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POLITY & GOVERNANCE

1. SWAYAM PLUS PLATFORM

· The 'SWAYAM Plus' platform, launched by the Union Minister of Education and Skill Development and Entrepreneurship, introduces a ground-breaking approach to online education.

· SWAYAM Plus offers meticulously crafted courses in collaboration with leading industry experts, aiming to bridge the gap between academic learning and real-world skills demanded by employers.

· The platform is designed to empower college students and lifelong learners, enhancing their employability across various sectors such as Manufacturing, Energy, Computer Science and Engineering/IT/ITES, Management Studies, Healthcare, Hospitality and Tourism, in addition to Indian Knowledge Systems.

· Its primary objective is to establish a robust ecosystem for professional and career development, engaging learners, course providers, industry stakeholders, academia, and strategic partners.

· With a strategic focus on reaching learners from tier 2 and 3 towns as well as rural areas, the platform endeavours to extend its reach to a diverse learner base across the country.

· Innovative features include multilingual content available in 12 major Indian languages, AI-driven guidance, seamless credit recognition, and pathways to employment, making learning accessible and tailored to individual needs.

2. ARTICLE 25 OF INDIAN CONSTITUTION

· The Kerala High Court recently observed that the fundamental right under Article 25 of the Constitution to enter a temple for worship does not give the right to any member of the Hindu community to perform the role of Archakas (priests).

· Article 25 says that all persons are equally entitled to freedom of conscience and the right to freely profess, practice, and propagate religion.

· The implications of these are:

o Freedom of conscience: Inner freedom of an individual to mould his relation with God or Creatures in whatever way he desires.

o Right to profess: Declaration of one's religious beliefs and faith openly and freely.

o Right to practice: Performance of religious worship, rituals, ceremonies, and exhibition of beliefs and ideas.

o Right to propagate: Transmission and dissemination of one's religious beliefs to others or exposition of the tenets of one's religion.

· But it does not include the right to convert another person to one's religion. Forcible conversions impinge on the 'freedom of conscience' guaranteed to all persons alike.

· Thus, Article 25 covers not only religious beliefs (doctrines) but also religious practices (rituals).

· Moreover, these rights are available to all persons–citizens as well as non-citizens.

· However, these rights are subject to public order, morality, health, and other provisions relating to fundamental rights.

· Further, nothing in this article shall affect the operation of any existing law or prevent the State from making any law to:regulate or restrict any economic, financial, political, or other secular activity associated with religious practice;

· Provide for social welfare and reform, or throw open Hindu religious institutions of a public character to all classes and sections of Hindus;

3. MISSION UTKARSH

· The Ministry of Ayush and the Ministry of Women and Child Development have partnered to enhance the nutrition of adolescent girls through Ayurveda interventions as a part of Mission Utkarsh.

· Under Mission Utkarsh, 15 central ministries or departments will work to elevate districts at the bottom, to state and national averages.

· In the first phase, the focus may be on improving the anaemic status of adolescent girls (14-18 years) in five aspirational districts of five states namely Assam (Dhubri),

Chhattisgarh (Bastar), Jharkhand (Paschimi Singhbhum), Maharashtra (Gadchiroli), and Rajasthan (Dhaulpur).

· The objective is to combat anaemia and work towards achieving an "Anaemia Mukt Bharat" (Anaemia Free India).

· Anaemia is a medical condition characterised by a deficiency of red blood cells or haemoglobin in the blood, leading to reduced oxygen-carrying capacity

4. PRADHAN MANTRI ANUSUCHIT JAATI ABHYUDAY YOJNA (PM-AJAY)

· The Ministry of Social Justice and Empowerment inaugurated and laid the foundation stone for 34 residential hostels across various states and central institutes (under PM-AJAY), in order to cater to the accommodation needs of Scheduled Castes (SC) and Other Backward Classes (OBC) students.

· PM-AJAY (Pradhan Mantri Adarsh Gram Yojana) is a Centrally Sponsored Scheme aimed at reducing poverty among Scheduled Castes (SC) communities and increasing literacy rates while encouraging SC enrollment in schools.

· The scheme comprises several components:

o Development of SC-dominated villages into "Adarsh Gram" (model villages) to uplift their socio-economic status.

o Provision of grants-in-aid for District/State-level Projects focused on the socio-economic betterment of SC communities.

o Construction of hostels in Higher Educational Institutes (HEIs) that are top-ranked according to the National Institutional Ranking Framework (NIRF), providing accommodation and support for SC students.

o Financial support for Monitoring and Evaluation to ensure effective implementation and impact assessment of the scheme.

5. GROW REPORT

· The Greening and Restoration of Wasteland with Agroforestry (GROW) report and portal was launched by NITI Aayog (National Institution for Transforming India).

· The GROW report aims to facilitate restoration projects for achieving national commitments of Land Degradation Neutrality and restoring 26 million hectares of degraded land by 2030, as well as creating an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent.

· The report highlights that India possesses approximately 55.76 million hectares of wastelands, comprising 16.96% of the total geographical area (TGA) of the country.

· These degraded lands have suffered from reduced productivity and biodiversity due to various natural and human-induced factors.

· The report suggests greening and restoring these wastelands through agroforestry.

· The report also underscores the potential benefits of converting underutilised areas, especially wastelands, for agroforestry.

· Currently, agroforestry covers 8.65% of India's total geographical area, totalling about 28.42 million hectares and about 6.18% and 4.91% of India's land are highly and moderately suitable for agroforestry, respectively.

· As per Indian Space Research Organisation (ISRO) Rajasthan, Madhya Pradesh, and Telangana are the top large-sized states for agroforestry suitability, while Jammu and Kashmir, Manipur, and Nagaland ranked highest among the medium-sized states.

· The report identifies the policy and institutional support required for scaling up agroforestry interventions in wastelands.

· The report emphasises India's National Agroforestry Policy of 2014, which aims to enhance productivity, profitability, and sustainability through this agro ecological land use system.

6. PRESS AND REGISTRATION OF PERIODICALS ACT (PRP ACT), 2023

- The registration of newspapers and other periodicals will be governed by the provisions of the Press and Registration of Periodicals Act, 2023, and its Rules, which came into effect recently.
- Press and Registration of Periodicals Act (PRP Act), 2023: It has replaced the colonial era Press and Registration of Books Act dating back to 1867.
- The office of Press Registrar General of India – PRGI (erstwhile Registrar of Newspapers for India – RNI) shall be carrying out the purposes of the new Act.
- It provides for an online system for facilitating the registration of newspapers and other periodicals in the country.
- The new system replaces the existing manual, cumbersome processes involving multiple steps and approvals at various stages, which were causing unnecessary hardships to the publishers.
- The Ministry of Information and Broadcasting launched the Press Sewa Portal (presssewa.prgi.gov.in), the online portal of the Press Registrar General, for receiving various applications as mandated by the new Act.
- All applications, including the intimation by the printer of a periodical, application for registration of a facsimile edition of a foreign periodical, the application by a publisher for obtaining a certificate of registration of a periodical, application for revision of certificate of registration, application for transfer of ownership of periodicals, furnishing annual statement by the publisher of a periodical, and procedure for desk audit for verification of circulation of a periodical will be online through the Press Sewa Portal.
- Accordingly, publishers intending to bring out periodicals need to register their titles before publishing them

7. KARNATAKA HINDU RELIGIOUS INSTITUTIONS AND CHARITABLE ENDOWMENTS (AMENDMENT) BILL, 2024

- The Karnataka Legislative Assembly passed the Karnataka Hindu Religious Institutions and Charitable Endowments (Amendment) Bill, 2024, after it was previously defeated in the Legislative Council by the BJP-JD(S) alliance.
- The bill proposes the creation of a Common Pool Fund under the Hindu Religious Institutions and Charitable Endowments Department to support religious activities in the state.
- The amendment requires temples with incomes above Rs one crore to contribute 10%, those with incomes between Rs 10 lakh to one crore to contribute five per cent, and temples with incomes below Rs 10 lakh are exempt from contributions.

8. SCHEME FOR INTERNALLY DISPLACED PERSONS

- The Election Commission of India (ECI) has introduced a scheme allowing internally displaced persons (IDPs) of Manipur to vote at relief camps.
- Following ethnic violence in May 2023, over 60,000 people were displaced and housed in relief camps, with an additional 9,000 in Mizoram.
- According to the Guiding Principles on Internal Displacement, internally displaced persons (also known as "IDPs") are "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized border."

9. NEW HOLISTIC PROGRESS CARD

- The National Council for Educational and Research Training (NCERT) is introducing a new 'holistic progress card' (HPC).
- HPC, developed by Performance Assessment, Review, and Analysis of Knowledge for Holistic Development (PARAKH), a

standard-setting body under the NCERT, for the foundational stage (Classes 1 and 2), preparatory stage (Classes 3 to 5), and middle stage (Classes 6 to 8), as per suggestions by the National Education Policy (NEP) 2020,

marks a paradigm shift in assessing students' overall progress.

· HPC incorporates feedback from parents, classmates, and even self-evaluation by students.

· The approach aims to provide a comprehensive view of students' academic performance, cognitive abilities, socio-emotional skills and creativity during class activities.

· HPC aligns with the National Curriculum Framework for School Education (NCFSE) to prioritise a learner-centric evaluation.

· HPC, will no longer depend on marks or grades to evaluate a student's academic performance. Instead, it will rely on a 360-degree evaluation

· Under the HPC model, the students will be regularly assessed through class activities where they are not just passive learners but active agents.

· Teachers, thus, will be able to register the strengths of a student, such as their ability to "collaborate", "follow instructions", show "creativity" or "empathy", etc.

· A key feature of the HPC is that students will have a say too, evaluating their own as well as their classmates' performance.

10. UNNATI – 2024

· The Union Cabinet approved the Uttar Poorva Transformative Industrialization Scheme, 2024 (UNNATI – 2024) for a duration of 10 years, to incentivize investors to set up new units or expand existing ones.

· The Uttar Poorva Transformative Industrialization Scheme (UNNATI – 2024)

is a 10-year Central Sector Scheme aimed at fostering industrial development and employment generation in the Northeast Region (NER).

· Certain industries are kept on a positive list, while others are on a negative list to maintain environmental balance.

· Scheme Period: 10 years with an additional 8 years for committed liabilities

· Eligibility: All new industrial units and expanding units

· It offers incentives to new and expanding industrial units, with a maximum benefit of Rs 250 crore per unit

· Categorization of Districts Zone A (Industrially Advanced Districts) & Zone B (Industrially Backward Districts)

· Implementation Agency: Department for Promotion of Industry and Internal Trade (DPIIT)

11. IRIS: INDIA'S FIRST AI TEACHER ROBOT

· A school in Thiruvananthapuram, Kerala has unveiled a groundbreaking innovation in education with the introduction of India's first Generative Artificial Intelligence(AI) teacher robot named 'Iris'.

· Developed in collaboration with Makerlabs Edutech, Iris aims to transform traditional teaching methods through personalised learning experiences for students.

· Equipped with voice assistant and IRIS engages students in interactive learning activities.

· IRIS responds to user queries, provides explanations, and delivers educational content through personalised interactions.

· With a 4-wheel chassis and 5 degrees of freedom (DoF) movements, IRIS can move freely and engage in hands-on learning activities.

· IRIS promises to enhance learning outcomes and inspire students in new ways, ushering in a future where AI complements traditional teaching methods.

· Generative AI refers to deep-learning models that can generate high-quality text, images,

and other content based on the data they were trained on.

· In August 2023, India inaugurated it's first-ever AI school in Kerala.

12. MAHATARI VANDANA YOJANA

· The Prime Minister recently launched the Mahatari Vandana Yojana in Chhattisgarh.

· The scheme aims to ensure the economic empowerment of women, provide them with financial security, promote gender equality, and strengthen their decisive role within families.

· All married women above the age of 21 as of 1st January 2024, including widows, divorced, and deserted women, are eligible to benefit from this scheme.

· Eligible married women in Chhattisgarh will receive financial aid of Rs 1000 per month through Direct Benefit Transfer (DBT).

· Approximately 70 lakh women are expected to benefit from the Mahatari Vandana Yojana in Chhattisgarh, contributing to their socio-economic upliftment.

· The other initiatives aimed at enhancing women's well-being are the Pradhan Mantri Matru Vandana Yojana, Lakhpati Didi, Jan Dhan Accounts, Mudra Loans, Beti Bachao Beti Padhao and Ujjwala.

13. CITIZENSHIP (AMENDMENT) ACT, 2019

· Ministry of Home Affairs (MHA) recently notified the Citizenship Amendment Rules, 2024.

· Citizenship (Amendment) Act, 2019: The Citizenship Amendment Act (CAA) amends the Citizenship Act of 1955 to provide a path to Indian citizenship for Hindus, Sikhs, Christians, Buddhists, Jains, and Parsis who migrated from neighbouring Muslim-majority countries such as Pakistan, Bangladesh, and Afghanistan, before December 31, 2014.

· Under the CAA, migrants who entered India till December 31, 2014, and had suffered "religious persecution or fear or religious persecution" in their country of their origin would be made eligible for accelerated citizenship.

· It relaxed the residence requirement for naturalisation of these migrants from twelve years to just six.

· The law exempts the tribal areas of Assam, Meghalaya, Mizoram, and Tripura as included in the Sixth Schedule of the Constitution, including the tribal areas of Karbi Anglong in Assam, Garo Hills in Meghalaya, Chakma district in Mizoram, and Tribal areas district in Tripura.

· It also includes a provision for the cancellation of Overseas Citizen of India (OCI) registration if the OCI cardholder violates any provision of the Citizenship Act or any other applicable law

14. DEMOCRACY REPORT 2024

· India has declined to become "one of the worst autocracies," according to the 'Democracy Report 2024' by the V-Dem Institute.

· Report released by V-Dem Institute at Sweden's University of Gothenburg

· India ranks 104 in LDI, slipped to 110 in the Electoral Democracy Index, 92 in the Liberal Component Index

· The report highlighted deteriorating components of democracy, such as freedom of expression, clean elections, media independence, and civil society participation

· 42 countries and about 3 billion people affected by increasing autocratization

· EDI Measures fairness of elections, freedom of expression, information, association, and suffrage

· LCI Emphasizes the protection of individual and minority rights against state oppression and majority rule

15. KARNATAKA BAN HARMFUL FOOD COLOURING AGENTS

· The Karnataka Government has announced a ban on the use of harmful colouring agents in popular food items like cotton candy and Gobi Manchurian.

· The ban targets Rodamine B in cotton candy and imposes restrictions on Tartrazine usage in Gobi Manchurian.

· Rhodamine B is a chemical compound commonly employed in synthetic dyes for colouring silk, jute, leather, cotton, and wool, as well as in the cosmetics and plastics industries.

· Tartrazine is a bright yellow azo dye that is more stable and a cheaper alternative to natural food dyes.

- According to the Food Safety and Standards Authority of India (FSSAI), no colouring matter should be added to food unless permitted in the Food Safety and Standards

(Food Products Standards and Food Additives) Regulation, 2011.

16. NATIONAL SAMPLE SURVEY OFFICE (NSSO): 2023

- According to the Periodic Labour Force Survey (PLFS), conducted by the National Sample Survey Office (NSSO), in 2023, India's unemployment rate has dropped significantly, marking the lowest in the past three years.
- The PLFS gives estimates of Key employment and unemployment Indicators like, the Labour Force Participation Rates (LFPR), Worker Population Ratio (WPR), Unemployment Rate (UR), etc and the Activity Status- 'Usual Status' and 'Current Weekly Status'.
- Highlights of the Report: India's unemployment rate for individuals aged 15 and above has dropped to 3.1% in 2023, marking the lowest in the past three years.
- The unemployment rate was at 3.6% in 2022 and 4.2% in 2021.
- There is a decline in the unemployment rate among females to 3% in 2023 from 3.3% in 2022 and 3.4% in 2021.
- Similarly, for males, it decreased to 3.2% in 2023 from 3.7% in 2022 and 4.5% in 2021.
- There is a recovery in the employment scenario post the impact of the Covid-19 pandemic, with increased economic activity after the lifting of lockdowns by the Centre and states.
- Urban areas witnessed a reduction to 5.2% in 2023 from 5.9% in 2022 and 6.5% in 2021, while rural areas experienced a decrease to 2.4% in 2023 from 2.8% in 2022 and 3.3% in 2021.

- The LFPR in Current Weekly Status (CWS) for individuals aged 15 and above in urban areas rose to 56.2% in 2023, showing an upward trajectory from 52.8% in 2022 and 51.8% in 2021.
- This positive employment data comes on the heels of recent reports indicating India's economic growth surging to 8.4% in the third quarter of 2023-24.
- Sectors such as manufacturing, mining & quarrying, and construction played a pivotal role in driving this growth, as per data released by the NSO.
- The NSO's second advance estimate pegs India's growth at 7.6% for the entire fiscal year 2023-24, surpassing the initial projection of 7.3% released in January 2024.

17. KIRTI PROGRAMME

- Union Minister for Youth Affairs and Sports inaugurated the unique Khelo India Rising Talent Identification (KIRTI) programme.
- KIRTI Programme is aimed at school children between nine and 18 years age group.
- The scheme will have two main objectives:
  o To hunt talent from every nook and corner of the country and
  o To use sports as a tool to curb addiction towards drugs and other gadgetry distractions.
- KIRTI aims to conduct 20 lakh assessments across the country throughout the year to identify talent through notified Talent Assessment Centres.
- KIRTI made a solid launch across 50 centres in India. Fifty thousand applicants are being assessed in the first phase across 10 sports, including athletics, boxing, wrestling, hockey, football and wrestling.
- KIRTI's athlete-centric programme is conspicuous by its transparent selection methodology based on Information Technology.
- Data analytics based on Artificial Intelligence is being used to predict the sporting acumen in an aspiring athlete.

18. UNIFORM CODE FOR PHARMACEUTICAL MARKETING PRACTICES (UCPMP) 2024

- The Central Government recently rolled out a Uniform Code for Pharmaceutical Marketing Practices (UCPMP) for pharmaceutical companies.
- UCPMP 2024 has been implemented to control unethical practices in the pharma industry.
- The updated guidelines include drug endorsement, promotion, and ethical conduct for medical representatives and maintaining relationships with healthcare professionals.
- It prohibits pharma companies from offering gifts and travel facilities to healthcare professionals or their family members.
- The UCPMP mandates that medical representatives must not employ any inducement or subterfuge to gain an interview, and they must not pay, under any guise, for access to a healthcare professional.
- It also holds companies responsible for the actions of the medical representatives.
- It also bans the supply of free samples to those who are not qualified to prescribe such a product.
- Each pharma company also needs to maintain details such as product name, doctor name, the number of samples given; date of supply of free samples to healthcare practitioners, etc., and the monetary value of samples so distributed should not exceed two percent of the company's domestic sales per year.
- All pharmaceutical associations must constitute an Ethics Committee for Pharmaceutical Marketing Practices (ECPMP), set up a dedicated UCPMP portal on their website, and take further necessary steps towards the implementation of this Code.
- It also lists in detail how the drug should be promoted, both in texts and in the audio-visual market.
- The information about drugs must be balanced, up-to-date, and verifiable, and must not mislead either directly or by implication.
- The pharma companies should not make claims and comparisons of their drug's usefulness, and the word "safe" must not be used without qualification.
- The word "new" must not be used to describe any drug which has been generally available or any therapeutic intervention which has been generally promoted in India for more than a year.
- The responsibility for adherence to the code rests with the Chief Executive Officer of pharmaceutical companies.
- It also detailed the penalties for violating the code and how complaints will be handled.
- Any violations of the code will be addressed by the ECPMP, ensuring accountability and oversight.

19. VOCAL FOR LOCAL INITIATIVE

- The NITI Aayog (National Institution for Transforming India) launched the 'Vocal for Local' initiative under its Aspirational Blocks Programme (ABP).
- Initiative aims to boost sustainable growth by showcasing indigenous products through 'Aakanksha.'
- A dedicated window on the GeM portal facilitates e-commerce for local products.

- As a part of this initiative, indigenous local products from 500 Aspirational Blocks have been mapped and consolidated under Aakanksha.
- The CEO of NITI Aayog urged district collectors and block-level officials to collaborate with partners such as Government e-Marketplace (GeM) and Open Network for Digital Commerce (ONDC) to facilitate sustainable growth of microenterprises in Aspirational Blocks.
- The ABP is a development initiative announced in the Union Budget 2022-23, it aims to provide direction, guidance, and support for social and economic advancement in the most underdeveloped regions in India and to direct development benefits towards marginalised and vulnerable sections of the population.

20. ELECTRIC MOBILITY PROMOTION SCHEME 2024

- Electric Mobility Promotion Scheme 2024 aims to further accelerate the adoption of Electric Vehicles in the country. It is a fund limited scheme with a total outlay of Rs. 500 crore for the period of 4 months.
- It is for faster adoption of electric two-wheeler (e-2W) and three-wheeler (e-3W) to provide further impetus to the green mobility and development of electric vehicle (EV) manufacturing eco-system in the country.
- Eligible EV categories
  - o Two Wheelers (electric) (e-2W)
  - o Three-wheeler (electric) including registered e-rickshaws & e-carts and L5 (e-3W)
  - o The scheme will be applicable mainly to those e-2W and e-3Ws registered for commercial purposes. Further, in addition to commercial use, privately or corporate owned registered e-2W will also be eligible under the scheme.
- To encourage advance technologies, the benefits of incentives, will be extended to only those vehicles which are fitted with advanced battery.
- Nodal Ministry: Ministry of Heavy Industries

21. CONTRACT LABOUR (REGULATION AND ABOLITION) ACT, 1970

- The Supreme Court recently observed that the workers employed to perform perennial/permanent nature of work couldn't be treated as contract workers under the Contract Labour (Regulation & Abolition) Act, 1970 to deny them the benefit of regularization of a job.
- Contract Labour (Regulation and Abolition) Act, 1970 has been enacted to regulate the employment of contract labour in certain establishments, and to provide for its abolition in certain circumstances, and for matters connected therewith.
- It aims to prevent the exploitation of contract labour and also introduce better conditions of work. It extends to the whole of India.
- Every establishment which proposes to employ contract workers for its work is required to obtain a certificate of registration from the appropriate Government.
- Every contractor who has employed twenty or more workers on any day of the month has to obtain a license for engaging contract labour working for any establishment.
- The granted licence will be valid for the specified period and may be renewed from time to time.
- It is the responsibility of the contractor to pay the required wages to each worker employed under contract labour before the expiry of the stipulated period.
- If the contractor fails to make the payment within the stipulated period, then the principal employer shall be liable to make the payment of wages in full or the unpaid balance due.
- The wages are to be fixed by the Commissioner of Labour.
- For contravention of the provisions of the Act or any rules made thereunder, the punishment is imprisonment for a maximum term upto 3 months and a fine upto a maximum of Rs.1000/-.
- The Act provides for the constitution of Central and State Advisory Boards to advise the concerned governments on matters arising out of the administration of the Act.
- The Central or State government after consultation with the appropriate advisory boards may prohibit the employment of contract labour in any process, operation or other work in any establishment.

22. SAGAR PARIKRAMA: READY TO RELEASE BOOK

- The Union Minister for Fisheries, Animal Husbandry and Dairying will release a book and video on "Sagar Parikrama".
- Sagar Parikrama is an outreach program intended to reach out fishermen community across the entire coastal belt of the country through a predetermined sea route.
- The initiative has been launched to understand the issues, experiences, and aspirations of fishermen and also to create awareness of various schemes and programs of the Government available to fishermen in coastal areas.
- Nodal Ministry: Ministry of Fisheries, Animal Husbandry and Dairying.

23. CRIMINAL CASE MANAGEMENT SYSTEM

· Union Home Minister and Minister of Cooperation virtually inaugurated a unique digital Criminal Case Management System (CCMS) and also launch a mobile app 'Sankalan.

· Criminal Case Management System has been developed by designed by the National Investigation Agency (NIA).

· It will enable the NIA personnel to better coordinate in terrorism and organized crime cases, thereby improving justice delivery.

· It is a user-friendly and easy-to-deploy, customizable, browser-based software to help the State Police forces in their investigations and prosecution.

· It would not only bring standardisation into investigations but also enable easy and streamlined compilation of terror-related data across the country.

· Sankalan app has been designed for navigating through new criminal laws as a bridge between old and new criminal laws.

· This app will work as a comprehensive guide for all stakeholders.

24. ONE NATION ONE ELECTION: COMMITTEE PROPOSED CHANGES

· The High-Level Committee on One Nation, One Election, led by former President Ram Nath Kovind, has proposed significant changes to enable synchronized elections across India.

· One Nation One Election is a proposal to synchronize the timing of all elections in India, including those for the Lok Sabha, state legislative assemblies, and local bodies.

· The aim is to streamline the electoral process, reduce campaign expenditures, minimize disruptions to governance, and enhance political stability by holding all elections simultaneously at regular intervals, typically once every five years.

· One Nation One Election was the norm until 1967 but after that cycle was broken.

· Key Recommendations of the High-Level Committee: Synchronize Lok Sabha and State Legislative Assemblies (SLA) elections first, followed by Municipalities and Panchayats elections (M&PE).

· Amendments in Article 324A are required for this synchronization, but states' ratification is not necessary.

· The amendments needed for simultaneous elections are outside the scope of Article 368(2) and thus don't require ratification by the states.

· Municipal and Panchayat elections should be held within 100 days of Lok Sabha and State elections.

· For Lok Sabha, fresh elections should be held with tenure limited to the unexpired term of the previous Lok Sabha.

· For States, fresh elections should be held, continuing until the end of the full term of Lok Sabha.

· Amendments in Article 83 and Article 172 are needed, but state ratification is not required.

· An amendment to Article 325 is recommended, which will require states' ratification.

· A Presidential notification would set an "appointed date" for simultaneous elections

· The Constitution mainly entrusts Parliament, not states, with the power to conduct Assembly elections.

· Under Article 328 of the Constitution States have only residual powers on conducting Assembly elections; the power is mainly entrusted to Parliament through Article 327.

25. PM-SURAJ SCHEME

· The Ministry of Social Justice and Empowerment launched the 'Pradhan Mantri Samajik Utthan and Rozgar Adharit Jankalyan' (PM-SURAJ) national portal online aimed at offering credit support to the marginalized segments of society, with the Prime Minister as the Chief Guest.

· The PM distributed Ayushman Health Cards and Personal Protective Equipment to Safai Mitras(sewer and septic tank workers), under the National Action for Mechanised Sanitation Ecosystem (NAMASTE) scheme, which was previously a rehabilitation scheme for manual scavengers.

· The 'PM-SURAJ' national portal aims to uplift the most marginalized sections of society and provide credit assistance to one lakh entrepreneurs from disadvantaged communities.

· It is implemented by the Ministry of Social Justice and Empowerment and its departments.

- The portal serves as a one-stop point where people from disadvantaged sections of society can apply for and monitor the progress of all loan and credit schemes already available to them.
- The credit support will be facilitated through banks, Non-Banking Financial Companies Finance Institutions (NBFC-MFIs), and other organizations, ensuring accessibility across the country.
- An NBFC MFI is a non-deposit taking NBFC with a minimum Net Owned Funds (NOF) of Rs. 5 crore (Rs. 2 crore for those registered in the North Eastern Region of the country) and having at least 85% of its net assets as "qualifying assets (intended use or sale)".

26. ULLAS INITIATIVE
- The Ministry of Education is set to conduct the Foundational Literacy and Numeracy Assessment Test (FLNAT) as part of the ULLAS – Nav Bharat Saaksharta Karyakram.
- The Understanding Lifelong Learning for All in Society (ULLAS) initiative is poised to revolutionise education and literacy across the nation.
- It is done by fostering a learning ecosystem that reaches every individual, bridging the gaps in basic literacy and critical life skills.
- It imparts basic education, digital and financial literacy and critical life skills to citizens aged 15 and above who lost on the opportunity to go to school. It is being implemented through volunteerism.
- Its objective is to impart not only Foundational Literacy and Numeracy but also to cover other components which are necessary for a citizen of 21st century such as
  o Critical Life Skills(including financial literacy, digital literacy, commercial skills, health care and awareness, child care and education, and family welfare);
  o Vocational Skills Development(with a view towards obtaining local employment);
  o Basic Education(including preparatory, middle, and secondary stage equivalency)
  o Continuing Education(including engaging holistic adult education courses in arts, sciences, technology, culture, sports, and recreation, as well as other topics of interest or use to local learners, such as more advanced material on critical life skills).
- The ULLAS app can be used for registration of learners and volunteers either through self-registration or by surveyors.
- It will serve as a digital gateway for learners to engage in diverse learning resources through the DIKSHA portal of NCERT

27. GRIEVANCE REDRESSAL ASSESSMENT INDEX: RANKING
- The Ministry of Home Affairs has consistently ranked amongst the top 10 Ministries in 2023-24 in the grievance redressal assessment index (GRAI).
- Grievance Redressal Assessment Index was conceptualised and designed by the Department of Administrative Reforms and Public Grievances (DARPG), Government of India.
- Objective is to present an organisation-wise comparative picture and provide valuable insights about strengths and areas of improvement regarding the grievance redressal mechanism.
- It is based on a comprehensive index in the dimensions of Efficiency, Feedback, Domain and Organisational Commitment.
- It uses data from the Centralised Public Grievance Redressal and Management System (CPGRAMS).
- CPGRAMS is an online platform available to the citizens 24×7 to lodge their grievances to the public authorities on any subject related to service delivery.
- It is a single portal connected to all the Ministries/Departments of Government of India and States.

28. ELECTORAL BONDS DATA: EC
- The Election Commission of India (ECI) has released detailed data on electoral bonds, following a directive from the Supreme Court.
- Among the major corporate donors revealed in the data, two companies stand out for their substantial contributions through electoral bonds.
- Future Gaming and Hotel Services Private Limited, a little-known entity that is currently under the scanner of the Enforcement Directorate (ED), emerged as the top

purchaser of electoral bonds, with total purchases of Rs. 1,368 crore.

· The second-largest donor was Megha Engineering and Infrastructure Limited, a Hyderabad-based company that has bagged several major government contracts in recent years.

· Megha Engineering bought electoral bonds worth Rs. 966 crore during the period covered by the data.

· Other prominent corporate contributors include Vedanta Limited (Rs. 400 crore), the Bharti Group (Rs. 247 crore), Essel Mining and Industries Limited (Rs. 224 crore), and DLF Group (Rs. 170 crore).

· The data also shows significant purchases by Haldia Energy (Rs. 377 crore), Qwik Supply Chain Private Limited (Rs. 410 crore), and Keventer Foodpark Infra Limited (Rs. 194 crore)..

29. OPERATION INDRAVATI

· Operation Indravati is an ongoing evacuation mission launched by the Indian government to rescue its nationals from Haiti, a Caribbean nation grappling with widespread gang violence and political instability.

· The operation, named after the Indravati River in India, aims to ensure the safety and well-being of Indian citizens amidst the escalating crisis in Haiti.

· India launched Operation Indravati to evacuate its citizens stranded in Haiti.

· External Affairs Minister Dr. S. Jaishankar announced that 12 Indians had been successfully evacuated to the Dominican Republic.

· He emphasized the Indian government's unwavering commitment to the security and well-being of its nationals abroad and expressed gratitude to the Dominican Republic for their support in the evacuation process.

30. SECTION 153A OF THE INDIAN PENAL CODE

· The Supreme Court reiterated that to constitute an offence under Section 153A of the Indian Penal Code, the essential ingredient is to create a sense of enmity and disharmony amongst two or more groups or communities.

· Section 153A of the IPC attempts to punish those who engage in promoting any kind of enmity among different groups on the basis of religion, caste, race, place of birth or residence or even language.

· The provision puts a liability on those who:

o Spread enmity in the form of words (spoken or written), visual representations, and signs with the intention of causing disharmony, hatred, or disturbance among people belonging to different groups, religions, castes, or communities.

o Spread disharmony and disturb the public tranquility of the people belonging to different racial and religious groups.

· Aid in the organising of certain movements, drills that encourage as well as train the participants of such movements to use criminal force and violence upon people belonging to other racial and religious groups and communities.

· The offence is a cognizable offence and the punishment for the same may extend to three years, or with fine, or with both.

· Further, the offence under Section 153A is non-bailable in nature, wherein the accused is tried by the magistrate of the first class.

· However, the punishment of the offence committed in a place of worship is enhanced up to five years and a fine.

ECONOMY

1. WOMEN EXPORTERS IN THE DIGITAL ECONOMY (WEIDE) FUND

- The World Trade Organization (WTO) and the International Trade Centre (ITC) have jointly launched a USD 50 million global fund called the Women Exporters in the Digital Economy (WEIDE) Fund.
- The aim of this fund is to assist women-led businesses and women entrepreneurs in developing economies and least-developed countries in adopting digital technologies and expanding their online presence.
- The United Arab Emirates (UAE) has allocated USD 5 million as the first donor to the fund.
- The ITC hosted the SheTrades Summit, bringing together women entrepreneurs, global business leaders, and development partners to discuss solutions to challenges faced by women in accessing new markets in the digital trading system.

2. WOMEN, BUSINESS AND THE LAW INDEX

- The World Bank (WB) Group has released report titled-Women, Business and the Law 2024, presenting in-depth analysis of the challenges obstructing women's entry into the global workforce
- India's rank improved to 113 out of 190 countries in the World Bank's Women, Business and Law index.
- Women, Business and Law Index to measure how laws and regulations affect women's economic opportunity on a scale from 0 to 100, where 100 means equal legal rights for men and women.
- It has 10 indicators- Safety, Mobility, Workplace, Pay, Child Care, Marriage, Parenthood, Entrepreneurship, Assets, and Pension.
- Safety from violence and access to childcare services is very crucial indicators.
- The data offer objective and measurable benchmarks for evaluating global progress toward legal gender equality.
- It is the 10th edition of the report.
- Globally, none of the countries has a full score in the new index, indicating that women did not enjoy equal rights in any of the countries.
- India's ranking improved to 113 out of 190 countries.
- Indian women enjoyed 60% of the legal rights given to men as per the new report, lower than the global average of 64.2%.
- Women around the world enjoy only 64% of the legal protections that men do, when legal differences involving violence and childcare are taken into account. This is even lower than the previous estimate of 77%.
- Even though many countries have enacted laws promoting gender equality, there is a significant gap between these laws and the actual experiences of women.

3. FOREIGN EXCHANGE RESERVE: INDIA STATUS

- India's foreign exchange reserves surged by $2.98 billion to $619.07 billion recently.
- Foreign Exchange Reserves (also called Forex Reserves) are reserve assets held by a central bank in foreign currencies.
- Foreign assets comprise assets that are not denominated in the domestic currency of the country.
- These may include foreign currencies, bonds, treasury bills, and other government securities.
- Reserves are denominated and expressed in the US dollar, which is the international numeracies for the purpose.
- RBI is the custodian of the foreign exchange reserves in India.
- India's foreign exchange reserves comprise of: Foreign currency assets (FCAs): These are maintained in currencies like the US dollar, euro, pound sterling, Australian dollar, and Japanese yen.
- Gold, SDR (Special Drawing Rights): This is the reserve currency with the IMF.

- RTP (Reserve Tranche Position): This is the reserve capital with the IMF.
- The biggest contributor to India's Forex reserves is foreign currency assets, followed by gold

4. PAYTM CUTS TIES WITH PAYMENTS BANK ARM

- Fintech leader Paytm announced steps to sever certain operating agreements between its parent entity One97 Communications and the group's payments bank arm Paytm Payments Bank (PPBL).
- As part of governance changes, the two firms will function with greater independence going forward.
- One 97 Communications Limited (OCL) and its services that include the Paytm app, Paytm QR, Paytm soundbox, and Paytm Card machines will continue to work uninterrupted.
- Paytm shares informed stock exchanges that after mutual evaluation, the company boards decided to terminate previous arrangements between One97 and PPBL across technology services, software licensing and brand sharing.
- Earlier, One97 provided managed services and infrastructure support to PPBL besides licensing its payment processing platform and the Paytm brand for usage by the payments bank.
- These agreements had attracted some regulatory concerns about conflict of interest between the promoter group entities.
- Hence, both companies agreed to advance an arm's length relationship by stopping the inter-company arrangements

5. E-KISAN UPAJ NIDHI PLATFORM

- The Union Minister for Consumer Affairs, Food & Public Distribution, Commerce and Industry and Textiles launched 'e-Kisan Upaj Nidhi' (Digital Gateway).
- e-Kisan Upaj Nidhi platform is a digital gateway of Warehousing Development and Regulatory Authority (WDRA).

- It is the initiative with its simplified digital process can ease the procedure of farmers' storage at any registered WDRA warehouse for a period of 6 months at 7% interest per annum.
- This digital intervention is poised to mitigate distress sales by providing farmers with viable post-harvest storage options.
- Warehousing Development and Regulatory Authority (WDRA) was established under the Warehousing (Development and Regulation) Act, 2007 and it consists of one Chairperson and two full time Members.
- Mission of WDRA is to establish a negotiable warehouse receipt system in the country.
- This will help foster scientific warehousing of goods, increase liquidity in rural areas, improve supply chains, enhance grading and quality of goods and there by ensure higher returns to depositors.

6. LOGISTICS EXCELLENCE, ADVANCEMENT & PERFORMANCE SHIELD INITIATIVE

- The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry organised a LEAPS Valedictory Session recently.
- LEAPS (Logistics Excellence, Advancement, and Performance Shield) Initiative is a flagship initiative by the logistics division of DPIIT, Ministry of Commerce and Industry, designed to acknowledge and celebrate the best practices and innovations within the logistics industry.
- The National Logistics Policy was introduced to create a single-window e-logistics market, focusing on the need for

skill development, economic growth, and competitiveness in the logistics sector.

- It aims to reduce logistics costs, improve India's ranking in the Logistics Performance Index, and establish a data-driven decision support mechanism.

- The PM Gati Shakti Programme aims to understand current gaps in logistics connectivity and facilitate the development of logistics infrastructure (creating connectivity between roadways, rail transport, waterways, and air transport) so as to reduce logistics costs. The programme has an estimated cost of ₹ 100 trillion.

- LEAPS will create a new benchmark globally by not only recognizing players in the logistics sector, but also the MSMEs, Start-ups and logistics sector enablers.

7. NATIONAL COOPERATIVE DATABASE

- Union Minister of Cooperation will launch the National Cooperative Database (NCD) to foster a cooperative-centric economic model.

- National Cooperative Database (NCD) is an initiative of the Ministry of Cooperation which had recognized the imperative need for a robust database to capture vital information about India's vast cooperative sector.

- NCD has been developed in collaboration with State Governments, National Federations and stakeholders, and aims to foster a cooperative-centric economic model.

- It is a web-based digital dashboard wherein data of cooperative societies, including National/State Federations have been captured.

- The data of cooperative societies has been entered and validated by States/ UTs nodal officials at RCS/ DRCS offices, and the data of federations has been provided by various national/state federations.

- The information collected from cooperative societies are on various parameters, such as their registered name, date, location, number of members, sectoral information, area of operation, economic activities, financial statements, status of audit etc.

- NCD serves as a crucial tool for efficient communication between the Central Ministry, States/UTs, and Cooperative Societies, benefiting all stakeholders in the cooperative sector

8. WORLD GOLD COUNCIL

- The Reserve Bank of India (RBI) bought 8.7 tonne of gold in January, making it the largest purchase by the central bank since July 2022, according to World Gold Council data.

- World Gold Council (WGC) is the market development organisation for the gold industry.

- It is a non-profit association formed in 1987 whose members comprise the world's leading and most forward-thinking gold mining companies.

- It was established to promote the use of and demand for gold through marketing, research, and lobbying. It is also the global authority on gold, and they offer comprehensive analyses of the industry.

- Headquartered in London, with operations in India, China, Singapore, and the USA, the WGC covers the markets which comprise about three-quarters of the world's

- The WGC aims to maximize the industry's potential growth by monitoring and defending existing gold consumption.

- It achieves this by setting up gold standards, proposing policies, ensuring fairness and sustainability in the gold mining industry and promoting the usage and demand for gold for individuals, industries, and institutions.

- It also co-sponsors research in the development of new uses for gold, or of new products containing gold.

- WGC was the creator of the first gold exchange-traded fund.

9. T+0 SETTLEMENT : SEBI

- The Securities and Exchange Board of India (SEBI) recently approved the launch of the beta version of the T+0 settlements on an optional basis.

- T+0 Settlement means that the funds and securities for a transaction will be settled on the day the trade was entered.

- At present, the Indian securities markets operate on a T+1 settlement cycle, where the settlement happens on the next day of trade.

- Instant receipt of funds and securities to the investor. It will eliminate the risk of any kind of settlement shortage and give greater control over funds and securities to the investor.

- There is expected to be lower counterparty risk and increased liquidity in the market.

10. BAN ON EXPORTS OF DE-OILED RICE BRAN

- The Central Government has extended the ban on exports of de-oiled rice bran by another four months.

- Rice Bran is one of the main by-products in the process of rice milling. It is the outer brown layer of brown rice and is separated during the milling process.

- The bran fraction contains 14-18% oil.

- Rice bran oil is popular as "healthy oil" in Japan, Asia, and particularly India.

- The nutrient composition of rice bran depends on the rice variety and the efficiency of the milling system.

- It is currently mostly used as animal feed. The oily nature makes bran an excellent binder for animal feeds.

- It has anti-diabetic, lipid-lowering, hypotensive, antioxidant and anti-inflammatory effects, while its consumption also improves bowel function.

- It contains substances that might decrease how much cholesterol the body absorbs.

11. GENDER INEQUALITY INDEX (GII), 2022

- The Gender Inequality Index (GII), 2022 has been released by UNDP in their Human Development Report 2023-24.

- In GII, India stands at rank 108th out of 193 countries, with a score of 0.437.

- Gender Inequality Index is a composite metric of gender inequality using three dimensions: reproductive health, empowerment and the labour market.

- It reflects the gap in human development potential due to inequality between female and male achievements in these areas.

- GII values range from 0 (equality) to 1 (extreme inequality).

- A low GII value indicates low inequality between women and men, and vice-versa.

12. RESERVE BANK INTEGRATED OMBUDSMAN SCHEME

- As per a recent report the number of complaints filed under the Reserve Bank's ombudsman schemes increased by over 68 per cent to 7.03 lakh in the fiscal 2022-23.

- The complaints pertained to mobile/electronic banking, loans and advances, ATM/debit cards, credit cards, pension

payments, remittances, and Para banking, among others.

- RESERVE BANK INTEGRATED OMBUDSMAN SCHEME (RB-IOS): The Reserve Bank Integrated Ombudsman Scheme (RB-IOS) was launched on November 12, 2021.

- This scheme integrates the three erstwhile Ombudsman schemes of the Reserve Bank of India (RBI), namely: Banking Ombudsman Scheme 2006, Ombudsman Scheme for Non-Banking Financial Companies 2018,Ombudsman Scheme for Digital Transactions

- The scheme adopts a 'One Nation One Ombudsman' approach by making the RBI's Ombudsman mechanism jurisdiction neutral.

- The grounds for filing a complaint are defined as "**deficiency in service**", with a specified list of exclusions.

- A Centralized Receipt and Processing Centre have been set up at RBI, Chandigarh,

for handling physical and email complaints in any language.

· The responsibility of representing the regulated entity and furnishing information lies with the Principal Nodal Officer

· Regulated entities cannot appeal when an Award is issued by the Ombudsman against them for not providing satisfactory and timely information/documents.

13. STATE ENERGY EFFICIENCY INDEX 2023

· The 22nd Foundation Day of the Bureau of Energy Efficiency was recently celebrated with the theme "Energy Transition through Electrification and Decarbonization in India" and the State Energy Efficiency Index 2023 was released.

· Findings of SEEI 2023: Front runner (>=60): Seven states in 'Front runner' category in SEEI 2023: Karnataka (score 86.5), Andhra Pradesh (83.25), Haryana, Kerala, Maharashtra, Punjab, and Telangana.

· Achiever (50-59.75): Two states, Assam and Uttar Pradesh are in the 'Achiever' category,

· Contender (30-49.75): Three states, Goa, Jharkhand, and Tamil Nadu, are in the 'Contender' category.

· Aspirant (<30): Maharashtra and Haryana most improved states, with score increases of 18.5 and 17 points, respectively.

· 15 states have improved their scores compared to SEEI 2021- 22.

· Substantial decline in score observed in Rajasthan, primarily attributed to lack of reported data

14. GRID CONTROLLER OF INDIA LIMITED: MINIRATNA CATEGORY-I STATUS

· RID Controller of India Limited (GRID-INDIA) reached a significant milestone as it was designated as a Miniratna Category-I Central Public Sector Enterprise (CPSE) by the Ministry of Power highlighting its pivotal role in the nation's power sector

· Established in 2009, GRID-INDIA oversees the seamless operation of the Indian Power System, ensuring efficient power transfer within and across regions.

· It manages the All India synchronous grid through five Regional Load Despatch Centres (RLDCs) and the National Load Despatch Centre (NLDC), playing a crucial role in the power landscape.

· GRID-INDIA manages competitive electricity markets, prioritising reliability, sustainability, and fair competition for integrated power system operations.

INTERNATIONAL RELATIONS

1. SWEDEN'S NATO MEMBERSHIP

- Hungary's parliament voted to approve Sweden's bid to join the North Atlantic Treaty Organization (NATO), making it the 32nd nation to join the alliance.

- NATO, a vital transatlantic military and political alliance, ensures collective security for its member countries. Established in 1949 by 12 founding nations, with a majority from Europe and North America, it remains a cornerstone of international stability.
- NATO is headquartered at Boulevard Leopold III in Brussels, Belgium.
- Alliances of NATO:
- Euro-Atlantic Partnership Council (EAPC): Mediterranean Dialogue fosters security and stability in the Mediterranean by enhancing relations between participating countries and NATO Allies.
- Istanbul Cooperation Initiative (ICI) offers non-NATO countries in the broader Middle East region the opportunity to cooperate with NATO, aiming to enhance regional security.
- "NATO plus" refers to a security arrangement of NATO and the five treaty allies of the U.S. , Australia, New Zealand, Japan, Israel, and South Korea as members to enhance "global defence cooperation" and win the "strategic competition with the Chinese Communist Party".
- NATO Plus is not an officially recognised or established concept within NATO.

2. INTERNATIONAL INTELLECTUAL PROPERTY INDEX: 12TH EDITION

- The US Chamber of Commerce released its 12th edition of the International IP (Intellectual Property) Index, where India ranked 42 out of 55 countries with an overall score of 38.64%.
- The United States topped the list, followed by the United Kingdom and France.
- The index assesses the IP framework of the world's top economies, noting 20 economies showing significant improvement.
- While India's IP framework is strengthening, it still lags behind the top performers.
- The top 10 economies for IP rights include the United States, United Kingdom, France, Germany, Sweden, Japan, Netherlands, Ireland, Spain, and Switzerland.
- Intellectual property (IP) is a category of property that includes intangible creations of the human intellect. It can include the subject matter, methods, and tools created as part of research or studies.

3. INTERNATIONAL ENERGY AGENCY: STUDY

- The International Energy Agency said that strong GDP growth and a weak monsoon drove up India's energy-related carbon emissions by around 190 million tonnes in 2023, though the country's per capita emissions remain far below the global average.
- International Energy Agency is an autonomous inter-governmental organisation within the Organisation for Economic Co-operation and Development (OECD) framework.
- It works with governments and industry to shape a secure and sustainable energy future for all.
- It was created in response to the 1973-1974 oil crises when an oil embargo by major producers pushed prices to historic levels and exposed the vulnerability of industrialised countries to dependency on oil imports.
- It was founded in 1974 to ensure the security of oil supplies.
- It is made up of 31 member countries, 13 association countries, and 5 accession countries.
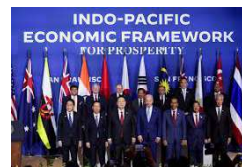
4. 6TH UNITED NATIONS ENVIRONMENTAL ASSEMBLY

· According to a report launched during the 6th United Nations Environmental Assembly (UNEA-6), the thriving street food sector across India depends heavily on single-use plastics.

· Single-use plastics such as plates, bowls, cups, and containers are extensively used in India's street food sector. Despite their affordability, these items contribute significantly to the country's waste management challenge.

· The findings reveal the reuse system offers a compelling business case with various benefits:

  o Both vendors and customers experience cost savings.

  o The system significantly reduces the amount of packaging material needed.

· The report highlights a potential 21% return on investment with a payback period of 2-3 years.

· Material choice, retention time, return rate, deposit amounts, and government incentives are crucial factors for optimizing the system's effectiveness.

· Single-Use plastic: It refers to a "plastic item intended to be used once for the same purpose before being disposed of or recycled."

· Single-use plastic has among the highest shares of plastic manufactured and used from packaging of items to bottles (shampoo, detergents, cosmetics), polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.

· On the current trajectory of production, it has been projected that single-use plastic could account for 5-10% of greenhouse gas emissions by 2050.

5. INDO PACIFIC ECONOMIC FRAMEWORK

· India has decided to join at least one of the four cooperative work programmes unveiled last week under the 'clean energy pillar' of the U.S.-led Indo Pacific Economic Framework (IPEF) – the one on facilitating

and promoting carbon-market activities.

· The Indo-Pacific Economic Framework for Prosperity (IPEF) is an economic initiative launched by U.S. President Joe Biden on May 23, 2022.

· The framework launched with fourteen participating founding member nations in the Indo-Pacific region with an open invitation for other countries to join.

· Indo Pacific Economic Framework (IPEF) was launched jointly by the USA and other partner countries of the Indo-Pacific region on May 23, 2022 at Tokyo.

· IPEF has 14 partner countries including Australia, Brunei, Fiji, India, Indonesia, Japan, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Vietnam & USA.

· It seeks to strengthen economic engagement among partner countries with the goal of advancing growth, peace and prosperity in the region.

6. WORLD POVERTY CLOCK

· According to the latest data from the World Poverty Clock, India has successfully reduced the proportion of its population living in 'extreme poverty' to below 3%.

· It signifies a substantial step towards accomplishing the first of the 17 Sustainable Development Goals (SDGs) set by the United Nations, with the target year of 2030.

· The World Poverty Clock tracks real-time poverty estimates until 2030 for almost all countries, monitoring progress toward ending extreme poverty.

· The Clock shows the worldwide number of people in extreme poverty, sorting them by age, gender, and rural or urban residency, capturing both those escaping poverty and those falling into it every second.

- The escape rate calculates the current rate of poverty reduction in the world.
- It is backed by the International Fund for Agricultural Development (IFAD) and Germany's Federal Ministry for Economic Cooperation and Development.

7. YAOUNDE DECLARATION

- Ministers of Health from African countries with the highest burden of malaria recently signed the Yaounde Declaration with the objective of ending malaria deaths.
- Yaounde Declaration was signed by the health ministers of 11 African countries with the highest burden of malaria, committing to accelerated action to end deaths from the malaria disease.
- It was signed at the Yaounde conference, co-hosted by the World Health Organization (WHO) and the Government of Cameroon.
- The 11 countries that signed the declaration are: Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana, Mali, Mozambique, Niger, Nigeria, Sudan, Uganda and Tanzania.
- These countries carry roughly 70% of the global malaria burden.

8. STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE (SIPRI) REPORT

- India emerged as the world's top arms importer for the period 2019-23, with a 4.7% increase compared to 2014-18, as per the Stockholm International Peace Research Institute (SIPRI)
- The USA is the largest arms exporter > France, for the first time, was the second biggest arms exporter> Russia
- The U.S. increased its arms exports by 17%, while Russia's exports fell by over half.
- India was the world's top arms importer: Russia remained India's main arms supplier (accounting for 36% of its arms imports).
- However, its share decreased to less than 50% for the first time in 6 decades.
- Ukraine emerged as the largest European arms importer in 2019–23.
- Nine of the top 10 arms importers were in Asia and the Middle East.

9. HUMAN DEVELOPMENT INDEX: REPORT

- India has moved up a rank on the global Human Development Index (HDI), according to the United Nations Development Programme (UNDP) report 'Breaking the gridlock: Reimagining cooperation in a polarised world'.
- The report stated that while India ranked 135 in 2021, it had moved up to 134 in 2022.
- A total of 193 countries were ranked in 2022 and 191 countries in 2021.
- In 2022, India saw improvements across all HDI indicators – life expectancy, education and Gross National Income (GNI) per capita.
- Life expectancy rose from 67.2 to 67.7 years, expected years of schooling reached 12.6, mean years of schooling increased to 6.57 and GNI per capita saw an increase from \$6,542 to \$6,951.
- While the country has moved up in 2022, it is still behind its South Asian neighbours, such as Bangladesh (129th), Bhutan (125th), Sri Lanka (78th) and China (75th).

10. NATO'S DIANA PROGRAM

- Finland has joined NATO's DIANA (Defence Innovation Accelerator for the North Atlantic) program, marking a significant opportunity for Finnish companies to expand globally.

- The DIANA program, established by NATO, aims to accelerate dual-use innovation capacity across the Alliance.
- It offers resources, networks, and guidance to companies for developing deep technologies.
- DIANA addresses critical defence and security challenges, including operating in denied environments and enhancing collective resilience.
- All NATO nations are members of DIANA.

11. DEVELOPING COUNTRIES TRADING SCHEME

- Exporters seeking to avail duty concessions on shipments to the UK will have to adhere to the new British rules under the Developing Countries Trading Scheme (DCTS).

- Developing Countries Trading Scheme (DCTS) is a scheme introduced by the UK Government to facilitate developing countries to integrate into the global economy, create stronger trade and investment partnerships and strengthen supply chains.
- It is a simpler and more generous preferential trading scheme which has been designed to boost trade with developing countries in order to support their development.
- It reduces or removes rates of duty, or tariffs, on imports from eligible developing countries into the UK.
- It also enables UK businesses to access thousands of products from around the globe at lower prices, reducing costs for UK consumers.
- The DCTS applies to 65 countries that are: least developed countries (LDCs) as defined by the United Nations, low-income countries (LIC) and lower middle-income countries (LMIC) as defined by the World Bank.
- It will provide duty-free, quota-free trade to LDCs on everything but arms and duty-free, quota-free trade on 85% of eligible goods to most low LIC and LMIC countries.
- It does not extend to countries and territories deemed by the World Bank as 'upper-middle income' for three consecutive years, or to LICs and LMICs who have a free trade agreement (FTA) with the UK.

12. INDIA AND BRAZIL FIRST-EVER '2+2' DIALOGUE

- India and Brazil conducted their first-ever '2+2' defence and foreign ministerial dialogue, discussing cooperation in key areas.
- The talks focused on expanding cooperation in various areas, including energy, critical minerals, technology, and counter-terrorism.
- The '2+2' defence and foreign ministerial dialogue involves the participation of the defence and foreign ministers of two countries, along with their respective counterparts, to discuss strategic and security-related issues, as well as diplomatic matters.

- India conducts '2+2' dialogues with key strategic partners: the US, Australia, Japan, and Russia.
- The US holds the oldest and most significant '2+2' talks partnership with India.

13. 4TH EDITION OF THE SHANGHAI COOPERATION ORGANISATION (SCO) STARTUP FORUM

- The fourth edition of the Shanghai Cooperation Organisation (SCO) Startup Forum was organized recently in New Delhi.
- Shanghai Cooperation Organisation Startup Forum is a platform for the stakeholders from the startup ecosystems from all SCO Member States to interact and collaborate.
- It aims to create multilateral cooperation and engagement for startups among the SCO Member States. It will empower the local startup ecosystems in the Member States.
- India will host the second meeting of the Special Working Group for Startups and Innovation (SWG) in November 2024 and SCO Startup Forum 5.0 in January 2025.
- Startup India had organized various initiatives for SCO Member states including:
  o SCO Startup Forum 1.0: The SCO Startup Forum in 2020 laid the foundation for multilateral cooperation and engagement for startups among the SCO Member States.
  o SCO Startup Forum 2.0: The two-day Forum was held virtually in 2021. SCO Startup Hub, a single point of contact for the SCO startup ecosystem, was launched in this forum.
  o SCO Startup Forum 3.0: DPIIT organised the first ever physical SCO Startup Forum in 2023 for the SCO Member States.
- The first Meeting of the SCO Special Working Group on Startups and Innovation (SWG), permanently chaired by India, was organised on the theme 'Growing from Roots' in 2023.

ENVIRONMENT

1. FLUE-CURED VIRGINIA

- The Government of India has taken several

measures to support Flue-Cured Virginia (FCV) tobacco growers in Andhra Pradesh and Karnataka

- Flue-cured Virginia (FCV) tobacco is a type of tobacco leaf that is cured by exposing it to heat in a flue, or enclosed space.
- This process removes moisture from the tobacco leaves while retaining their bright colour and producing a mild, sweet flavour.
- FCV tobacco is commonly used in cigarette blends, prized for its high sugar content and smooth smoking characteristics.
- It is grown in various regions around the world, with notable production in countries like the United States, Brazil, Zimbabwe, and India.
- FCV tobacco is mainly produced in India in Andhra Pradesh and Karnataka.
- In Karnataka, the Mysore and Hassan districts produce more than 95% of FCV tobacco

2. AMRABAD TIGER RESERVE

- The leopard population increased considerably in Amrabad Tiger Reserve, according to the 'Status of Leopards in India' report released recently.
- Amrabad Tiger Reserve is located in the Nagarkurnool and Nalgonda districts in the southern part of Telangana.
- It is one of the largest tiger reserves in India. It is the second-largest Tiger Reserve in terms of core area.
- Earlier, it was part of 'Nagarjunasagar-Srisailam Tiger Reserve, but post-state bifurcation, the northern part of the reserve was vested with Telangana state and renamed 'Amrabad Tiger Reserve'.

- The southern portion continues to be 'NSTR' with Andhra Pradesh.
- ATR covers a part of the Nallamala Forest and is home to a variety of flora and fauna.
- Major reservoirs like the Srishailam Dam and Nagarjunsagar Dam are fed by the river Krishna and its several perennial streams that originate in the Tiger Reserve.
- Flora: Dense grass occurs in 30% of the area and is scattered in an additional 20%.
- Fauna: Major wild animals found are Tiger, Leopard, Wild dog, Indian Wolf, Indian fox, Rusty-spotted cat, Small Indian civet, Sloth bear, Honeybadger, Wild boar etc.

3. WORLD WILDLIFE DAY

- World Wildlife Day is observed annually on March 3 to raise awareness about the importance of wildlife conservation.
- World Wildlife Day is celebrated to promote sustainable practices that can help conserve biodiversity and raise public awareness of the need to protect and care for animals.
- It aims to raise awareness of the interconnectedness of all living things on our planet and to promote peaceful coexistence between humans and animals through activism, campaigning and education.
- It was first proposed by Thailand to the UN General Assembly in 2013.
- The idea was to set aside a day to promote awareness of wild animals and plants around the world.
- The General Assembly adopted a resolution on 20 December 2013, designating March 3 as World Wildlife Day in 2014.
- Theme of WWD 2024: "Connecting People and Planet: Exploring Digital Innovation in Wildlife Conservation," highlights the potential of technology to advance conservation efforts

4. GLOBAL RESOURCE OUTLOOK 2024

· Global Resource Outlook 2024 was launched on the final day of the Sixth United Nations Environmental Assembly (UNEA-6) at the UNEP headquarters in Nairobi, Kenya.

· Global Resource Outlook is the flagship report of the International Resource Panel of United Nations Environment Programme.

· This year's report sheds light on how resources are essential to the effective implementation of the Agenda 2030 and multilateral environmental agreements to tackle the triple planetary crisis.

· It brings together the best available data, modelling and assessments from 180 countries, seven world regions and four income groups, to analyse trends, impacts and distributional effects of resource use.

· It presents a stark picture of global inequality, where low-income countries consume six times less materials compared to wealthy countries, despite generating 10 times less climate impacts.

· Global production and consumption of material resources has grown more than three times over the last 50 years, growing at an average of more than 2.3 per cent a year, despite the increase being the main driver of the triple planetary crisis.

· The consumption and use of resources is largely driven by demand in upper income countries.

· The extraction and processing of material resources — including fossil fuels, minerals, non-metallic minerals and biomass accounts for over 55 per cent of greenhouse gas (GHG) emissions and 40 per cent of particulate matter poisoning the environment.

· The extraction and processing of agricultural crops and forestry products accounts for 90 per cent of land-related biodiversity loss and water stress and a third of GHG emissions.

· The extraction and processing of fossil fuels, metals and non-metallic minerals including sand, gravel and clay account for 35 per cent of global emissions.

· Despite this, resource exploitation could increase by almost 60 per cent from 2020 levels by 2060 — from 100 to 160 billion tonnes.

5. STATUS OF LEOPARDS IN INDIA 2022

· The Ministry of Environment, Forest and Climate Change has released a report on the Status of Leopards in India 2022. The survey covered 20 States of India, and focussed on about 70% of the animals' expected habitat.

· The Union Government, while commemorating the 50th anniversary of Project Tiger, has approved the establishment of the International Big Cat Alliance (IBCA) with headquarters in India with a one-time budgetary support of Rs.150 crore for a period of five years from 2023-24 to 2027-28.

· India's leopard population rose by 8% from 12,852 in 2018 to 13,874 in 2022.

· About 65% of the leopard population is present outside protected areas in the Shivalik landscape. Only about a third of the leopards are within protected areas.

· The Shivalik landscape refers to the outermost range of the Himalayas, known as the Shivalik Hills or the Shivalik Range.

· This range extends across several states in northern India, including Uttarakhand, Himachal Pradesh, Haryana, Punjab, and parts of Jammu and Kashmir and Uttar Pradesh.

· Central India shows a stable or slightly growing population of leopards (2018: 8071, 2022: 8820), Shivalik hills and Gangetic plains experienced decline (2018: 1253, 2022: 1109).

· In Shivalik hills and Gangetic plains, there is a 3.4% decline per annum, while the largest growth rate was in Central India and Eastern Ghats of 1.5%.

- Madhya Pradesh has the highest number of leopards (3,907), followed by Maharashtra, Karnataka, and Tamil Nadu.
- In Odisha the number of leopards dropped from 760 in 2018 to 562 in 2022, and in Uttarakhand, the population declined from 839 in 2018 to 652 in 2022.
- Kerala, Telangana, Chhattisgarh, Bihar, and Goa too reported population declines.

6. INDIA'S FIRST DOLPHIN RESEARCH CENTRE

- India's inaugural National Dolphin Research Centre (NDRC) marks a significant milestone

in the conservation efforts for the endangered Gangetic dolphin (Platanista gangetica).
- Located strategically near the Ganga river in Patna, Bihar, the NDRC aims to be a hub for comprehensive research on various aspects of Gangetic dolphins, including behavior, survival skills, and causes of mortality.
- Bihar is home to around half of the estimated 3,000 Gangetic dolphins in India.
- The Ganges river dolphin, discovered in 1801, historically inhabits the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems in India, Nepal, and Bangladesh.
- Recent studies in the Ganga River Basin show their presence in the mainstream and tributaries like Ghagra, Kosi, Gandak, Chambal, Rupnarayan, and Yamuna.

7. THE UNJUST CLIMATE: FAO REPORT

- The Food and Agriculture Organization of the United Nations (FAO), has released a report titled- The Unjust Climate, shows how the effects of Climate Change on income and adaptation in rural areas vary with gender, wealth and age.
- FAO analysed socioeconomic data from over 100,000 rural households representing more than 950 million people across 24 LMICs (Lower Middle Income Countries).
- The study integrated this information with 70 years of geo referenced daily precipitation and temperature data to examine the impacts of climate stressors on incomes, labour, and adaptation strategies, differentiating based on wealth, gender, and age.
- Every day of extreme heat results in poor rural households losing 2.4% of on-farm incomes, 1.1% of crop value, and 1.5% of off-farm income compared to non-poor households across India and 23 other LMICs (Lower Middle Income Countries).

8. SECOND THOMAS SHOAL: SUBMERGED REEF

- A recent incident in the Second Thomas Shoal area, renewed global interest in the flashpoint between the Philippines and China.

- Second Thomas Shoal is a submerged reef located in the Spratly Islands in South China Sea.
- It is low-tide elevation located within the exclusive economic zone of the Philippines.
- The Philippines first took possession of the Second Thomas Shoal in the late 1990s, setting an outpost on the drowned BRP Sierra Madre.
- It continues to maintain its presence there and the ship serves as a military outpost, manned by a small contingent of troops.
- The Second Thomas Shoal lies about 108 nautical miles (200 km) from the Philippine island of Palawan.
- China claims sovereignty over most of the South China Sea, including the Second Thomas Shoal, based on the historical and controversial Nine-dash line.
- China's claims cut into the EEZs of Vietnam, the Philippines, Malaysia, Brunei and Indonesia.

- In 2013, the Philippines had filed a case against China with the Permanent Court of Arbitration in The Hague, challenging the legality of China's claims and activities in the South China Sea, including the Second Thomas Shoal.
- The court ruled in favour of the Philippines in 2016, but China rejected the judgment.

9. BIODIVERSITY BEYOND NATIONAL JURISDICTION: EVENT

- The Blue Leaders High-Level Event on Biodiversity beyond National Jurisdiction took place in Belgium, encouraging nations to ratify the Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) treaty aimed at protecting the high seas from pollution, climate change, and overfishing.
- The BBNJ treaty commonly referred to as the Treaty of the High Seas was agreed upon in March 2023 for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction.
- It represents a crucial step towards conserving and sustainably managing marine biological diversity in areas beyond national jurisdiction.
- The treaty aims to address the challenges faced by the high seas, which constitute areas beyond 200 nautical miles from the exclusive economic zones of coastal countries.
- It aims to ensure fair and equitable sharing of profits from marine genetic resources (MGR) and establish rules for conducting Environmental Impact Assessments (EIA), which deal with identifying and evaluating the potential impacts an activity could have on the ocean.

10. INTEGRATED ASSESSMENT MODELS

- The UN Intergovernmental Panel on Climate Change (IPCC) uses 'modelled pathways' drawn using Integrated Assessment Models (IAMs) to estimate what it will take to limit the warming of the earth's surface.
- Integrated Assessment Models are complex models that examine possible futures of the energy and climate system and economies. They are "integrated" because they combine different strands of knowledge to model

human society alongside parts of the Earth system.
- Its macroeconomic models can point to future growth levels in terms of GDP; its energy models can project future consumption; vegetation models can examine land-use

changes; and earth-system models use the laws of physics to understand how climate evolves.
- With such integration across disciplines, IAMs are meant to provide policy-relevant guidelines on climate action.

11. BARBERTON GREENSTONE BELT

- It is situated on the eastern edge of the Kaapvaal Craton in South Africa. It is known for its gold mineralisation and for its komatiites, an unusual type of ultramafic volcanic rock named after the Komati River that flows through the belt.
- Some of the oldest exposed rocks on Earth (greater than 3.6 Ga) are located in the Barberton Greenstone Belt of the Eswatini–Barberton areas, and these contain some of the oldest traces of life on Earth, second only to the Isua Greenstone Belt of Western Greenland.
- The Makhonjwa Mountains make up 40% of the Baberton belt.
- Ultramafic (or ultrabasic) rocks are dark-colored igneous and meta-igneous rocks that are rich in minerals containing magnesium and iron ("mafic" minerals) and have a relatively low content of silica.

12. WORLD AIR QUALITY REPORT 2023

- Delhi was identified as the capital city with the poorest air quality, according to a new report by World Air Quality Report 2023.
- With an average air annual particulate matter 2.5 (PM2.5) concentrations of 54.4

micrograms per cubic metre; India had the third worst air quality.

- India was better than only two of its neighbouring countries, Bangladesh and Pakistan.

- While Bangladesh remained the most polluted country in the world, with an average PM2.5 concentration of 79.9 micrograms per cubic metre, Pakistan was second, with a level of 73.7.

- It also identified Delhi as the most polluted capital city in the world for the fourth consecutive time. Bihar's Begusarai was termed the world's most polluted metropolitan area.

- Ten out of the top 11 most polluted cities in the world are from India, the other being Lahore in Pakistan.

- 96 percent of the Indian population experiences PM2.5 levels more than seven times the WHO annual PM2.5 guideline.

13. INTERNATIONAL SEABED AUTHORITY (ISA): 29TH SESSION

- The Council of the International Seabed Authority (ISA) commenced the first part of its 29th session recently.

- International Seabed Authority (ISA) is an autonomous international organization established in 1994 to regulate mining and related activities in the international seabed beyond national jurisdiction, an area that includes most of the world's oceans.

- The ISA came into existence upon the entry into force of the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which codified international law regarding territorial waters, sea lanes, and ocean resources.

- It organizes and controls all mineral-resources-related activities in the Area (the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction) for the benefit of humankind as a whole.

- Headquarters: Kingston, Jamaica

- ISA has 169 Members, including 168 Member States and the European Union.

- The ISA is responsible for granting licenses and regulating activities related to the exploration and exploitation of mineral resources in the international seabed.

- United Nations Convention on the Law of the Sea (UNCLOS): UNCLOS, also called the Law of the Sea Convention or the Law of the Sea Treaty, is an international agreement that establishes a legal framework for all marine and maritime activities.

14. STATE OF GLOBAL CLIMATE REPORT 2023:

- As per the State of the Global Climate report, published recently, 2023 was found to be the hottest year on record.

- Global Climate Report 2023 is an annual report published by the World Meteorological Organisation (WMO).

- Many experts and partners contribute to the report, including UN organizations, National Meteorological and Hydrological Services (NMHSs), and Global Data and Analysis Centers, as well as Regional Climate Centres, the World Climate Research Programme (WCRP), the Global Atmosphere Watch (GAW), the Global Cryosphere Watch and the Copernicus Climate Change Service operated by ECMWF.

- 2023 was the hottest year on record, with the global average near-surface temperature at 1.45 °Celsius (with a margin of uncertainty of $\pm$ 0.12 °C) above the pre-industrial baseline.

- On an average day in 2023, nearly one third of the global ocean was gripped by a marine heatwave, harming vital ecosystems and food systems. Towards the end of 2023, over 90% of the ocean had experienced heatwave conditions at some point during the year.

- The global set of reference glaciers suffered the largest loss of ice on record (since 1950), driven by extreme melt in both western North America and Europe, according to preliminary data.

- In 2023, renewable capacity additions increased by almost 50% from 2022, for a total
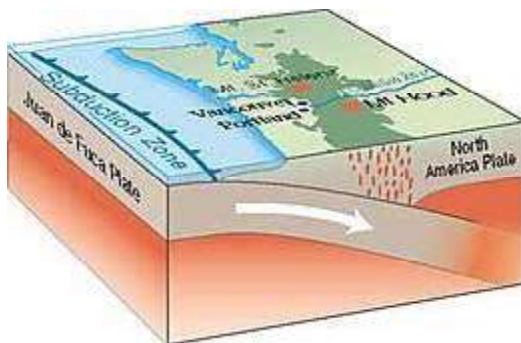
of 510 gigawatts (GW), the highest rate observed in the past two decades.

15. EARTH HOUR

- The power discoms in the national capital are gearing up to make the 'Earth Hour' a success by encouraging their consumers to switch off non-essential lights and electric appliances for one hour on March 23 night.
- Earth Hour is a global grassroots movement uniting people to take action on environmental issues and protect the planet. It is organized by the World Wildlife Fund (WWF).
- It started in Sydney, Australia, in 2007 as a symbolic lights-out event and has since grown into a global movement involving millions of people in over 190 countries and territories. It takes place towards the end of March every year.
- "Earth Hour" encourages people to switch off all lights for an hour, from 8:30 p.m. to 9:30 p.m. local time, to promote awareness of climate change challenges and energy conservation.
- Governments and companies also participate by turning off non-essential lights in their buildings, monuments and landmarks to raise awareness about the impact of energy consumption on our planet.

16. SUBDUCTION ZONE

- A recent study by scientists in Portugal predicts the 'Ring of Fire' subduction zone beneath the Gibraltar Strait may lead to the Atlantic Ocean's closure in 20 million years.

- Subduction Zone is a spot where two of the planet's tectonic plates collide and one dives, or subducts, beneath the other.

- Tectonic plates are pieces of the Earth's rigid outer layer that slowly move across the planet's surface over millions of years.
- This is the main tenet of plate tectonics, the theory that portions of Earth's shell glide over the lower mantle, taking continents with them.
- That outer layer, known as the lithosphere, consists of the Earth's crust and the upper section of the mantle, a dense, hot layer beneath the crust.
- When two tectonic plates meet at a subduction zone and one slide underneath the other, this lithosphere material curves down into the hot mantle.

17. WORLD FOREST DAY 2024

- World Forest Day, also known as International Day of Forests, is celebrated on March 21 each year.
- World Forest Day is celebrated every year to remind people of the significance of forests and trees in our lives.
- Countries are encouraged to take part in regional, global, and local drives to set up a scope of forest and tree-related campaigns, like planting campaigns.
- The Food and Agriculture Organization of the United Nations (FAO) and the United **Nations Forum on Forests** are the coordinators of the International Day of Forests.
- The theme for this year is – *Forests and Innovation: New Solutions for a Better World.*

18. PAPIKONDA NATIONAL PARK: BIRD SPECIES RECORDED

- More than 200 bird species have been recorded in the Papikonda National Park (PNP) in a recent survey.
- The three-day survey was carried out under the aegis of the Andhra Pradesh Forest department in collaboration with the Indian Institute of Science, Education and Research (IISER-Tirupati).
- Papikonda National Park (PNP) is located in the East and West Godavari districts of Andhra Pradesh.
- The park spans over 1012.86 square kilometers.

- The park lies on both banks of the River Godavari and cuts through the Papikonda hill range of Eastern Ghats.

- The majority of the park is covered with moist deciduous forest.

- It is home to various animal species such as tigers, mouse deer, gaur, and others.

- The park also has a unique dwarf breed of goat known locally as the "kanchu mekha".

- The park has experienced varying levels of protection, beginning as a reserved forest in 1882, a wildlife sanctuary in 1978, and as a national park from 2008.

- The park has been recognized as an Important Bird and Biodiversity Area.

19. WORLD WATER DAY 2024

- Every year, March 22 is observed as World Water Day to raise awareness about the global water crisis and the importance of water.

- The day aims to inspire people to sustainably manage freshwater resources, address water-related issues and support the achievement of Sustainable Development Goal 6: **Water and Sanitation for All by 2030.**

- The theme for this year is '*Water for prosperity and peace'*.

- The 2024 edition of the UN's flagship World Water Development Report (WWDR) report will explore this theme.

- The theme changes every year, but the central focus remains on topics relevant to clean water, sanitation and hygiene (WASH), which is in line with the targets of Sustainable Development Goal 6.

20. WORLD SPARROW DAY 2024

- World Sparrow Day is observed on March 20, shedding light on the significance of sparrows in maintaining biodiversity and ecological balance.

- In 2024, the theme for World Sparrow Day is "Sparrows: Give them a tweet-chance!", "I Love Sparrows" and "We Love Sparrows".

- The inaugural World Sparrow Day took place on March 20, 2010. In India, it was initiated by the Nature Forever Society.

- Sparrow populations are declining due to habitat degradation, urbanization, and changes in agricultural practices.

- The loss of nesting sites and foraging areas, as well as the decline in insect populations, are major factors

SCIENCE AND TECH

1. NEW SPACEPORT AT KULASEKARAPATTINAM

- The Prime Minister recently laid the foundation stone for a new spaceport at Kulasekarapattinam in southern Tamil Nadu.

- It is a new spaceport coming up at Kulasekarapattinam, a coastal hamlet near the temple town of Tiruchendur in Thoothukudi district in southern Tamil Nadu.

- It will be second after the space agency's existing Satish Dhawan Space Centre, founded in Andhra Pradesh's Sriharikota in 1971, with two launch pads.

- It will focus on the launch of Small Satellite Launch Vehicles (SSLVs) on a commercial basis.

- It will house 35 facilities, including a launch pad, rocket integration facilities, ground range and checkout facilities, and a mobile launch structure (MLS) with checkout computers.

- It would have the capacity to launch 24 satellites per year using a mobile launch structure.

- Spread over 2,350 acres, the Kulasekharapatnam spaceport will help save fuel for small rocket launches as the port can launch rockets directly south over the Indian Ocean without requiring crossing landmasses.

- This is unlike the existing launch site at the Satish Dhawan Space Centre, which adds more fuel requirements for launching into a polar orbit as rockets need to follow a curved path to the south to avoid Sri Lanka's landmass.

- It is estimated to cost Rs. 986 crore.

2. EXERCISE SAMUDRA LAKSAMANA

- The Exercise Samudra Laksamana kicked off on February 28 and will continue until March 2, taking place at or off the coast of Visakhapatnam.

- Exercise Samudra Laksamana is a joint naval exercise between the Indian Navy and Royal Malaysian Navy.

- It is the 3rd edition of this exercise.

- Indian Naval Ship Kiltan and Royal Malaysian Ship KD Lekir are participating in this exercise which has harbour professional interactions followed by the operational phase at sea.

- At harbour, crew of both ships will have various professional interactions, Subject Matter Expert Exchange on topics of mutual interest, sports fixtures, and other interactions.

- These interactions are aimed to enhance knowledge base, share best practices and further cooperation on maritime aspects. The exercise aims to strengthen bonds and enhance interoperability between the Indian and Royal Malaysian Navy.

- INS Kiltan is an indigenously-built anti-submarine warfare stealth corvette

- This is the third of the four Kamorta-class corvettes being built under Project 28.

3. GENOME INDIA PROJECT

- The Genome India Project recently announced that it had finished sequencing 10,000 Indian genomes.

- Genome India Project is a pan-India initiative focused on the whole genome sequencing of representative populations across India.

- The goal is to start with and execute whole genome sequencing and subsequent data analysis of 10,000 individuals representing the country's diverse population.

- This is a mission-mode, multi-institution consortium project, the first of its kind in India, supported and funded by the Department of Biotechnology, Government of India.

- Genome is the complete set of genetic information in an organism.

- In living organisms, the genome is stored in long molecules of DNA called chromosomes.

- In humans, the genome consists of23 pairs of chromosomes located in the cell's nucleus, as well as a small chromosome in the cell's mitochondria.

4. INDIA'S FIRST INDIGENOUS HYDROGEN FUEL CELL FERRY

- Prime Minister of India flagged off India's first indigenously built hydrogen fuel cell ferry boat in virtual.
- The hydrogen cell-powered inland waterway vessel launched under the Harit Nauka initiative.
- The vessel's flagging off was a key component of a major program that involved the foundation stone laid for a ₹ 17,300-crore project, including the outer harbor at the V.O. Chidambaranar Port.
- The vessel has been built at the Cochin Shipyard.
- It will make urban mobility smooth and easy through inland waterways. The vessel underscores the pioneering step for embracing clean energy solutions and aligning with the nation's net-zero commitments.
- Hydrogen fuel cells are a clean, reliable, quiet, and efficient source of high-quality electric power.
- They use hydrogen as a fuel to drive an electrochemical process that produces electricity, with water and heat as the only by-products.

5. INS JATAYU

- Indian Navy will commission Naval Detachment Minicoy as INS Jatayu in the presence of the Chief of the Naval Staff on 06 Mar 2024.
- INS Jatayu is the second Naval base in Lakshadweep after INS Dweeprakshak in Kavaratti.
- With the commissioning of INS Jatayu, the Indian Navy will strengthen its foothold in the Lakshadweep islands and along with extending operational surveillance, reach and sustenance.
- It will usher in a new era of capacity building and comprehensive development of the island territories.
- The event marks an important milestone in the Navy's resolve to incrementally augment security infrastructure at the strategically important Lakshadweep Islands.

6. GREY ZONE WARFARE

- The phrase 'grey zone warfare' crops up in descriptions of Chinese actions around an island that it claims as its own.
- Grey Zone Warfare generally means a middle, unclear space that exists between direct conflict and peace in international relations.
- It can be broadly defined as the exploitation of operational space between peace and war to change the status quo through the use of coercive actions which remain below a threshold that, in most cases, would prompt a conventional military response.
- Activities characterised as grey zone warfare methods range from the use of proxies for kinetic action or change of territorial status quo through coercion to non-kinetic subversive actions such as cyberattacks, economic coercion, disinformation campaign, election meddling, and more recently, weaponisation of migrants.

7. YARS MISSILE

- Russia recently announced a successful test fire of Yars intercontinental ballistic nuclear missile.

- Yars Missile is a Russian-made intercontinental ballistic missile (ICBM) with multiple independently targetable warheads, each capable of targeting different objectives.
- It is a three-stage, solid propellant, MIRV-capable (Multiple Independently Targetable Reentry Vehicles) ICBM.

- The Yars is a modified version of the Topol-M missile system.
- The missile can be launched from a silo or mobile launcher.
- It has a range of 10,500 km.
- The missile can be armed with up to 10 MIRVs, each containing a thermonuclear warhead weighing 300 kilotons.
- It has the capability to manoeuvre during flight and deploy both active and passive decoys.
- Intercontinental ballistic missile (ICBM):
- An ICBM is a guided missile that is designed to deliver nuclear warheads, although it could also deliver other payloads.
- According to the Federation of American Scientists, ICBMs have a minimum range of 5,500 kilometres (3,400 miles), with maximum ranges varying from 7,000 to 16,000 kilometres.

8. GENE THERAPY FOR HEMOPHILIA A

- The Union Minister of Science & Technology addressing the National Science Day 2024 programme stated that India conducted its first human clinical trial of gene therapy for hemophilia A (FVIII deficiency) at Christian Medical College (CMC) Vellore.
- Hemophilia is a group of rare bleeding disorders caused by a congenital deficiency in specific clotting factors.
- The most prevalent form is Hemophilia A.
- The treatment involves replacing the missing blood clotting factor so that the blood can clot properly.
- This is typically done by injecting treatment products, called clotting factor concentrates, into a person's vein.
- The two main types of clotting factor concentrates available are:
- Plasma-derived Factor Concentrates: Derived from human plasma, which is the liquid component of blood containing various proteins, including clotting factors.

9. PROJECT SEABIRD

- The Defence Minister will inaugurate two big piers and seven towers with 320 homes for Navy officers and Defence civilians as part of Project Seabird at Naval Base Karwar in Karnataka.
- Project Seabird involves creation of a naval base at Karwar, Karnataka, on the west coast of India.
- In the post-Indo-Pak War of 1971 scenario, India learned that the Indian Navy needs an additional naval base since Mumbai Harbour faced congestion, which led to security issues for its Western Fleet.
- It was initially sanctioned in 1985, and the foundation stone was laid on October 24, 1986, by Rajiv Gandhi.
- This is a massive project with the first sealift facility in the country and a transfer system for docking and undocking ships and submarines.
- Once completed, it will be the largest naval base in the Eastern Hemisphere.

10. ADITI SCHEME

- The Union Minister of Defence launched the ADITI scheme during DefConnect 2024.
- Acing Development of Innovative Technologies with iDEX (ADITI) is a scheme to promote innovations in critical and strategic defence technologies.
- It aims to develop about 30 deep-tech critical and strategic technologies in the proposed timeframe.
- Under this scheme start-ups are eligible to receive grant-in-aid of up to Rs 25 crore for their research, development and innovation endeavours in defence technology.
- It falls under the iDEX (Innovations for Defence Excellence) framework of Department of Defence Production, Ministry of Defence.
- It also envisages to create a 'Technology Watch Tool' to bridge the gap between the expectations and requirements of the modern Armed Forces and the capabilities of the defence innovation ecosystem.
- In the first edition of ADITI, 17 challenges – Indian Army (3), Indian Navy (5), Indian Air Force (5) and Defence Space Agency (4) – have been launched.
- To motivate young innovators, iDEX was expanded to iDEX Prime, with the assistance increasing from Rs 1.5 crore to Rs 10 crore.

11. NAVAL COMMANDERS CONFERENCE 2024

· The first edition of the Naval Commanders' Conference of 2024 commenced on March 5, 2024, with a powerful demonstration of the Indian Navy's maritime capabilities.

· The three-day event began with Raksha Mantri Shri Rajnath Singh embarking at sea to witness the Navy's ability to conduct 'twin-carrier operations', showcasing the growing strength of India's sea-based air power in maintaining maritime superiority.

· The ceremony witnessed the combat prowess of aircraft carriers INS Vikrant and INS Vikramaditya.

· During the inaugural session, Shri Rajnath Singh addressed the Naval Commanders and commended the Indian Navy for its increasing multi-dimensional capabilities in the Indian Ocean region.

12. METHANESAT

· The MethaneSAT satellite was launched aboard a SpaceX Falcon9 rocket from California.

· MethaneSAT will track and measure methane emissions at a global scale.

· It will provide more details and have a much wider field of view than any of its predecessors.

· The entity behind MethaneSAT is the Environmental Defense Fund (EDF) — a US-based nonprofit environmental advocacy group.

· It is developed in collaboration with Harvard University, the Smithsonian Astrophysical Observatory, and the New Zealand Space Agency.

· It will orbit the Earth 15 times a day, monitoring the oil and gas sector.

· It will create a large amount of data, which will tell "how much methane is coming from where, who's responsible, and are those emissions going up or down over time",

· The data collected by this will be made public for free in near real-time.

· This will allow stakeholders and regulators to take action to reduce methane emissions.

13. CHAKSHU AND THE DIGITAL INTELLIGENCE PLATFORM

· The Department of Telecommunications (DoT) introduced two initiatives, Chakshu and the Digital Intelligence Platform (DIP), to combat spam and fraud calls through the Sanchar Saathi portal.

· Chakshu is accessible at sancharsaathi.gov.in/sfc, facilitating citizens to report suspicious communications.

· The platform allows users to report various types of fraud, including those related to bank accounts, payment wallets, SIM cards, gas and electricity connections, KYC updates, impersonation, and sextortion.

· The primary objective of Chakshu is to enable proactive reporting of suspicious activities, contributing to the prevention and mitigation of telecom-related fraud and spam calls.

· Telecom Regulatory Authority of India (TRAI) is working on developing an app for the Chakshu platform, further streamlining the reporting process for users.

· The DIP is a secure and integrated platform created by the DoT for curbing the misuse of telecom resources and data through intelligence sharing and information exchange among the stakeholders covering a wide spectrum of telecom service providers, law enforcement agencies (LEAs), banks and financial institutions.

· It would be a non-public data-sharing resource for "Telecom Service Providers (TSPs), LEAs, banks and financial institutions, social media platforms, identity document issuing authorities etc.

14. INDIA'S FIRST UNDER-RIVER METRO TUNNEL

· Prime Minister recently inaugurated a metro train service in Kolkata, marking the opening of India's first under-river metro tunnel.

· India's First Under-River Metro Tunnel is a part of Kolkata Metro's East-West Corridor.

· It passes under the Hooghly River and forms part of section from Howrah Maidan to Esplanade.

· The stretch also has the deepest metro station in the country, the Howrah Maidan station, at 32 metres below ground level.

· The Hooghly River, also known as the Bhagirathi-Hoogly and Kati-Ganga Rivers, is one of the significant rivers in West Bengal.

· It is a distributary or arm of the Ganges River.

· It is formed in Murshidabad, where the Ganga splits into two parts, while the part flowing through Bangladesh is called the Padma.

· The Hooghly River is silted up above Kolkata, and the river flows to the west and south to the estuary of Rupnarayan and then south and southwest to enter the Bay of Bengal through a 32-kilometer-wide estuary.

· The Hooghly's majority of water comes from the Farakka Feeder Canal instead of natural water.

· The Farakka Barrage is a dam that diverts water from the Ganges into a canal near the town of Tildanga in Malda district. This supplies the Hooghly with adequate water even in the dry season.

15. HAIPER : AI-POWERED VIDEO GENERATION TOOL

· Former members of Google's DeepMind team, have introduced Haiper, a cutting-edge AI-powered video generation tool.

· Haiper is an all-in-one visual foundation model that allows everyone, with or without technical training, to generate high-quality video content with ease.

· According to Haiper, its model is a powerful perceptual foundation model-driven AI that has been designed for a "new path towards AGI" (artificial general intelligence, an AI software with human-like intelligence and the ability to self-learn).

· It offers tools such as text-to-video, animated static images, video repainting tools, etc.

· Users can go on to the website, log in with their email addresses, and start generating videos for free by typing in text prompts.

· At present, users can only generate HD video spanning 2 seconds, and a slightly lower-quality video could go up to four seconds.

16. DOLUTEGRAVIR : ANTIRETROVIRAL DRUG

· Resistance to the antiretroviral drug dolutegravir (DTG) is increasing among HIV patients, a new report by the World Health Organization (WHO) highlighted.

· Dolutegravir (DTG) is an antiviral drug used with other medications to treat human immunodeficiency virus (HIV) infection, the virus that can cause the acquired immunodeficiency syndrome (AIDS).

· Dolutegravir is in a class of medications called HIV integrase inhibitors.

· It works by decreasing the amount of HIV in your blood and increasing the number of immune cells.

· Although dolutegravir does not cure HIV, using it along with other medications may decrease your chance of developing AIDS and HIV-related illnesses such as serious infections or cancer.

· WHO has recommended the use of dolutegravir as the preferred first- and second-line HIV treatment for all population groups.

· It is more effective, easier to take and has fewer side effects than other drugs currently in use.

17. SEA DEFENDERS-2024

· The United States Coast Guard's (USCG) Bertholf ship reached Port Blair ahead of the 'Sea Defenders-2024' joint exercise.

· Sea Defenders-2024 is a joint exercise between the Indian Coast Guard and the United States Coast Guard.

· Location: Off the coast of Port Blair, Andaman and Nicobar Islands.

- The two-day exercise will focus on maritime piracy and asymmetric threats, including simulated drone attacks on commercial merchant traffic, joint maritime search and rescue operations, major firefighting, marine pollution response, and counter-drug interdiction exercises.

- The event will also witness a simulated medical evacuation to enhance readiness in emergency situations.

- Indian Coast Guard (ICG) is an armed force that protects India's maritime interests and enforces maritime law, with jurisdiction over the territorial waters of India, including its contiguous zone and exclusive economic zone.

- The ICG, working in coordination with other Union agencies, institutions and authorities, safeguards the maritime interests and security of India, assists vessels and fisherman in distress and protects the maritime environment.

- It was formally established in 1978 by the Coast Guard Act, 1978, as an independent Armed force of India.

- It operates under the Ministry of Defence.

18. INS TUSHIL

- INS Tushil is the first Krivak-III frigate to be acquired under Project 11356M.

- India in October, 2016 signed an Inter-Governmental Agreement (IGA) with Russia

to purchase/construct four additional Admiral Grigorovich-class (Project 11356M) frigates through a partnership between Russian and Indian shipyards.

- Russia will supply two of the frigates (INS Tushil and INS Tamala), while the other two will be constructed in India.

- The Talwar-class frigates, or Project 11356, are a class of stealth-guided missile frigates.

- The construction of the ships is based on the Indian Navy's specific requirements to meet the entire spectrum of naval warfare in all three dimensions of air, surface, and sub-surface.

- These ships feature "stealth technology" in terms of low radar and underwater noise signatures.

- These ships are being equipped with major Indian-supplied equipment such as surface-to-surface missiles, sonar systems, surface surveillance radar, communication suites, and anti-submarine warfare systems, along with Russian surface-to-air missiles and gun mounts.

19. PANCHESHWAR MULTIPURPOSE PROJECT

- The recent Nepal-India official dialogue did not address progress on the significant Pancheshwar Multipurpose Project (PMP), despite the signing of a long-term power-sharing agreement over a month ago.

- The project remains stalled due to disagreements over benefit sharing, posing challenges to its initiation.

- Pancheshwar Multipurpose Project (PMP) is a joint hydropower initiative situated on the Mahakali River, shared by Nepal and India.

- It is governed by the integrated Mahakali Treaty signed in 1996.

- The project aims to generate approximately 6,480 MW of energy, with equal division between the two countries, and provide irrigation water for 130,000 hectares of land in Nepal and 240,000 hectares in India

20. CHIPIN CENTRE

- The ChipIN Centre, a hub for chip designers in India, received a boost from leading semiconductor industry players, aiming to empower the semiconductor design community in the country.

- The centre offers state-of-the-art Electronic Design Automation (EDA) tools to students at various academic levels.

- These initiatives aim to realize India's vision of becoming a semiconductor hub by fostering chip design innovation and entrepreneurship.

- A semiconductor chip, also known as an integrated circuit (IC) or microchip, is a small electronic device that contains multiple interconnected electronic components.

- Semiconductor chips are made up of electronic components such as transistors, resistors, and capacitors.
- These components are etched onto a small piece of semiconductor material, usually silicon.
- Semiconductors are tiny electrical switches that act like electrical currents on or off.

21. EXERCISE CUTLASS EXPRESS

- INS Tir, the lead ship of First Training Squadron (1TS) participated in Exercise Cutlass Express – 24 (CE – 24) held at Port Victoria, Seychelles
- Exercise Cutlass Express is an exercise conducted in East African coastal regions and the West Indian Ocean to counter malign influence, aggression and activity along overlapping command seams and maritime regions.
- It is a premier multinational maritime exercise sponsored by U.S. Africa Command (AFRICOM) and led by U.S. Naval Forces Europe-Africa/U.S. Sixth Fleet.
- It brings together maritime forces from East Africa, West Indian Ocean nations, Europe, North America and several international organizations to enhance maritime law enforcement capacity, promote national and regional security and increase interoperability among participating nations.
- Training was conducted on theoretical and practical aspects of Maritime Interdiction Operations, Visit Board Search and Seizure procedures and Diving operations. During the sea phase, the ship's VBSS team boarded Seychelles Coast Guard (SCG) ship LE Vigilant and demonstrated procedures of boarding operations.
- As part of Cutlass Express 2024, the Indian Navy actively engaged with participants from 16 friendly foreign countries.
- The Indian Navy has been participating in the exercise since 2019.

22. SELA TUNNEL IN ARUNACHAL PRADESH

- PM Modi inaugurates the Sela Tunnel in Arunachal Pradesh, built at an altitude of 13,700 feet by the Border Roads Organisation.
- The all-weather Sela Tunnel is built on the road linking Tezpur (Assam) to Tawang in the West Kameng district of Arunachal Pradesh. Constructed using the New Austrian Tunnelling Method (NATM), it stabilizes the tunnel perimeter with sprayed concrete and other support while ensuring stability through regular monitoring.
- This bi-lane tunnel, stretching approximately 1.5 kilometres.
- Stands as the world's longest (at an altitude above 13,000 feet), offering crucial all-weather connectivity.

23. MISSION DIVYASTRA

- The Prime Minister of India announced successful maiden flight test of Agni-5 missile

with MIRV technology, code-named Mission Divyastra, boosting India's defence capability.
- Mission Divyastra the maiden flight test of the locally developed Agni-5 missile with multiple independently targetable re-entry vehicle (MIRV) technology and code named as Mission Divyastra.

- Agni-5 missile uses a three-stage solid fuelled engine and has a range of more than 5,000km.
- Agni series has medium to Intercontinental versions of Agni missile systems 1 to 5 with a varying ranges — starting from 700 km for Agni-1 to 5000 km and above for Agni-5.
- In June 2021, DRDO successfully tested Agni P, a canisterised missile with a range capability between 1,000 and 2,000 km.
- This means that the missile can be launched from road and rail platforms, making it easier for it to be deployed and launched at a quicker pace.

24. SAKHI : GAGANYAAN SPACE FLIGHT MISSION

- The Vikram Sarabhai Space Centre (VSSC), under the Indian Space Research Organisation

(ISRO), has developed an innovative and versatile application called the Space-borne Assistant and Knowledge Hub for Crew Interaction (SAKHI) to support astronauts during the Gaganyaan space flight mission.
- SAKHI offers access to technical information, facilitates communication, monitors health, ensures connectivity with Earth and onboard systems, and manages dietary schedules.
- Strapped to space suits, SAKHI helps astronauts access data, maintain logs, and stay informed about their well-being, enhancing safety and efficiency for the Gaganyaan mission and aligning with ISRO's goal of advancing space exploration.

25. CONNECTOME.

- Connectome Concept represents a comprehensive map of neural connections, akin to a blueprint illustrating the electrical and chemical signals exchanged between neurons.

- A neuron consists of a cell body containing the nucleus, dendrites for receiving input, and an axon for sending messages, sometimes enveloped by a myelin sheath for faster signal transmission.
- Neurons communicate through synapses, where dendrites receive chemical signals, convert them to electrical impulses, and transmit them through axons to other neurons.
- Despite the brain's complexity and data volume, the connectome simplifies scientists' understanding, facilitating advancements in neuroscience and neurological health research.
- Mapping the connectome aids in comprehending brain function and the impact of conditions like Attention deficit hyperactivity disorder (ADHD) and Alzheimer's disease on neural processes.

26. NAVAL DRILL IN THE GULF OF OMAN

- China, Iran, and Russia recently began a joint naval drill in the Gulf of Oman.
- The Gulf of Oman, also known as the Gulf of Makran, is the western extension of the Arabian Sea and lies in the Middle East.
- It forms the only entrance to the Persian Gulf from the Indian Ocean.
- The Gulf connects the Arabian Sea with the Strait of Hormuz, which then empties into the Persian Gulf.
- Bordering Countries: It is bordered by Pakistan and Iran in the north; by the United Arab Emirates (UAE) in the west and by Oman in the south. Muscat, the capital of Oman, is located on the coast of the gulf.
- It is at its widest point between Cape al-Hadd in Oman and the Gwadar Bay on the Iran-Pakistan border. The gulf is relatively shallow because of its origin as a fissure in the mountain spine now divided between Iran and Oman.
- Some of the significant islands that are located in the Gulf of Oman include Sheytan Island, Al Fahal Island, Dimaniy at Islands, and the Sawadi Islands.
- The major international shipping ports that are situated in the Gulf of Oman include Port Sultan Qaboos Muttrah in Muscat, Oman;

Chabahar Port in Iran; the Port of Fujairah and Khor Fakkan Container Terminal in the UAE.

- Roughly one-third of the world's oil is exported via the Strait of Hormuz and the Gulf of Oman.

27. HYODOL ROBOT : TO BEAT LONELINESS AMONG ELDERS

- South Korean company Hyodol has come up with a way to use Artificial Intelligence (AI) to beat loneliness among elders with dementia.

- The South Korean government is reported to have deployed around 7,000 Hyodol dolls to keep senior citizens 'company' and remind them to take medications. Loneliness among senior citizens is a growing social issue in South Korea.

- Hyodol Robot is an AI care robot that offers customised care for seniors. The robot does this by relying on data collected by living and having conversations with them.

- It can hold full conversations and it comes with a companion app and web monitoring platform for caretakers to monitor remotely.

- Besides, it comes with safety features that can raise an alert when no movement has been detected for a certain period of time.

- It also comes with touch interaction, check-ins, a health coach, voice messages, 24-hour voice reminders, music, quizzes, exercise suggestions, and more.

- Moreover, caregivers with access to the app will be able to send and receive voice messages, make group announcements, and monitor motion detection.

- The robot also continuously monitors the health condition of its users through health Q&A two times a day.

- It collects verbal/nonverbal data for 24 hours from the users through AI

28. PB-SHABD PLATFORM

- Union Minister of Information and Broadcasting launched PB-SHABD, a news sharing service from Prasar Bharati.

- Prasar Bharti – Shared Audio Visuals for Broadcast and Dissemination (PB-SHABD) platform has been designed to provide daily news feeds in video, audio, text, photo and other formats to the subscribers from media landscape.

- It is powered by the vast network of Prasar Bharati reporters, correspondents and stringers, the service would bring you the latest news from different parts of the country.

- It will be a single point source of news content for all organizations.

- SHABD service is being offered free of cost for the first year as an introductory offer and will provide news stories in all major Indian languages across fifty categories.

- The shared feeds can be used for customized storytelling across different platforms.

- As an introductory offer, the services would be available free of cost and help the smaller newspapers, TV channels and digital portals immensely.

29. GLOBAL METHANE TRACKER 2024

- According to the International Energy Agency's (IEA) Global Methane Tracker 2024, Methane emissions from fuel use in 2023 were close to being the highest ever.

- Global Methane Tracker is an annual report released by the International Energy Agency (IEA).

- It is based on the most recently available data on methane emissions from the energy sector and incorporates new scientific studies, measurement campaigns, and information collected from satellites.

- Highlights of Global Methane Tracker 2024:

- Methane emissions from fuel use in 2023 were close to being the highest ever at 120 million tonnes (Mt).

- This is a small rise compared to 2022.

- Bioenergy, a form of renewable energy generated by plant and animal waste, caused another 10 million tons of emissions.

- Of the 120 Mt of methane that escaped into the atmosphere, around 80 million tons of methane emissions came from just 10 countries, The United States leads in methane emissions from oil and gas operations, and is "closely followed" by Russia. China, on the other hand, leads in emissions from coal operations.

- While studies suggested emissions are falling in some regions, overall emissions remain far too high to meet the world's climate goals.

- The world needs to slash methane emissions from fossil fuels by 75 percent by 2030 to achieve the Paris Agreement goal of limiting warming to 1.5°C.

- The IEA estimated that this goal would require about $170 billion in spending.

- This is less than 5 percent of the income generated by the fossil fuel industry in 2023.

30. ETHANOL 100 : LAUNCHED

- The Union Minister for Petroleum & Natural Gas and Housing and Urban Affairs, launched 'ETHANOL 100'.

- ETHANOL 100 fuel has high-octane rating, typically between 100-105. It proves ideal for high-performance engines, ensuring improved efficiency and power output all while minimizing environmental impact.

- ETHANOL 100's versatility shines through, as it can be used in a wide array of vehicles, including flex-fuel vehicles (FFVs) designed to run on gasoline, ethanol or any blend of the two.

- Its practicality and potential to become a mainstream fuel option with the right infrastructure in place.

- It includes 93-93.5 percent ethanol blended with 5 percent petrol and 1.5 percent co-solvent, which is a binder.

- It stands as a cleaner, greener alternative to gasoline, boasting lower emissions of greenhouse gases and pollutants, thus aiding in combating climate change and enhancing air quality in our communities.

31. NOCTIS VOLCANO : MASSIVE VOLCANO ON MARS

- Scientists recently discovered a massive volcano on Mars, temporarily designated

'Noctis volcano', with the possible remains of a relict glacier at its base.

- Noctis Volcano is a newly-discovered volcano located just south of Mars' equator, in Eastern Noctis Labyrinthus, west of Valles Marineris, the planet's vast canyon system.

- The volcano sits on the eastern edge of a broad regional topographic rise called Tharsis, home to three other well-known giant volcanoes: Ascraeus Mons, Pavonis Mons, and Arsia Mons.

- The central summit area is marked by several elevated mesas forming an arc, reaching a regional high and sloping downhill away from the summit area.

- The caldera remnant–the remains of a collapsed volcanic crater once host to a lava lake–can be seen near the centre of the structure.

- Lava flows, pyroclastic deposits (made of volcanic particulate materials such as ash, cinders, pumice and tephra), and hydrated mineral deposits occur in several areas within the structure's perimeter.

- It was active for a very long time on the Red Planet, and in its southeastern part lies a thin, recent volcanic deposit beneath which glacier ice is likely still present.

32. EASTERN MARITIME CORRIDOR

- The Red Sea crisis has shifted attention to the Eastern Maritime Corridor (EMC) – the proposed trade route for coking coal, crude oil, LNG, fertilizers and containers.

- Eastern Maritime Corridor (EMC) is a proposed sea route between the Indian port of Chennai and the Russian port of Vladivostok.

- Once complete, it will take 24 days, down from presently over 40 days, to transport goods from India to Far East Russia.

- The EMC will cover a distance of about 5,600 nautical miles, which is significantly shorter than the current route via the Suez Canal.

- For India, it will provide a shorter and more efficient route to access the markets of the Far East, such as China and Japan..

33. EXERCISE LAMITIYE

- Indian Army contingent departed for Seychelles to participate in the Tenth edition of Joint Military Exercise "LAMITIYE-2024".

- Exercise LAMITIYE is a joint military exercise between the Indian Army and Seychelles Defence Forces (SDF). 'LAMITIYE' meaning 'Friendship' in the Creole language is a biennial training event and has been conducted in Seychelles since 2001.

- 45 personnel each from the GORKHA RIFLES of the Indian Army and Seychelles Defence Forces (SDF) will participate in the 2024 exercise.

- The Exercise will enhance cooperation and interoperability between both the sides during Peace Keeping Operations.

- The exercise will also build and promote bilateral military relations in addition to exchanging skills, experiences and good practices between both armies

- Both sides will jointly train, plan and execute a series of well-developed tactical drills for neutralization of likely threats that may be encountered in Semi-Urban environment, while exploiting and showcasing new-generation equipment and technology.

34. FLUORIDE CONTAMINATION : SURVEY

- Fluoride contamination was detected in three districts of Kerala.

- According to the State Environment department, the source of contamination is likely geogenic, meaning these constituents are naturally present in the rock or soil matrix and enter groundwater through various chemical processes.

- Fluoride contamination in water is a critical issue worldwide.

- While fluoride is essential for dental health at low concentrations, excessive exposure can lead to health problems.

- Fluoride is naturally present in water and certain foods. It plays a crucial role in preventing tooth decay.

- However, when fluoride levels exceed 1.5 mg/L, it becomes toxic to humans.

- According to the Bureau of Indian Standards, the maximum permissible limit of arsenic in groundwater meant for drinking is 0.01 mg/l, while the corresponding limit of fluoride is 1.0 mg/l, which can be extended to 1.5 mg/l in case no alternative source of water is available.

- Excessive fluoride causes dental fluorosis, characterized by staining, pitting, and weakening of tooth enamel.

- Chronic exposure leads to skeletal fluorosis, affecting bones and joints.

- High fluoride levels may impact the nervous system.

35. EXERCISE BHARAT SHAKTI

- A Tri-Services Live Fire and Manoeuvre Exercise named "Bharat Shakti" is being conducted in Pokhran, Rajasthan,

demonstrating India's indigenous defence capabilities.

- It included successful test firing of the long-range AGNI missile with advanced MIRV technology.
- Key equipment and weapons systems featured in the exercise include T-90 (IM) Tanks, Dhanush and Sarang Gun Systems, Akash Weapons Systems, Logistics Drones, Robotic Mules, Advanced Light Helicopters (ALH), Naval Anti-Ship Missiles, Light Combat Aircraft Tejas, Light Utility Helicopters, and Advanced Light Helicopters.
- However, the LCA Tejas fighter jet tragically crashed during a training exercise.

36. EXERCISE TIGER TRIUMPH

- Exercise Tiger Triumph is scheduled on the Eastern Seaboard from 18 to 31 March 2024.
- Exercise Tiger Triumph is a bilateral tri-Service Humanitarian Assistance and Disaster Relief (HADR) Exercise between India and the US.

- It is aimed at developing interoperability for conducting HADR operations and refine Standard Operating Procedures (SOPs) to enable rapid and smooth coordination between forces of both countries.
- On completion of the Harbour Phase, the ships, with the troops embarked, would sail for the Sea Phase and undertake Maritime, Amphibious and HADR operations in accordance with injected situations.
- Indian Navy Ships with integral helicopters and landing crafts embarked, Indian Navy aircraft, Indian Army personnel and vehicles and Indian Air Force aircraft and helicopters along with the Rapid Action Medical Team (RAMT) would be participating in the exercise.

37. PUSHPAK : REUSABLE LAUNCH VEHICLE

- ISRO plans to conduct the second landing test of the Reusable Launch Vehicle (RLV) Pushpak soon.

- This ongoing research and development aim to reduce space launch costs and advance India's space exploration missions.
- In 2023, ISRO successfully conducted the Reusable Launch Vehicle Autonomous Landing Mission (RLV LEX).
- The Reusable Launch Vehicle (RLV) Pushpak is a winged technology demonstrator developed by the Indian Space Research Organisation (ISRO).
- Its purpose is to explore and validate technologies essential for achieving a fully reusable launch vehicle.
- The RLV Pushpak is part of ISRO's efforts to develop a fully reusable launch vehicle.
- Its primary goal is to enable low-cost access to space.
- ISRO envisions building a space station by 2035, and the RLV technology plays a crucial role in achieving this objective.

38. PROJECT GR00T

- AI chip leader Nvidia announced Project GR00T which promises to revolutionise the evolution of humanoid robots.
- Project GR00T stands for Generalist Robot 00 Technology.
- It is a multimodal AI system that acts as the mind for humanoid robots, allowing them to learn new skills and interact with the real world.
- Robots built on this platform are designed to understand natural language and emulate movements by observing human actions, such as instantly learning coordination, dexterity, and other skills.

- The project aims to empower humanoid robots with human-like understanding and movement using Artificial Intelligence (AI).

- The humanoids learn from human demonstrations with imitation learning and from the robotics platform NVIDIA Isaac Lab for reinforcement learning.

- While imitation learning involves observing an expert performing a task and learning to imitate those actions, reinforcement learning is a machine learning method that trains software to make decisions to achieve the most optimal results.

39. TRI LATERAL EXERCISE

- INS Tir and INS Sujata will participate in the forthcoming edition of India Mozambique Tanzania (IMT) Tri Lateral (TRILAT) Exercise.

- IMT Trilateral Exercise is a joint maritime exercise scheduled from 21-29 Mar 24.

- As part of the harbour phase scheduled from 21-24 Mar 24, Naval ships Tir and Sujata will engage with the respective Navies at the ports of Zanzibar (Tanzania) and Maputo (Mozambique).

- This phase would begin with a Planning Conference followed by conduct of joint harbour training activities like Damage Control, Fire Fighting, Visit Board Search and Seizure procedures, Medical Lectures, Casualty Evacuation and Diving operations.

- The sea phase of the exercise is covering practical aspects of countering asymmetric threats, Visit Board Search and Seizure procedures, boat handling, manoeuvres and firing exercise.

- A joint EEZ surveillance is also planned during the sea phase.

- The exercise will conclude with a joint debrief scheduled at Nacala (Mozambique).

40. RAD51 PROTEIN: PREVENTING DNA RE-REPLICATION

- Researchers recently identified the RAD51 protein as a key player in preventing DNA re-replication.

- RAD51 recombinase (RAD51) is a gene that encodes a protein that functions in homologous recombination and DNA repair.

- RAD51 has the function of finding and invading homologous DNA sequences to enable accurate and timely DNA repair.

- The RAD51 protein binds to the DNA at the site of a break and encases it in a protein sheath, which is an essential first step in the repair process.

- Breaks in DNA can be caused by natural and medical radiation or other environmental exposures, and also occur when chromosomes exchange genetic material in preparation for cell division.

- In the nucleus of many types of normal cells, the RAD51 protein interacts with many other proteins, including BRCA1 and BRCA2, to fix damaged DNA.

MISCELLANEOUS

1. TAWI FESTIVAL : JAMMU AND KASHMIR

- Jammu & Kashmir is hosted the annual 'Tawi Festival' from March 1st to 4th, 2024.

- Centered on the banks of the river Tawi flowing through Jammu city, the event will showcase the region's vibrant cultural legacy through arts, cuisine, literature and folk traditions.

- The festival is being jointly organized by the Tourism Department, Jammu Municipal Corporation and prominent cultural institutions of the city.

- It provides a platform to nurture local talent and enterprises while drawing attention to Jammu's distinct ethos.

- "The Tawi Festival aims to bring various slices of Jammu's culture together on a common platform through immersive experiences centered around art, knowledge and community."

2. VIKRAMADITYA VEDIC CLOCK : INAUGURATED BY PRIME MINISTER NARENDRA MODI

- The Prime Minister recently inaugurated the Vikramaditya Vedic Clock, which is mounted

on an 85-foot tower within Jantar Mantar in Ujjain.

- Vikramaditya Vedic Clock is the world's first 'Vedic Clock', designed to display time according to the ancient Indian traditional Panchang (time calculation system).

- It has been positioned on an 85-foot tower within Jantar Mantar in Ujjain, Madhya Pradesh.

- It also provides information on planetary positions, Muhurat, astrological calculations, and predictions.

- It also indicates Indian Standard Time (IST) and Greenwich Mean Time (GMT).

- The clock will calculate time from one sunrise to another.

- The period between the two sunrises will be divided into 30 parts, whose one hour consists of 48 minutes, according to ISD.

- The reading will start from 0:00 with the sunrise functions for 30 hours (an hour of 48 minutes).

- It has been developed by Lucknow-based Sanstha Arohan, using digital interventions, enabling it to be connected to the internet and provide a wide range of features through a mobile app named after the clock.

3. RISA TEXTILE : GI TAG

- Tripura's traditional tribal attire 'risa' received the Geographical Indication (GI) tag recently.

- Risa Textile is a handwoven cloth used as a female upper garment and also as headgear, a stole, or a present to express respect.

- It is woven in colourful designs and has a crucial social and religious significance.

- Adolescent Tripuri girls are first given a risa to wear in an event called Risa Sormani, around age 12 to 14.

- The risa is used in religious festivals such as Garia Puja by tribal communities, a turban by men during weddings and festivals, a cummerbund over the dhoti, a head scarf by young girls and boys and a muffler during winters.
- It is presented as a mark of honour to distinguished recipients.
- Risa is common in almost all 19 indigenous tribal communities of Tripura.
- The traditional Tripuri female attire consists of three parts — risa, rignai and rikutu.
- Risa is a handwoven cloth used as a female upper garment.
- Rignai is primarily worn as the lower garment and literally means 'to wear'.
- Rituku is mainly used as a wrap, or like a 'chunri' or a 'pallu' of the Indian saree. It is also used to cover the heads of newly married Tripuri women.
- The complete Tripuri attire is claimed to have originated even before the time of the Manikya kings, who ruled Tripura for over 500 years starting from the 15th century.

4. RUPA TARAKASI: GI TAG

- The famous silver filigree (Rupa Tarakasi) of the millennium Cuttack city in Odisha recently received the Geographical Indication (GI) tag.
- Rupa Tarakasi is one of the most exquisite silver crafts.
- This centuries-old, sophisticated craft is practiced in the silver city of Cuttack, Odisha.
- It is known to have existed as far back as the 12th century.
- The art form received considerable patronage under the Mughals.
- In this work of craft, silver bricks are transformed into thin, fine wires (tara) or foils, from which silver filigree is made with all designs (kasi).
- While different grades of silver are used in the main metal alloy, the craftsmen also use other metals like copper, zinc, cadmium and tin.
- The artists involved with this filigree work are called "Rupa Banias" or "Roupyakaras" (in Odia).

- This craftsmanship extends to creating various items, including jewellery worn by Odissi dancers, decorative artifacts, accessories, and religious and cultural pieces

5. INTERNATIONAL WOMEN'S DAY 2024

- International Women's Day is an annual celebration observed on 8th March every year, dedicated to honouring the achievements of women and advocating for gender equality worldwide.
- Theme 2024: Inspire Inclusion
- This global event serves as a reminder of the progress made towards women's rights and the ongoing challenges that women still face in many aspects of life.
- The celebration's origin lies in the labour movements of Europe and North America. The first International Women's Day was held in March 1911.
- It was celebrated for the first time by the United Nations in 1975.

6. MEASLES AND RUBELLA CHAMPION AWARD

- India has been honoured with the prestigious Measles and Rubella Champion Award by The Measles and Rubella Partnership at the American Red Cross Headquarters in Washington D.C., USA.
- The partnership, comprising various organizations dedicated to reducing global measles deaths and preventing rubella illness, applauds India's commitment to public health and leadership in controlling these infectious diseases, particularly among children.
- Measles is a highly contagious disease that can cause death in young children.
- The measles-mumps-rubella (MMR) vaccine is safe and highly effective in preventing rubella.
- The WHO recommends two doses of the measles vaccine to ensure immunity and prevent outbreaks.
- Rubella is a contagious viral infection that can cause birth defects.

7. 96ᵗʰ ACADEMY AWARDS

· The highly anticipated 96th Academy Awards ceremony concluded with flair at the Ovation Hollywood in Los Angeles.

· Academy Awards are popularly known as the Oscars given for artistic and technical merit in the film industry.

· These are given annually by the Academy of Motion Picture Arts and Sciences (AMPAS).

· The awards are an international recognition of excellence in cinematic achievements.

· The awards were first presented in 1929 and winners receive a gold-plated statuette commonly called Oscar.

· The various category winners are awarded a copy of a golden statuette, officially called the "Academy Award of Merit". Winners are chosen from the 24 categories: best picture, actor, actress, supporting actor, supporting actress, directing, original screenplay and adapted screenplay etc.

· Only members of the Academy of Motion Picture Arts and Sciences may nominate and vote for candidates for the Oscars.

· The academy is divided into various branches of film production, and the nominees in each award category are chosen by the members of the corresponding branch.

· The entire academy membership nominates the candidates for best picture and votes to determine the winners in most of the categories.

8. GORSAM KORA FESTIVAL

· The Gorsam Kora Festival, held annually in Arunachal Pradesh's Zemithang valley, concluded, celebrating the shared Himalayan

Buddhist cultural heritage and the enduring friendship between India and Bhutan.

· It is Located along the Nyanmjang Chu River, Zemithang is historically significant as the refuge where the 14th Dalai Lama sought sanctuary in 1959.

· The festival, centred around the 93-foot tall stupa – 'Gorsam Chorten' built in the 13th century.

· It attracts thousands of devotees, including Bhutanese nationals, for prayers and traditional rituals.

9. LACHIT BORPHUKAN : BRONZE STATUE UNVEILED

· The Prime Minister of India unveiled a 125-foot bronze statue of Ahom general Lachit Borphukan at his burial site in eastern Assam's Jorhat district.

· Lachit Borphukan was a legendary army commander of the Ahom kingdom (1228-1826). He was known for his leadership in the 1671 'Battle of Saraighat'.

· He defeated the Mughal forces, led by Raja Ramsingh-I, in this battle, and thwarted a drawn-out attempt by them to take back Assam.

· He was chosen as one of the five Borphukans of the Ahom kingdom by king Charadhwaj Singha and given administrative, judicial, and military responsibilities.

· Borphukan preferred guerrilla tactics which provided an edge to his smaller, but fast moving and capable forces.

· He was buried at the 'maidam' burial grounds for Ahom royals and nobles at Hollongapar, after passing away a year after the battle at the age of 49 due to illness.

10. WORLD MONUMENTS FUND WATCH 2025

· Conservationists plan to propose the Kazhuveli watershed region in Villupuram district, Tamil Nadu, for nomination to the

World Monuments Fund Watch 2025 programme.

- This region, spanning 740 sq. km. from Gingee to Marakkanam and up to the Auroville plateau, features an ancient Eri (tank) network crucial for sustaining agricultural practices over millennia.
- The proposal aims to address the decline of this historic water management system and its cultural heritage.
- The World Monuments Watch, launched in 1996, is a biennial program that highlights heritage sites globally nominated by individuals and community-based organizations.
- It is a program by the World Monuments Fund (WMF) that raises awareness about cultural heritage around the world that is threatened by conflict, vandalism, disaster, or neglect.

11. RENAMING MUMBAI CENTRAL STATION

- The Maharashtra cabinet has decided to propose renaming Mumbai Central Station after Nana Jagannath Shankarseth, a renowned social reformer and philanthropist who played a crucial role in shaping Mumbai.
- Nana Jagannath Shankarseth is often hailed as the architect of Mumbai (formerly Bombay).
- His notable contributions include being the first Indian nominated to the Legislative Council of Bombay and founding the Bombay Association in 1852.
- He championed education for girls and women and established the Native School of Bombay (1849), which later became the esteemed Elphinstone College. Shankarseth was instrumental in the committee that propelled India's first train project, connecting Boribunder and Thane in 1853.
- Shankarsheth was instrumental in founding the Great Indian Peninsula Railway, alongside notable figures like Sir Jamsetjee Jeejeebhoy and David Sassoon.
- Shankarsheth's legacy lives on through the institutions he established and the

development projects he spearheaded, leaving an indelible mark on Mumbai's history.

12. WORLD HAPPINESS REPORT 2024

- Finland has once again claimed the title of the world's happiest country for the seventh consecutive year, according to the annual UN-sponsored World Happiness Report.
- Highlights of World Happiness Report 2024:
- The Nordic nations continue to dominate the top rankings. Finland topped the list for the seventh year in a row.
- The other top 10 countries are Denmark, Iceland, Sweden, Israel, Netherlands, Norway, Luxembourg, Switzerland, and Australia.
- Out of the 143 countries surveyed, Afghanistan remained at the bottom of the list.
- For the first time in over a decade, the United States and Germany have slipped out of the top 20 happiest nations, landing at 23rd and 24th place, respectively.
- The report underscores a change wherein the happiest countries no longer include any of the world's most populous nations. Only the Netherlands and Australia, both with populations exceeding 15 million, are present in the top 10.
- India is ranked 126th on the list, the same as last year, in the happiness index.
- Older age is associated with higher life satisfaction in India.
- The report said that older Indian men, particularly those in higher age brackets, presently married and those with an education, tend to report greater life satisfaction compared to their counterparts

13. MAHAKUMBH 2024

- The Start-up Mahakumbh, a major event focused on promoting and celebrating India's startup ecosystem, was inaugurated by Prime Minister Narendra Modi at Bharat Mandapam in New Delhi.
- The Start-up Mahakumbh event showcased innovations and startups from across the country, with participants displaying their products and services with great pride.
- India's startup ecosystem has seen remarkable growth in recent years, with the country now

having the third-largest startup ecosystem in the world

- Prime Minister Modi highlighted that the startup revolution is being led by small cities across a wide range of sectors, including agriculture, textiles, medicine, transport, space, yoga, and ayurveda.
- He mentioned the work of Indian startups in more than 50 areas within the space sector, including the launch of space shuttles.
- The Prime Minister underlined the impetus provided by the Digital India initiative to startups, suggesting that colleges take it up as a case study.
- He specifically mentioned the Unified Payments Interface (UPI) becoming a pillar of support for fintech startups, leading to the development of innovative products and services that have expanded digital services in the country.

14. PANDAVULA GUTTA

- Pandavula Gutta is located in Jayashankar Bhupalpally District in Telangana.
- It is known for its rock art and geological heritage.
- The site features Paleolithic cave paintings depicting wildlife and symbols.
- Discovered in 1990, it showcases habitation from the mesolithic to medieval times.

- Recognized as the sole Geo-heritage site in Telangana, older than the Himalayan hills.

15. DOOMSDAY GLACIER

- Unveiling new details about Antarctica's "Doomsday Glacier", scientists have revealed that the Thwaites Glacier has been losing ice since the 1940s.
- Doomsday Glacier also known as the "Doomsday Glacier," is located in the remote Amundsen Sea in West Antarctica.
- It's a wide and fast-flowing glacier, roughly the size of Florida or Great Britain, and it has been a significant focus of scientific study due to its sensitivity to climate change.
- Satellite measurements have shown that the glacier is losing an enormous amount of ice each year, nearly 50 billion tons annually, contributing to rising global sea levels. The glacier already contributes 4% of global sea level rise.
- If the entire Thwaites Glacier were to melt, it could raise the world's oceans by about 65 centimeters (over 2 feet).
- It also acts as a buffer, holding back neighboring glaciers that contain around three meters of potential sea level rise.
- A critical concern is that much of Thwaites sits on land that is below sea level, in a configuration known as "marine-based."

SPECIES IN NEWS

1. MELANOCHLAMYS DROUPADI

· Researchers of the Zoological Survey of India (ZSI) recently discovered a new species of head-shield sea slug from Odisha and the West Bengal coast named 'Melanochlamys Droupadi'.

· Melanochlamys Droupadi is a new marine species of head-shield sea slug with ruby red spot.

· This species belonging to Melanochlamys genus was discovered from Digha of West Bengal coast and Udaipur of Odisha coast.

· It is a small invertebrate with a maximum length of up to 7 mm.

· It inhabits wet and soft sandy beaches.

· It is brownish black in colour with a ruby red spot in the hind end.

· This particular species of sea slug is hermaphrodite (having both male and female reproductive parts); however, they need another sea slug for reproduction.

· It has a shell inside the body. It has a posterior, accounting for 61 percent of its body length.

· It continuously secretes transparent mucus to form a sheath that prevents sand grains from entering parapodial space.

· It crawls beneath smooth sand to form a moving capsule where the body is rarely visible, leaving behind a trail like a turtle.

· Sea Slugs are a group of molluscs that live primarily in marine habitats and are slug-like.

· They can be found from the shallow intertidal to the deep sea and from the polar regions to the tropics.

· The sea slugs are rapid hunters and feed upon mobile prey such as other shelled and unshelled sea slugs, roundworms, marine worms, and small fishes.

2. TAENIOGONALOS DEEPAKI

· Discovered a new species of wasp in the Western Ghat region of Karnataka.

· Taeniogonalos deepaki was discovered in the Belgaum region of Karnataka. The genus Taeniogonalos belongs to the family Trigonalyidae of the order Hymenoptera.

· The Trigonalyidae family consists of a type of insects called hyperparasitoids that "sneak into" parasitoids or insects whose larvae develop on or within the bodies of other insects.

· The Taeniogonalos genus is distributed in Afrotropical, oriental, eastern palaearctic, nearctic, Australian and neotropical regions; 6 of the species have been reported earlier from India and 20 from China.

· Most of the Taeniogonalos species have been reported from south India.

· Parasitoid is an organism that has young that develop on or within another organism (the host), eventually killing it. They have characteristics of both predators and parasites.

3. EUSCORPIOPS KRACHAN

· Researchers recently discovered a previously unknown species of scorpion, scientifically classified as Euscorpiops Krachan.

· Euscorpiops Krachan belongs to the subgenus Euscopiops and has been named Euscorpiops Krachan after the national park in Thailand, where it was found.

· Scorpions in this genus have limited distribution ranges with a high degree of endemism.

· They can be found mainly in mountain areas, particularly in places with numerous rock crevices.

· They are very small in comparison to most other species of the subgenus, reaching just over 1 inch in length.

· They are brownish in colour; however, females are darker than males.

· They also have eight eyes and eight legs.

- Other scorpions of the Scorpiops genus hunt through 'ambush or sit-and-wait type of foraging'.
- It is believed that the new species employs similar strategies while hunting.

4. BRUCETHOA ISRO
- Researchers recently named a new species of deep-sea isopod discovered off the Kerala coast after the Indian Space Research Organisation (ISRO).

- Brucethoa isro is a new species of deep-sea isopod discovered off the Kollam coast, Kerala.
- The tiny fish-parasitic crustacean, belonging to the genus Brucethoa, was recovered from the base of the gill cavity of the Spinyjaw greeneye, a marine fish.
- It is the second species within this genus to be documented in India.
- It has been named Brucethoa isro in honour of the Indian space agency's successful space missions.
- Females of the species tend to be larger than males. Females grow to about 19 mm in length and 6 mm in width, while males are smaller at around half the size.
- Isopods are an order of invertebrates (animals without backbones) that belong to the greater crustacean group of animals, which includes crabs and shrimp.
- They also live in many different types of habitats, from mountains and deserts to the deep sea and they are distributed worldwide.

5. HANGUL (AKA THE KASHMIR STAG)
- It is a unique subspecies of the Asian Red

Deer. It is the State Animal of Jammu and Kashmir.
- Hanguls are, by nature, high-altitude forest dwellers.
- Distribution: Dachigam National Park and its nearby areas; Rajparian Wildlife Sanctuary, Overa Aru, Sind Valley, and the forests of Kishtwar and Bhaderwah in Jammu and Kashmir.
- Conservation Efforts:
- In 1947, around 2000 were spotted and the number fell to 384 by 1968.
- Despite being the state animal of Jammu and Kashmir, only 289 individuals of this elusive species remain.
- IUCN's Red Data Book: Critically Endangered
- Project Hangul: In an effort to address the decreasing population of the Hangul, the government of Jammu and Kashmir, in collaboration with the IUCN and WWF, initiated this project

PLACES IN NEWS

1. VOLCANO ERUPTION IN REYKJANES PENINSULA

- A state of emergency has been declared in Southern Iceland after a volcano erupted in Reykjanes Peninsula in Iceland.
- Iceland is located on Mid-Atlantic Ridge, between the Eurasian and the North American tectonic plates. It is a seismic and volcanic hot spot as the two plates move in opposite directions.
- The Reykjanes peninsula is in South West Iceland, characterized by immense lava fields, volcanoes, and heightened geothermal activity.
- The main geothermal areas of Reykjanes are Gunnuhver, Krysuvik, and Svartsengi.

2. SOMALIA

- Somali police and international navies were preparing to attack a commercial ship that was hijacked by pirates.
- It is located in the Horn of Africa.
- It is bordered by Ethiopia to the West, Djibouti to the Northwest, the Gulf of Aden to the North, the Indian Ocean to the East, and Kenya to the Southwest.
- The official languages: Somali and Arabic.
- It is a founding member state of (AU) African Union which was originally the Organization of African Union and in June 1974, Somalia hosted the 11th OAU summit in Mogadishu.

3. DARIEN GAP

- Darien Gap had become a major route for the illegal migration to US.

- The Darien Gap is a stretch of densely forested jungle across northern Colombia located in South America and southern Panama located in North America.

- Roughly 60 miles (97 kilometres) across, the terrain is muddy, wet and unstable.
- The challenging topography of humid, swampy rainforest as well as criminal gangs who control the area, make the route an extremely challenging and deadly one.

4. GULF OF ADEN

- The Gulf of Aden is a deepwater gulf of the Indian Ocean located between:

- Yemen to the north
- Somalia to the south
- Arabian Peninsula to the west
- Socotra Island (Yemen) in Arabian Sea to the east
- Vital shipping lane for global trade, particularly for oil transportation from the Persian Gulf.
- Important for international commerce as it links Asia, Africa, and Europe.
- Home to several major ports, including Aden (Yemen), Djibouti City (Djibouti), and Berbera
- Pandavula Gutta, an ancient geological marvel predating the Himalayan hills, has been officially designated as Telangana's sole Geo-heritage site.
- Also the 165 million-year-old meteor Ramgarh Crater in Rajasthan was declared geo-heritage site.

5. POPOCATEPETL VOLCANO

· Popocatepetl, Mexico's most dangerous active

volcano has erupted 13 times in the past day, hurling columns of ash and smoke into the sky.

· Popocatepetl — which means "Smoking Mountain" in the Aztec Nahuatl language — is located in central Mexico roughly 72 km southeast of Mexico City.

· Popocatepetl is situated in the eastern half of the Trans-Mexican Volcanic Belt, in Central Mexico.

· It lies on the border between the states of Puebla and Morelos.

· The summit of Popocatepetl stands at an elevation of about 5,426 meters above sea level, making it the second-highest peak in Mexico after Citlaltepetl (Pico de Orizaba).

· Geological Details

· Popocatepetl is a stratovolcano (composite volcano) characterized by its steep, conical shape built up by successive layers of volcanic ash, lava flows, and pyroclastic materials.

· It is one of Mexico's most active volcanoes, with documented eruptions dating back to the 14th century.

· In the modern era, significant eruptions have occurred in 1947, 1994, 2000, 2005, and ongoing activity since 2013.

· The volcano's eruptions are primarily andesitic to dacitic in composition, characterized by the eruption of viscous lava flows and explosive eruptions producing ash clouds, pyroclastic flows, and lahars (mudflows).

PRACTICE QUESTIONS

1. Consider the following statements regarding Grey Zone warfare:
   1. Activities such as malicious economic activities, influence operations and cyber attacks, mercenary operations, assassinations and disinformation campaign constitutes grey zone warfare.
   2. Grey zone conflict is sometimes also termed as hybrid warfare.
   Which of the following statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

2. Consider the following statements about INS Jatayu:
   1. INS Jatayu is a naval detachment on the Minicoy Islands which would facilitate surveillance of Sea lane of Communications.
   2. Minicoy island straddles between Eight Degree Channel (between Minicoy and Maldives) and the Nine Degree Channel (between Minicoy and main cluster islands of Lakshadweep islands)
   Which of the above given statements is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

3. What is the primary objective of the PM-SURAJ scheme launched by the Ministry of Social Justice and Empowerment?
   a) Providing housing assistance to marginalized communities
   b) Offering credit support to disadvantaged segments of society
   c) Promoting agricultural productivity in rural areas
   d) Enhancing healthcare infrastructure in urban regions

4. What was the primary focus of Exercise Bharat Shakti?
   a) Counter-terrorism operations
   b) Demonstrating India's indigenous defence capabilities
   c) Disaster relief operations
   d) Maritime security operations

5. Where is the Reykjanes Peninsula located?
   a) North Iceland
   b) East Iceland
   c) South Iceland
   d) West Iceland

6. What is the goal of Project GR00T?
   a) To create robots with superhuman intelligence
   b) To develop humanoid robots capable of complex emotional responses
   c) To empower humanoid robots with human-like understanding and movement using AI
   d) To replace humans in all manual labor tasks

7. What is the purpose of the initiatives supported by leading semiconductor industry players?
   a) To establish semiconductor manufacturing plants in India
   b) To provide training in semiconductor fabrication techniques
   c) To foster chip design innovation and entrepreneurship in India
   d) To develop advanced semiconductor materials

8. Which organization was responsible for building the Sela Tunnel?
   a) National Highways Authority of India (NHAI)
   b) Border Roads Organisation (BRO)
   c) Indian Railways
   d) Central Public Works Department (CPWD)

9. What does ADITI stand for?
   a) Acing Development of Innovative Technologies with iDEX
   b) Advancing Defence Innovation through Technology and Innovation
   c) Accelerating Defence Initiative for Technological Integration
   d) Advanced Defence Innovation and Technological Integration

10. What is juice jacking?
    a) A cyber-attack targeting fruit juice manufacturers
    b) A form of cyber-attack involving tampering with public USB charging ports
    c) A type of phishing scam involving fake juice advertisements
    d) A technique used by hackers to steal fruit-related data

ANSWER KEY

1	2	3	4	5
(a)	(b)	(b)	(b)	(d)
6	7	8	9	10
(c)	(c)	(b)	(a)	(b)

TOPIC OF THE MONTH

LEGISLATIVE PRIVILEGES

Context: Recently, the Supreme Court of India ruled that MPs or MLAs cannot claim any immunity under Articles 105 (2) and 194 (2) for acts of bribery to cast a vote or make a speech in the House.

Legislative privileges are a system in which members of the legislature are granted protection from legal prosecution for actions taken or statements made in the course of their official duties. In India, this concept is enshrined in the Constitution and plays a crucial role in the functioning of the country's parliamentary democracy. These privileges are defined in Article 105 of the Indian Constitution. Article 194 guarantees same privileges to the Members of Legislative Assemblies of states. Under these privileges, the members of Parliament are exempted from any civil liability (but not criminal liability) for any statement made or act done in the course of their duties.

PARLIAMENTARY PRIVILEGES

- **Special rights:** These privileges provide immunities and exemptions enjoyed by the two houses of Parliament, their committees, and their members.
- **Need**: They are essential to secure the independence and effectiveness of parliamentary actions. Without these privileges, the Houses cannot maintain their authority, dignity, and honor, nor can they protect their members from obstruction in the discharge of their parliamentary responsibilities.
- **Extension:** Parliamentary privileges are extended to those persons entitled to speak and take part in the proceedings of a House of Parliament or any of its committees. This includes the Attorney General of India and Union Ministers.
- **Exception**: The parliamentary privileges do not extend to the President, who is an integral part of the Parliament.
- **Article 121:** It restricts members from discussing the conduct of judges of the Supreme Court and the High Court.
- **Freedom of speech**: Freedom of speech in Parliament is subject to the provisions of the Constitution and the rules regulating the procedure of the Houses.
- **Rajya Sabha Rulebook:** It is an essential prerequisite for the efficient discharge of parliamentary duties. Without it, members may not be able to speak their mind and express their views in the House without fear.
- Classification:
  - **Collective privileges:** These are privileges enjoyed by each house of Parliament collectively.
  - **Individual privileges:** These are privileges enjoyed by members individually.

CONSTITUTIONAL PROVISIONS

- **Article 105:** Deals with the powers, privileges, etc. of the Houses of Parliament and its members and committees.
- **Article 105(2):** Provides immunity to Members of Parliament (MPs) from prosecution in any court for anything said or any vote given by them in Parliament.
- MPs are exempt from legal action for statements made or acts done in the course of their parliamentary duties.
- **Article 194(2):** A corresponding provision granting immunity to members of state legislatures.
- **Defamation:** Defamation suits cannot be filed for statements made within the parliamentary setting.
- **Immunity to non-members**: Individuals like the Attorney General of India or Ministers, who may not be members of the legislature but speak in the House, also enjoy immunity.
- **Role of Speaker:** In cases where a member exceeds the limits of permissible free speech, the Speaker of the House is responsible for addressing the issue internally, rather than it being brought before a court of law.

CASES RELATED TO LEGISLATIVE PRIVILEGES

- **P.V Narasimha Rao v. State (1998)**
  - A five-member Constitution Bench had held that parliamentarians and legislators enjoyed immunity for their actions on the floor of the House, even if they had taken bribes to vote in a particular manner.
  - It allowed legislators to claim immunity from prosecution in bribery cases under the Prevention of Corruption Act, 1988.

- *Kuldip Nayar case (2006)*
  - *SC held that elections to the Rajya Sabha are not proceedings of the legislature but a mere exercise of franchise and therefore fall outside the ambit of parliamentary privileges under Article 194.*
- **State of Kerala Vs. K. Ajith Case (2021)**
  - The Supreme Court, observed, that privileges and immunities are not gateways to claim exemptions from the general law of the land, particularly as case of, the criminal law which governs the action of every citizen.
- In July 2021, the Supreme Court rejected the Kerala government's plea to withdraw criminal cases against its MLAs who were charged in the assembly.

CURRENT ISSUE AND VERDICT

- A seven-judge Constitution Bench headed by Chief Justice of India (CJI) unanimously overruled its Judgement in P.V Narasimha Rao v. State (1998).also known as the JMM (Jharkhand Mukti Morcha) bribery case.
- **Allegations**: Certain members (MPs) of the Jharkhand Mukti Morcha (JMM) were accused of accepting bribes in exchange for voting against a No-Confidence motion in 1993.
- **1998 Ruling**: Established immunity for MPs and MLAs from prosecution in bribery cases if they fulfilled their end of the bargain, essentially granting immunity to lawmakers who accepted bribes and then voted or spoke in the House as agreed upon.
- **Recent Ruling:** The Supreme Court overturned the 1998 ruling, emphasizing that bribery is not protected by parliamentary privileges.
- **Basis of Recent Ruling**: Accepting a bribe is a separate criminal act, unrelated to the core duties of lawmakers within the Parliament or legislative assembly.
- **Immunity**: Highlighted that the immunity provided under Articles 105 and 194 of the Constitution does not extend to cases of bribery.

KEY POINTS OF THE SC JUDGMENT ON JMM BRIBERY CASE

1. **No Violation of Stare Decisis**
   - Courts can change prior rulings if they have wide ramifications on public interest, probity in public life, and parliamentary democracy.
   - The principle of stare decisis requires courts to follow precedent, but exceptions exist when significant public interest concerns are at stake.
2. **Legislative Privileges Conform with Constitutional Parameters**
   - Unlike the UK's historic rights, India's parliamentary privileges derive from statute and constitutional privilege, subject to judicial review.
   - This ensures that legislative privileges are consistent with constitutional principles and can be scrutinized by the judiciary.
3. **Constitutional Immunity from Bribery Charges Lacks a Two-Fold Test**
   - Immunity from prosecution for bribery contradicts the purpose of fostering debate and deliberation in the legislature, failing to meet the test of necessity for a legislator's essential duties.
   - The two-fold test assesses whether claimed privileges are essential to collective functioning and necessary for legislator duties.
4. **Bribery Not Immune**
   - Bribery doesn't enjoy immunity under Article 105(2) if it's not intrinsic to the voting process, challenging the interpretation that any act related to parliamentary duties is immune from prosecution.
   - Accepting a bribe constitutes a criminal offense and is not protected by parliamentary privileges.
5. **Parallel Jurisdictions**
   - Courts and the House can exercise parallel jurisdictions.
   - The Court's jurisdiction to prosecute bribery charges doesn't interfere with the House's authority to address breaches of discipline.
   - Judicial proceedings and House actions operate independently.

6. **Corruption Erodes Democracy**
   - Legislative corruption undermines democratic values and citizens' representation, eroding probity in public life and creating a polity that deprives citizens of a responsible democracy.
7. **Legislative Privileges Apply Equally to Rajya Sabha Elections**
   - The principles regarding legislative privileges extend to Rajya Sabha elections and appointments of the President and Vice-President, ensuring consistency and adherence to constitutional principles.

SIGNIFICANCE OF THE JUDGMENT ON THE JMM BRIBERY CASE

1. **Upholding Basic Structure Doctrine**
   - The judgment reinforces the principle of judicial review, a fundamental aspect of the Basic Structure Doctrine of the Indian Constitution.
   - This ensures that parliamentary privileges are subject to scrutiny by the judiciary, safeguarding the constitutional framework.
2. **Combating Corruption**
   - By removing immunity for legislators facing bribery charges, the judgment contributes to the fight against corruption.
   - It sends a strong message that corrupt practices within the legislative sphere will not be tolerated and must be prosecuted like any other criminal offense.
3. **Promoting Accountability & Transparency**
   - By clarifying that bribery offenses are not immune from prosecution, the judgment promotes accountability and transparency in governance.
   - It underscores the importance of holding lawmakers accountable for their actions, regardless of their position or privileges.
4. **Strengthening Integrity of the House**
   - Upholding the principle that accepting bribes to make a speech undermines the integrity of the house strengthens the institution's credibility.
   - It reinforces the expectation that legislators must act in the public interest and maintain the highest ethical standards.
5. **Protection of Fundamental Rights**
   - By ensuring equal treatment under the law and eliminating special privileges for bribery accused legislators, the judgment upholds the fundamental right to equality guaranteed under Article 14 of the Constitution.
   - It reaffirms that no one is above the law and all individuals are subject to the same legal standards.

IMPLICATIONS OF THE JUDGMENT
Positive Impact

1. **Equality before the Law**
   - The judgment reinforces the principle that no one, including lawmakers, is above the law.
   - This reaffirms the notion of equality before the law, ensuring that legislators are subject to the same legal standards as any other citizen.
2. **Combatting Corruption**
   - By removing immunity for legislators in bribery cases, the judgment sends a strong message against corruption and bribery in the legislative process.
   - It emphasizes the importance of upholding ethical standards and integrity in governance.
3. **Legal Accountability**
   - The judgment enables law enforcement agencies to initiate prosecution against legislators accused of bribery under the Prevention of Corruption Act, 1988.
   - This strengthens the legal accountability of lawmakers and ensures that they can be held responsible for their actions.
4. **Enhanced Transparency and Accountability**
   - The prospect of facing prosecution for bribery could potentially lead to greater accountability and transparency in the legislative process.

- Legislators may be more cautious about engaging in corrupt practices, knowing that they can be held legally accountable.

Negative Impact

1. **Potential Legal Uncertainty**
   - Overturning established precedent may lead to legal uncertainty and interpretation challenges, potentially complicating future judicial decisions.
2. **Impact on Legislative Independence**
   - Some argue that subjecting legislators to criminal prosecution may impede their independence and effectiveness in fulfilling their duties, potentially affecting the functioning of the legislative body.
3. **Political Ramifications**
   - The judgment may have political ramifications, potentially affecting the candidates who had been elected through bribery, leading to questions about the legitimacy of their positions and undermining public trust in the electoral process.
4. **Challenges in Implementation**
   - Implementing the judgment effectively may pose logistical and procedural challenges for law enforcement agencies and the judiciary, including gathering evidence, conducting investigations, and ensuring fair trials while respecting parliamentary privileges and legal rights.

WAY FORWARD

1. **Constitutional Scrutiny:** The ruling highlights the importance of constitutional scrutiny in defining the limits of legislative privileges. This may lead to further clarification and refinement of these privileges through judicial review.
2. **Judicial Review of Legislative Actions**: The Supreme Court's assertion that Parliament is not the sole judge of its privileges allows for increased judicial oversight of legislative actions and members' conduct. This could lead to more robust checks and balances within the legislative process.
3. **Strengthening Legislative Accountability**: Cases such as Sita Soren vs Union of India mark a significant step towards strengthening legislative accountability and upholding the rule of law. This may encourage greater transparency and adherence to ethical standards among lawmakers.
4. **Reaffirmation of Moral Principles:** The clear stance outlined by the court regarding parliamentary privilege in bribery cases reaffirms principles of moral uprightness and openness within public life. This sends a strong message about the importance of integrity and ethical conduct among elected officials.

MAINS PRACTICE

The 'Powers, Privileges and Immunities of Parliament and its Members' as envisaged in Article 105 of the Constitution leave room for a large number of uncodified and unenumerated privileges to continue. Assess the reasons for the absence of legal codification of the 'parliamentary privileges. How can this problem be addressed? (UPSC 2014)