMR in human health** this year.
- ❖ Agenda presented a five pillar based one health approach to tackle growing threat of AMR including:
 1. **Transmission-** focuses on understanding the transmission, circulation, and spread of AMR across various sectors, including the environment, plants, animals, and humans.
 2. **Integrated surveillance-** enhance technical understanding and information exchange among stakeholders
 3. **Interventions-** concentrates on programs, practices, tools, and activities aimed at preventing, containing, or reducing AMR
 4. **Behavioural insights and change**
 5. **Economics and policy-** addresses investment and action required for AMR prevention and control

18.4 TELE MANAS

- ❖ India's **first Tele-MANAS chatbot** was launched in **Jammu & Kashmir**.
- ❖ It will ensure **round the clock** services of health counsellors, clinical psychologists and consultants.
- ❖ The Centre had in Budget 2022 announced the **National Tele Mental Health Programme of India, Tele Mental Health Assistance and Networking Across States (Tele-MANAS)**.
- ❖ It is under the **Ministry of Health and Family Welfare**.
- ❖ **National Institute of Mental Health and Neuro-Sciences(NIMHANS)** is the nodal centre while **National Health Systems Resource Centre (NHRSC), IIT Bengaluru and IIITB** will provide **technology support**.
- ❖ A toll-free, **24/7 helpline number (14416)** has been set up across the country.
- ❖ **Tele-MANAS is a two-tier system**.
 - ✓ **Tier 1** comprises **State Tele MANAS cells**, which includes trained counsellors and mental health specialists.
 - ✓ **Tier 2** comprises **specialists at District Mental Health Programme (DMHP)/Medical College resources for physical consultation and/or eSanjeevani for audio visual consultation**.

18.5 PESTE DES PETITS RUMINANTS (PPR)

- ❖ PPR has recently killed 60 sheep and goats in the **highland pastures of the Lahaul and Spiti district of Himachal Pradesh**.

ABOUT PPR

- ❖ It is a **highly contagious viral disease**.
- ❖ It is **caused by a morbillivirus** closely related to the rinderpest virus.

- ❖ It affects goats, sheep, and some wild relatives of domesticated small ruminants, as well as camels.
- ❖ **Symptoms:**
 - ✓ It causes **immunosuppression**, which makes affected animals more likely to pick up other infections.
 - ✓ Clinical signs of PPR include **fever, eye and nasal discharges, sores in the mouth, diarrhoea, listlessness, respiratory signs (coughing and pneumonia), Abortion and death**
 - ✓ Fatality rates can **range from 20% and can reach as high as 90%**.
- ❖ **Transmission**
 - ✓ when a susceptible animal **inhales the virus from infected animals' coughing and sneezing**.
 - ✓ indirectly through contact with **infected objects** (fomites) such as feed troughs, bedding
 - ✓ **secretions from the eyes, nose, and mouth and faeces** of infected animals.
- ❖ The **PPR virus does not infect humans**.

18.6 NAEGLERIA FOWLERI OR "BRAIN-EATING AMOEBIA"

- ❖ A 15-year-old boy in Kerala's Alappuzha district died recently due to a rare infection caused by *Naegleria fowleri* or "brain-eating amoeba".

ABOUT NAEGLERIA FOWLERI

- ❖ *Naegleria fowleri*, commonly known as "brain-eating amoeba," is a **single-cell organism** found in a **warm freshwater environment** such as lakes, hot springs and even in poorly maintained swimming pools.
- ❖ **Warm water temperatures, particularly during the summer months, create favourable conditions** for the amoeba's growth.
- ❖ It **can only be seen with a microscope**.
- ❖ Only one species of *Naegleria*, *Naegleria fowleri*, **infects people**.
- ❖ However, **it doesn't survive in saline conditions** and is hence **not found in sea water**.
- ❖ It **survives on bacteria found in the sediment in lakes and rivers**.
- ❖ The **amoeba enters the body through the nose and travels to the brain**, leading to a severe and usually fatal brain infection known as **primary amebic meningoencephalitis (PAM)**.
- ❖ This affects the brain by causing **inflammation and destruction of brain tissue**.
- ❖ The **symptoms usually appear within a week of infection** and include **severe headache, fever, nausea, vomiting, stiff neck, confusion, seizures and hallucinations**.
- ❖ Brain-eating amoeba can be fatal, with a **recorded death rate of 97%**.
- ❖ *Naegleria fowleri* infection **does not spread from person to person, nor does it manifest symptoms when contracted in other forms**.

18.7 CANDIDA AURIS

- ❖ Live cultures of *Candida auris* have been **isolated and documented in the ear canals of hospitalised stray dogs** in the capital.

ABOUT CANDIDA AURIS

- ❖ It is an **emerging oval-shaped fungus** that presents a serious global health threat. It is **resistant to most antifungal agents** and can cause **life-threatening outbreaks**.
- ❖ It was **1st reported in Japan in 2009**.
- ❖ The research suggests that **pets can act as reservoirs for superbugs, potentially transmitting infections to humans**.
- ❖ It has been **classified as a critical priority group by the World Health Organisation**.
- ❖ It **belongs to the genus Candida** which causes **Candidiasis in humans**.
- ❖ Often, candidiasis is acquired in hospitals by patients with weakened immune systems.

18.8 GULLIAN BARRE SYNDROME

- ❖ Peru has imposed a **health emergency over an "unusual" outbreak** of Guillain-Barré Syndrome (GBS) in the country.

ABOUT GBS

- ❖ The Guillain-Barré Syndrome (GBS) is a **rare but serious neurological disorder and autoimmune disease**.
- ❖ It is a neurological condition characterized by an **uncommon immune system response that mistakenly attacks on nervous system**.
- ❖ Guillain-Barre Syndrome **can manifest in various degrees of severity**, ranging from **mild cases with brief episodes of weakness to more severe instances of paralysis**.
- ❖ In GBS, **symptoms may progress gradually over a span of hours, days, or weeks** eventually rendering certain muscles non-functional.
- ❖ **Symptoms**
 - ✓ The earliest symptoms of Guillain-Barré Syndrome (GBS) **are usually tingling and weakness in the feet and hands or pain in the legs or back**.
 - ✓ If the weakness extends beyond the legs, a person may develop the following symptoms:
 - **Weakness on both sides of the body**
 - **Difficulty breathing**
 - **Muscle weakness in the arms**
 - **Paralysis of the whole body**
- ❖ The disease is **often triggered after a viral or bacterial infection**.
- ❖ **Treatment**
- ❖ The two main treatment options for GBS **are immunoglobulin therapy (IVIG) and plasma exchange**.
 - ✓ In IVIG, donated blood containing health anti-bodies is given to a person with GBS. It is an intravenous treatment and is the most common method to treat GBS.
 - ✓ In plasma exchange, a person's blood is taken and harmful anti-bodies are filtered out in a machine. The treated blood is given again to the person.

18.9 BRUCELLOSIS DISEASE

- ❖ A seven-year-old Kadakkal Kummil native was affected by the **contagious Brucellosis disease mostly found in cattle breeds**.

ABOUT BRUCELLOSIS DISEASE

- ❖ It is a **bacterial disease caused by various Brucella species**, which mainly infect cattle, swine, goats, sheep and dogs.
- ❖ It **spreads from animals to people. But person-to-person transmission is rare**.
- ❖ It is **also known as Malta fever or Mediterranean fever**.
- ❖ Brucellosis is **endemic in India** causing huge economic losses to dairy industry due to Infertility, abortion, birth of weak off springs, reduced productivity etc.
- ❖ **Humans can get infected under if they**
 - ✓ **Directly contact with infected animals**
 - ✓ **Eat or drink contaminated animal products**
 - ✓ **Inhaling airborne agents carrying bacteria**.
- ❖ Worldwide, **Brucella melitensis** is the **most prevalent species causing human brucellosis**.
- ❖ **Symptoms:** Brucellosis **typically causes flu-like symptoms, including fever, weakness, malaise and weight loss**.
- ❖ It is usually **treated with antibiotics, including rifampin and doxycycline**.
- ❖ To control the disease, the **WHO recommends the vaccination of cattle and**, in some cases, **testing and culling**.

18.10 ENTAMOEBIA MOSHKOVSKII

- ❖ A pathogen associated with **diarrhoea**, 'Entamoeba Moshkovskii' is circulating in **Kolkata**, according to a new study.
- ❖ First described in **1941 in Moscow**, it is **commonly found in anoxic sediments (oxygen deficient) to brackish coastal pools**.
- ❖ **E moshkovskii and other related species like E histolytica and Entamoeba dispar are morphologically identical**.
- ❖ They **also cause amoebiasis, which affects approximately 50 million people in tropical regions**.
 - ✓ Of them, **E histolytica infections are prevalent**.

18.11 DUCHENNE'S MUSCULAR DYSTROPHY

- ❖ A team of doctors from **Tamil Nadu along with scientists from Japan** have developed a **disease-modifying treatment for Duchenne Muscular Dystrophy (DMD)**, a rare genetic disease, using a food additive — a **beta-glucan produced by N-163 strain of a yeast Aureobasidium pullulans**.

ABOUT DMD

- ❖ **Duchenne Muscular Dystrophy (DMD) is the most common and fatal type of muscular dystrophy marked by progressive muscle degeneration and weakness**.
- ❖ **Dystrophin**, an enzyme secreted in the muscles, helps in wear and tear and regeneration of muscles. **Because of the genetic disorder, muscles cannot produce dystrophin**.
- ❖ **Muscle weakness is the principal symptom of DMD. It can begin as early as age 2 or 3, primarily affects boys, but in rare cases it can affect girls**.
- ❖ Patients (usually children) have **reduced bone density and an increased risk of developing fractures**.
- ❖ **Women are usually carriers of the genetic trait**.
- ❖ **Currently available treatments were gene therapy, Exon-skipping and disease modifying agents (anti-inflammatory medicines such as steroids)**.

18.12 MEASLES

- ❖ **London** is standing at risk of a **major measles outbreak**, the UK Health Security Agency (UKHSA) has warned recently.

ABOUT MEASLES

- ❖ It is a **highly contagious viral disease** and is a **cause of death among young children globally**.
- ❖ It is **caused by a single-stranded, enveloped RNA virus with 1 serotype**. It is classified as a member of the **genus Morbillivirus in the Paramyxoviridae family**.
- ❖ It is **normally passed through direct contact and the air**.
- ❖ The **virus infects the respiratory tract, then spreads throughout the body, causing severe disease, complications and even death**.
 - ✓ It can cause serious complications, including **blindness, encephalitis, severe diarrhoea, ear infection and pneumonia**.
- ❖ **Unvaccinated young children and pregnant women are at highest risk of severe measles complications**.
- ❖ **No specific antiviral treatment exists for measles**.
- ❖ **Vaccine**
 - ✓ **MMR Vaccine gives protection against three diseases measles, mumps and rubella**.
 - ✓ **MMRV vaccine can prevent measles, mumps, rubella, and varicella**.

18.13 CRIMEAN-CONGO HEMORRHAGIC FEVER

- ❖ As Europe reels under a heatwave and wildfires, the **rising temperatures have also raised fears of spread of viruses generally not found in colder climates**.
- ❖ WHO has sounded alert about the threat **Crimean-Congo haemorrhagic fever (CCHF)**

ABOUT CRIMEAN-CONGO HEMORRHAGIC FEVER (CCHF)

- ❖ Crimean-Congo hemorrhagic fever (CCHF) is a **viral haemorrhagic fever usually transmitted by ticks.**
- ❖ It was **first detected among soldiers in the Crimean Peninsula (near the Black Sea) in 1944.**
- ❖ It **can also be contracted through contact with viraemic animal tissues (animal tissue where the virus has entered the bloodstream) during and immediately post-slaughter of animals.**
- ❖ Animals such as **cattle, goats, sheep and hares “serve as amplifying hosts for the virus.**
- ❖ **Symptoms-** CCHF symptoms include **fever, muscle ache, dizziness, neck pain, backache, headache, sore eyes and sensitivity to light.**
- ❖ CCHF **outbreaks constitute a threat to public health services as the virus can lead to epidemics.**
- ❖ It has a **high case fatality ratio (10–40%), potentially results in hospital and health facility outbreaks, and is difficult to prevent and treat.**
- ❖ There is **no vaccine for the virus in either humans or animals, and treatment generally consists of managing symptoms.**

18.14 E-CIGARETTES

- ❖ The Health Ministry has **launched an online portal to facilitate reporting of violations** under the **Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act (PECA).**
- ❖ **PECA was introduced as an Ordinance and later formalised into an Act in 2019.**
- ❖ The portal, **www.violation-reporting.in**, will allow faster action against any reported violations.
- ❖ **All forms of Electronic Nicotine Delivery Systems including e-cigarettes are prohibited under PECA.**
- ❖ Electronic cigarettes and similar devices are **battery-operated systems** that heat a substance (in liquid or solid state), which **contains nicotine and often flavours, to create an aerosol for inhalation.**
- ❖ E-cigarettes’ aerosols have **harmful substances such as nicotine, cancer-causing chemicals, heavy metals such as nickel, tin and lead, chemicals causing lung diseases such as diacetyl.**

18.15 FRAGILE X SYNDROME

- ❖ **'World Fragile X Awareness Day'** is observed on July 22nd across the globe to **spread education and awareness** among the general public about the genetic disorder called **'Fragile X Syndrome'.**
- ❖ **Fragile X syndrome (FXS) is a genetic disorder that causes intellectual disability and autism.**
- ❖ **First reported in 1943 by James Purdon Martin and Julia Bell in Britain, the condition was originally referred to Martin–Bell syndrome. It is also known as Marker X syndrome.**
- ❖ The syndrome is the **leading inherited cause of autism in 4% of the population worldwide.**
- ❖ **Boys often have a more serious form of it than girls.**
- ❖ FXS is **caused by changes in a gene called Fragile X Messenger Ribonucleoprotein 1 (FMR1).**
 - ✓ **FMR1 usually makes a protein called FMRP that is needed for brain development.**
- ❖ A **mother who is a carrier of FXS has a 50% chance of passing the mutated gene to her children, who will either be carriers or have FXS.**
 - ✓ **Men who are carriers do not pass the pre-mutation to their sons, but only daughters, who become carriers.**
- ❖ There is **no cure for FXS.**
- ❖ However, **treatment services can help people learn important skills.**

18.16 TELE MANAS

- ❖ The union health ministry said the **Tele-MANAS (Mental Health Assistance and Networking Across States) helpline** under the **National Tele Mental Health Programme** has received **over 200,000 calls since its launch in October 2022.**
- ❖ Currently, **there are 42 active Tele Manas cells across 31 states and Union Territories.**

- ✓ The service handles over 1,300 calls daily in 20 different languages.
- ❖ The service is accessible through the toll-free numbers 14416 or 1-800-891-4416, with options to choose preferred languages.
- ❖ It is part of the government's initiative to bolster the nation's mental health workforce and make mental health services accessible and free to every household.
- ❖ Tele-MANAS will be organised in two tier system-
 - ✓ **Tier 1:** It comprises of state Tele-MANAS cells which include trained counsellors and mental health specialists.
 - ✓ **Tier 2:** It will comprise of specialists at District Mental Health Programme (DMHP)/Medical College resources for physical consultation and/or e-Sanjevani for audio visual consultation.
- ❖ **Services offered by Tele MANAS:**
 - ✓ **Tele counselling** by trained counsellors.
 - ✓ **Tele Consultation** by Mental Health professionals when required.
 - ✓ **Referral Services to other Mental Health Establishments** such as Medical Colleges, District Mental Health Program (DMHP) services and speciality institutes.

18.17 INDIA'S FIRST CANNABIS MEDICINE PROJECT

- ❖ CSIR-IIIM Jammu is set to lead **India's first Cannabis Medicine Project**, exploring a diverse array of medicinal uses for cannabis.
- ❖ It has been initiated under the leadership of Ministry of Science & Technology in **Private Public Partnership** with a **Canadian firm**.
- ❖ Cannabis has a great potential to put substance of abuse for the good of mankind **especially for patients suffering from neuropathies, cancer and epilepsy, malignancies**.
- ❖ This project of CSIR-IIIM is **also important from the perspective of Atma- Nirbhar Bharat** as it will be able to produce export quality drugs meant for different kinds of neuropathies, diabetic pains etc.

18.18 CHIS - CONTROLLED HUMAN INFECTION STUDIES

- ❖ India is taking its **first step towards introducing Controlled Human Infection Studies (CHIS)**, a research model used in other countries for vaccine and treatment development.
- ❖ **Indian Council of Medical Research's (ICMR) Bioethics Unit** has introduced a **consensus policy statement on ethical conduct of CHIS in India**.
- ❖ It **aims to address ethical issues of CHIS** so that research can be conducted without compromising on ethical principles while ensuring protection of human participants.
- ❖ **CHIS** refers to the **research methodology that involves intentionally exposing healthy human volunteers to a specific pathogen or infectious agent under controlled conditions**.
- ❖ This is **done for developing models of infection, understanding host-pathogen interactions and/or testing vaccines and therapeutics**.
- ❖ **ICMR has cautioned that CHIS is a highly complex area and may require collaborations at different levels between researchers, institutions, organisations and/or between different countries**.

18.19 NIPAH VIRUS

- ❖ An **ongoing nationwide survey** by the Pune-based Indian Council of Medical Research's National Institute of Virology (ICMR-NIV) has found **evidence of the Nipah virus circulation in the bat population across nine states** (Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra, Bihar, West Bengal, Assam and Meghalaya) and **one Union Territory (Puducherry)**.
- ❖ India **reported its first outbreak in West Bengal's Siliguri in January-February 2001** with 45 deaths among 66 cases.
- ❖ Nipah Virus (NiV), a **zoonotic virus, is a type of RNA virus transmitted in humans through its natural hosts or through direct contact with infected people or contaminated food**.

- ❖ Nipah virus **causes a highly fatal respiratory and encephalitic infection in humans.**
- ❖ **Symptoms** such as fever, headache, myalgia (pain in the muscles), vomiting, altered sensorium, acute respiratory distress, and convulsions.
- ❖ The **Pteropus species of fruit bats**, commonly called **flying foxes**, are the **known carriers of the virus.**
- ❖ There is **no treatment or vaccine available for either people or animals.**

18.20 MERS- MIDDLE EAST RESPIRATORY SYNDROME

- ❖ The World Health Organisation (WHO) recently confirmed a case of the **potentially fatal Middle East Respiratory Syndrome Coronavirus (MERS-CoV)** in **Abu Dhabi.**

ABOUT MERS-COV

- ❖ The **Middle East Respiratory Syndrome Coronavirus (MERS-CoV)** was **first identified in Saudi Arabia in 2012.**
- ❖ Since its detection, **27 countries reported MERS cases.**
- ❖ According to the WHO, a **total of 2,605 cases of the virus have been reported so far, with 936 associated deaths.**
- ❖ MERS is a **zoonotic virus that can transmit between animals and people.**
- ❖ **Common symptoms** of MERS infection are: **Fever, Shortness of breath, Cough, Sore throat, Muscle and stomach pain and soreness, Vomiting, Diarrhea.**
- ❖ According to WHO information, **people in Saudi Arabia mostly got infected through unprotected contact with infected dromedary camels.**

18.21 DENGUE

- ❖ Samples **found positive for dengue** in Delhi has confirmed the presence of **Type-2 strain** in a majority of them.
- ❖ **Dengue Virus Type-2** is supposed to be the **most severe and has a tendency to cause haemorrhagic fever and mortality.**
- ❖ **DENV 2 can cause dengue shock syndrome and also lead to multi-organ failure.**

ABOUT DENGUE

- ❖ It is a **mosquito-borne tropical disease** caused by the dengue virus i.e **Genus Flavivirus**, transmitted by several species of **female mosquito within the genus Aedes, principally Aedes aegypti.**
 - ✓ The mosquito also **transmits chikungunya, yellow fever and Zika infection.**
- ❖ There are **4 distinct serotypes** of the virus that cause dengue (**DEN-1, DEN-2, DEN-3 and DEN-4**).
 - ✓ Serotypes are **separate groups within a species of microorganisms that all share a similar characteristic.**
- ❖ **Symptoms** - fever, headache, muscle, and joint pain, and a characteristic skin rash that is similar to measles. There is also a drop in platelets.
 - ✓ It is also called **Break bone fever.**
- ❖ There is **no specific medicine to treat dengue infection.**
- ❖ **Vaccine- Dengvaxia or CYD-TDV** approved by **US FDA**,
 - ✓ It is a **live, attenuated dengue virus** which is **administered to people who have been infected by dengue once.**
- ❖ **Biological control-** breeding a **species of mosquito** which carries a **type of bacteria, called Wolbachia** that **prevents viruses like dengue from growing inside them.**
- ❖ **Precautions**
 - ✓ Wear **body covering clothes**, and **apply mosquito repellent creams** to protect yourself from mosquito bites.
 - ✓ **Adequate water intake** is also very important if one is down with dengue.

18.22 CONJUNCTIVITIS

- ❖ Amid heavy rainfall in Delhi and nearby areas over the past few weeks, conjunctivitis has become a prevalent concern.
- ❖ The **humid weather offers** a favourable environment for **bacteria and viruses to grow and spread**, contributing to **increased cases of highly contagious eye infections**.
- ❖ **Conjunctivitis**, also known as **pink eye**, is **the most common type of eye infection**.
- ❖ It is the **swelling or inflammation of the conjunctiva** i.e., **a clear tissue covering the white part of your eye and the inside the eyelids**.
- ❖ It can **occur due to allergic or chemical reaction or due to Infectious cause caused by bacteria or virus**.
 - ✓ The conjunctivitis cases **are mostly caused by a virus**.
- ❖ The infection is **highly contagious** and **symptoms last for three to four days**.
- ❖ However, **it doesn't affect the vision** and after the disease has been treated or run its course, the **eyes gets completely cured**.
- ❖ **Transmission/spread**- direct or indirect contact with an **infected person's eye secretions, contaminated objects** like door knobs, towels, tissues, or **respiratory droplets**.

19. MISCELLANEOUS

19.1 SHARENTING

- ❖ **Kolkata CID** recently warned parents of dangers of **Sharenting**.
- ❖ **Sharenting** refers to the act of **parents posting too many details about their children on social media**.
- ❖ It could be **detrimental for child's psychological growth** and also **increases risk of details being used by Cyber criminals**.
- ❖ It also requested that **information about the child are to be posted with extreme caution**.

19.2 LISA FRANCHETTI TO LEAD US NAVY

- ❖ **Admiral Lisa Franchetti** has been nominated by **US President Joe Biden to lead US Navy**.
- ❖ If confirmed by the Senate, **Franchetti would become the first female member of the Joint Chiefs of Staff**, which consists of chiefs of the Army, Navy, Air Force and others.

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20. HIMACHAL NEWS

20.1 UNCERTAINTY PERSISTS OVER KULLU'S BHOOTNATH BRIDGE RESTORATION

- ❖ People have lost hope for restoration of Bhootnath bridge, the targets for whose completion have been postponed several times during the last three years.
- ❖ The bridge is **lying defunct for the past over four years**.
- ❖ It is a **96-metre-long double-lane bridge** over the **Beas river at Bhoothnath in Kullu**.

20.2 TWO IRRIGATION PROJECTS STUCK FOR WANT OF CENTRAL FUNDS

- ❖ **Phina Singh Canal** and **Shah Canal command area irrigation projects** in **Kangra district** are stuck for want of funds from the Union Government.
- ❖ The **Rs 643-crore Phina Singh Canal project is being set up in the Nurpur area of Kangra district**. The project has been hanging fire for the past over 11 years and its cost has gone up from initial Rs 204 crore to Rs 643 crore now.
- ❖ The project was envisaged in 2011 for **interlinking two Beas tributaries, the Chaki river and Kalam nullah**, in the Nurpur area and the construction of a concrete gravity dam across the Chaki river.

20.3 EARTHQUAKES IN LHAUL SPITI

- ❖ **Two moderate-intensity, back-to-back earthquakes shook Lahaul and Spiti district** in Himachal Pradesh recently.
- ❖ The **earthquakes of 3.2 and 3.1 magnitudes** with a **depth of 10 kilometres** were reported.
- ❖ **Tribal Lahaul and Spiti falls in seismic zone IV**, which is a high-damage-risk zone.

Note

- ❖ **Bureau of Indian Standards (BIS)** has **grouped the country into four seismic zones viz. zones V, IV, III and II**.
- ❖ **Zone V expects the highest level of seismicity** whereas **Zone II is associated with the lowest level of seismicity**.

20.4 SANGLA VALLEY

- ❖ The government recently evacuated all 118 stranded tourists **from the Sangla valley of Kinnaur district**.
- ❖ The **Indian Air Force (IAF) with the help of ITBP personnel** and the district administration managed to **airlift the stranded tourists from Sangla to Choling village**.

20.5 MINJAR FAIR

- ❖ The upcoming International Minjar Fair will **be organised with grandeur, highlighting the rich folk art, culture and history of Chamba district**.
- ❖ The eight-day fair will be organised from July 23 to 30.

20.6 PANCHVAKTRA TEMPLE

- ❖ The centuries-old **Panchvaktra temple of Mandi district** has emerged as a centre of immense religious faith as it emerged intact in flooded Beas after torrential rains.
- ❖ The temple of **Lord Shiva** is stated to be **over 300 years old**.
- ❖ Temple is **under the jurisdiction of the Archaeological Survey of India (ASI)**.

20.7 GADDI SHEPHERDS STRANDED IN CHANDRATAL AREA

- ❖ A large number of Gaddi shepherds are **stranded in higher reaches of the Bara Bhangal valley** that extends over **Kangra, Kullu and Lahaul and Spiti districts**.
- ❖ Bara Bhangal is a **remote village** that is situated 15 km from **Thamsar Pass** in Kangra district.
- ❖ Flashfloods in the **Ravi, bridges constructed over it were destroyed**.

20.8 WORKS WORTH RS 51L DEDICATED IN HAROLI SUB-DIVISION

- ❖ Deputy Chief Minister Mukesh Agnihotri recently dedicated to the people, **three community utility buildings in the Haroli sub-division in Una**. A sum of Rs 51 lakh has been spent on these.
- ❖ The three **buildings have been constructed in Beetan, Hira Nagar and Gondpur Jaichand villages**.
- ❖ Other than that, **15 new tubewells are being set up in Beetan and Singan villages** to mitigate water scarcity in the upper reaches of the Haroli Assembly segment.
- ❖ A **water storage tank with a capacity of 25 lakh litre** is being constructed in **Amrali village** and **will be the biggest storage tank in the state**.

20.9 CUHP GETS A+ NAAC GRADE

- ❖ The **Central University Himachal Pradesh (CUHP)** has become the **first institute in the state** to secure an **'A+' grade** from the **National Assessment and Accreditation Council (NAAC)**.

20.10 AGNIVEER TRAINING CENTRE OPENS AT ACC, BARMANA

- ❖ The centre was **inaugurated by Brigadier (retd) Madan Sheel Sharma**, chairman of Himachal Pradesh Ex Servicemen Corporation, at **ACC cement factory at Barmana** in **Bilaspur district**.
- ❖ The centre would also **create awareness about Agniveer selection process** and **encourage more youth to join defence services**.
- ❖ In the first group, **35 boys have been enrolled for the training**.

20.11 SASHAKT MAHILA RIN YOJANA

- ❖ The CM recently announced the launching of a **collateral-free loan scheme**, called **Sashakt Mahila Rin Yojana** to **economically empower women**.
- ❖ The 'Sashakt Mahila Rin Yojna' is an initiative of the **Himachal Pradesh State Cooperative Bank (HPSCB)** which will provide loans to women for pursuing their entrepreneurial dreams, engage in livelihood activities, fulfil their day-to-day needs and uplift their families.
- ❖ Under this scheme, **beneficiaries will get the credit facility of Rs.21,000, Rs.51,000 and Rs.1,01,000** at a **relatively low interest rates of 8.51%**.
- ❖ The main benefit of this scheme is **that beneficiaries need not to provide any assets or collateral as security against the loan amount**.

20.12 STATE COMMISSION FOR WATER CESS ON HYDROPOWER GENERATION

- ❖ The state government today appointed **Amitabh Awasthi**, Secretary, Jal Shakti Department, as Chairman of the State Commission for Water Cess on Hydropower Generation.
- ❖ The **three members**, who had been appointed, are **HM Dhareula**, an engineer with the HP State Electricity Board, **Arun Sharma** and **Joginder Singh**.
- ❖ Awasthi and the three members **shall hold office for three years or up to the age of 65 years**, whichever is earlier.

20.13 MALANA DAM

- ❖ **National Disaster Response Force Rescuers reached Malana village** to assist the authorities to open the **flood gates of the dam that were jammed and led to overflowing of water and further cracked walls of the dams.**
- ❖ Panic gripped the ancient village of **Malana when the water from the 86-MW dam**, across the **Malana tributary of the Parvati River** spilt over due to the malfunctioning of all four gates.
 - ✓ **Parvati River is a river in the Parvati Valley in Himachal Pradesh, that flows into the Beas River at Bhuntar.**

20.14 SAINJ RIVER

- ❖ A flood in the **Sainj river** has left many families homeless in Sainj under Banjar subdivision of Kullu district. The flooded river washed away 30 houses and 40 shops at Sainj on July 10, forcing residents to take refuge in temporary shelters.
- ❖ The **V-shaped Sainj Valley rises** from the lower ranges of the main Himalaya to the **east of Kullu.**
- ❖ The Sainj River flows past a **series of interlocking spurs and widens as it travels southwest to join the River Beas** at the small village of Larji.

20.15 ZOOLOGICAL PARK, TIGER SAFARI TO COME UP IN KANGRA

- ❖ The **Central Zoo Authority (CZA)** has given approval for setting up a **world-class zoological park and a safari at Bankhandi in Kangra district.**
- ❖ Around **195 hectares of forestland has already been demarcated for the park project** and forest clearance will not be required for it.
- ❖ The proposal includes a tiger safari, besides bringing a host of other animals like various species of crocodiles.
- ❖ At present, **there are only three zoos at Gopalpur in Kangra, Renukaji in Sirmaur and the Kufri Nature Park in Shimla.**

20.16 JAWALI IRRIGATION PROJECT

- ❖ Hanging fire for over 11 years, the ambitious **Sukharhar medium irrigation project** proposed by the then state government in the **Jawali area of Kangra district in 2012** has been approved by the **State Level Scheme Sanctioning Committee of the Pradhan Mantri Krishi Sinchayee Yozna (PMKSY).**
- ❖ The project had **earlier been cleared** by the **State Technical Advisory Committee** earlier.
- ❖ The committee accorded approval to the project to be constructed at an estimated cost of Rs 223.49 crore for inclusion under the scheme for the current fiscal year.



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