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**SPECIAL
FEATURES**



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Economy

1. Maritime India Summit 2021

Why in News?

- Prime Minister Narendra Modi will inaugurate 'Maritime India Summit 2021' on 2nd March via video conferencing.

About

- It is the flagship initiative of the **Ministry of State for Ports, Shipping and Waterways**.
- Aims → Visualise a **roadmap for India's maritime sector** for the next decade and work to propel India to the forefront of the global maritime sector.
- Partner Country → **Denmark**.
- Participants → **Various stakeholders in the maritime sector**, eminent policy planners, domestic and international investors, industry experts, thought leaders, technology providers, representatives of major ports and shipping lines, etc.
- Functions →
 - Project **vast investment opportunities** in each of the Indian maritime States and UTs.
 - Showcase the **latest technology, products and services**.
 - Help **disseminate knowledge** about the latest developments in the maritime sector.
 - Provide a platform to **interact closely to explore business opportunities**.

2. Land Ports Authority of India

Why in News?

- The Land Ports Authority of India (LPAI) celebrated its 9th Foundation Day at its headquarters in New Delhi.

About

- Status → **Statutory body** (created by Land Ports Authority of India Act, 2010).
- Established in → **2012**.
- Headquartered → **New Delhi**.
- Parent ministry → **Ministry of Home Affairs**.
- It develops, sanitizes and manages the facilities for **cross-border movement of passengers and goods** at designated points along the international borders of India.
- LPAI may put in **place systems**, which **address security imperatives** at the Integrated Check Posts (ICPs) on the border.
- It has **power to manage various activities** like infrastructure facilities, communication, security, etc., at an ICP.
- It can **regulate and control the movement of vehicles, people and goods** at the ICP with due regard to the law, security and protocol of the Government of India.
- It can develop and provide **consultancy, construction or management services**, and undertake operations in India and abroad regarding ICP.

3. Cess and surcharge

Why in News?

- The share of cess and surcharge in the gross tax revenue (GTR) of the Centre has almost doubled to 19.9% in 2020-21 from 10.4% in 2011-12.

About Cess

- It is a **form of tax levied** or **collected by the government** for the development or welfare of a particular service or sector.
- It is charged **over and above direct and indirect taxes**.
- Cess collected for a particular purpose **cannot be used** for or **diverted to other purposes**.
- It is **not a permanent source** of revenue for the government, and it is **discontinued** when the purpose levying it is fulfilled.
- Currently, the cess and surcharge collected by the Centre are **not part of the tax devolution**.
- Examples → **Education Cess, Swachh Bharat Cess, Krishi Kalyan Cess** etc.

Surcharge

- 'Surcharge' is an **additional charge** or **tax levied** on an existing tax.
- Unlike a cess, which is meant to **raise revenue for a temporary need**, surcharge is **usually permanent in nature**.
- It is levied as a **percentage on the income tax** payable as per normal rates. In case no tax is due for a financial year, then no surcharge is levied.
- The revenue earned via surcharge is **solely retained by the Centre** and, unlike other tax revenues, is not shared with States.
- Collections from surcharge flow into the **Consolidated Fund of India**.

Difference between Usual Taxes, Surcharge & Cess

Usual Tax (Article 269)	Surcharge (Article 271)	Cess (Article 270)
- Goes to CFI and can be spent for any purpose	- Goes to CFI and can be spent for any purpose	- Goes to CFI but can be spent only for specific purposes.
- Union needs to share with state as per Finance Commission	- Not shareable with States	- Not Shareable with States

4. Anti-dumping Duty

Why in News?

- The U.S. Department of Commerce is preparing to tax aluminium sheet exporters from 18 countries including India after determining that they had benefited from subsidies and dumping.

About Dumping

- In international trade practise, dumping happens when a country or a firm **exports an item at a price lower than the price of that product in its domestic market.**
- Dumping **impacts the price** of that product in the importing country, hitting margins and profits of local manufacturing firms.

👉 Anti-dumping duty

- Anti-dumping duty is imposed to **rectify the situation** arising out of the dumping of goods and its trade distortive effect.
- According to global trade norms, including the World Trade Organization (**WTO**) regime, a country is **allowed to impose tariffs on such dumped products** to provide a level-playing field to domestic manufacturers.

👉 How is it different from CVD?

- Anti-dumping duty is different from countervailing duty. The latter is imposed in order to **counter the negative impact of import subsidies** to protect domestic producers.
- Countervailing Duties (**CVDs**) are **tariffs levied on imported goods to offset subsidies** made to producers of these goods in the exporting country.
- CVDs are meant to **level the playing field** between domestic producers of a product and foreign producers of the same product **who can afford to sell it at a lower price because of the subsidy** they receive from their government.

5. India Telecom 2021

Why in News?

- Union Minister for Communications inaugurated India Telecom 2021 Event.

About

- Organised by → **Telecom Equipment Export Promotion Council**(TEPC) under Market Access Initiative Scheme (**MAI**) of the Department of Commerce.
- The event has the **support of** the Department of Telecommunications & Ministry of External Affairs.
- Purpose → It is an **exclusive international business expo**. It aims to **provide opportunities** to the Indian telecom stakeholders to meet qualified overseas buyers.
- **40 Indian telecom companies** and **200 foreign delegates** from more than 45 countries are attending the event.

👉 About TEPC

- Setup by → **Ministry of Commerce & Industry and Ministry of Communications**
- Aim → To **promote and develop Export** of Telecom Equipment and Services.
- Functions → The council undertakes several activities aimed at exports promotion such as;
 - **Commissioning of Studies** to find potential markets
 - **Recommending to the Government** for making necessary changes in various policies and procedures for promotion of Exports and Services.
 - **Holding of National/International Seminars**

- **Facilitating the participation of exporters** in various overseas exhibitions
- **Dissemination** of **trade-related data** to its members.

📌 Market Access Initiative (MAI) Scheme

- Nodal Ministry → **Department of Commerce, Ministry of Commerce and Industry**
- Objective → It is an **Export Promotion Scheme**. The scheme aims to act as a catalyst to promote India's exports on a sustained basis.
- Product and Country Focus Approach → The scheme is formulated on the basis of the **product and country focus approach**. It will **evolve specific markets and specific products** through **market studies/surveys**.

6. Rating mechanism for National Highways

Why in News?

- The Ministry of Road Transport & Highways(MoRTH) released the first-ever rating mechanism for National Highways.

About

- Conducted by → **National Highways Authority of India** (NHAI) under the Ministry of Road Transport & Highways(MoRTH).
- Objective → The fundamental objective of highway rating is "**Minimum time with maximum safety in a stress-free environment**" for the highway users. Apart from that, it will also **improve the government's accountability** towards road users.
- Parameters: Each toll plaza of the highway is judged based on three major criteria. They are **Highway Efficiency**(45%), **Highway Safety**(35%), **User Friendly**(20%).
- Note: There are **no such criteria** that have been developed **across the world to evaluate** the performance of highways from the user perspective.
- How many National Highways have been covered in the rating mechanism?
 - The rating has been done for **all 219 national highway** stretches across the country. They cover a **distance of 18,668 km**.
 - Four corridors are selected for rating i.e. **Agra-Mumbai**(1,084 km), **Pune-Vijayawada**(856 km), **Mumbai-Kolkata**(1,927 km), **Bangalore-Kanyakumari** (655 km).
- Best and worst Highway according to the rating mechanism
 - The **best** is the **102-km stretch** of the six-lane **Ahmedabad-Vadodara section** of National Highway (NH)-48.
 - The **worst** stretch is the **45-km Indore-Dewas section** of **NH-3**, which connects Agra to Mumbai.

📌 Golden Quadrilateral:

- The Golden Quadrilateral(GQ) is a **national highway network**. It is connecting most of the major industrial, agricultural and cultural centres of India.
- It forms a quadrilateral **connecting the four major metro cities** of India, viz., **Delhi** (north), **Kolkata** (east), **Mumbai** (west) and **Chennai** (south).

- Managed by → National Highways Authority of India(**NHAI**) under the Ministry of Road, Transport, and Highways.
- Significance → It is the **largest highway project in India** and the fifth-longest in the world.

7. Sub-Mission on Agroforestry (SMAF) Scheme

Why in News?

- The Ministry of Agriculture and Farmers Welfare signed a MoU with the Central Silk Board on a convergence model for the implementation of Agroforestry in the silk sector under the ongoing Sub-Mission on Agroforestry (SMAF) Scheme.

About

- The signing of this MoU aims to **incentivize the farmers** to take up **sericulture based Agroforestry models** thereby contributing to the Make in India and Make for the World vision.
- This linkage will add another dimension to agroforestry for **faster returns to the growers** as well as **support the production** of the **range of silks** that India is famous for.

👉 About the Sub-Mission on Agroforestry (SMAF):

- The **Department of Agriculture, Cooperation and Farmers Welfare** (DAC & FW) has been **implementing** the Sub-Mission on Agroforestry (SMAF) since 2016-17 as part of the recommendation of the National Agroforestry Policy 2014.
- This sub-mission is **under** the **National Mission for Sustainable Agriculture** (NMSA).
- India was the **first country** to have such a **comprehensive policy** which was launched at the World Agroforestry Congress held in Delhi in February 2014.
- At present, the scheme is being **implemented in 20 States** and **2 UTs**.
- Activities carried out under the SMAF include **raising seedlings, planting on boundaries and bunds, low-density planting, high-density planting**, etc.
- Aim →
 - It aims to **encourage farmers** to **plant multi-purpose trees** together with the agriculture crops for climate resilience.
 - The focus of the programme is to **encourage agroforestry** which has **tremendous potential** to mitigate climate change effects through moderation of microclimate.
- Significance → It also provides benefits such as **improvement of the soil profile, moisture conservation, conservation of natural resources**, and creation of an additional source of livelihood and income opportunities.

👉 The Central Silk Board

- The Central Silk Board is a **Statutory Body**, established during **1948**.
- It functions under the administrative control of the **Ministry of Textiles**, having head quarter at Bengaluru.

👉 Agroforestry

- Agroforestry is defined as a **land use system** which **integrates trees and shrubs on farmlands** and **rural landscapes** to **enhance productivity**, profitability, diversity and ecosystem sustainability.
- It is a **dynamic, ecologically based, natural resource management system** that, through integration of woody perennials on farms and in the agricultural landscape, diversifies and sustains production and builds social institutions.

8. Index of Economic Freedom 2021

Why in News?

- The Heritage Foundation releases The Index of Economic Freedom 2021.

About

- It is an **annual index**. This index created in 1995 by think-tank **The Heritage Foundation** and **The Wall Street Journal**.
- Purpose → It measures the **degree of economic freedom** in countries across the world.
- Coverage → The Index **covered economic freedoms** in **184 countries**.
- Parameters → The index measures **12 indicators** grouped into **four broad** categories of economic freedom:
 - **Rule of Law** (property rights, government integrity, judicial effectiveness)
 - **Government Size** (government spending, tax burden, fiscal health)
 - **Regulatory Efficiency** (business freedom, labour freedom, monetary freedom)
 - **Open Markets** (trade freedom, investment freedom, financial freedom).
- Each of these twelve economic freedoms within these categories is **graded on a scale of 0 to 100**. Score 0 is the least economic freedom and score 100 is the highest economic freedom.

👉 Key Findings

- **Singapore tops** the index followed by New Zealand, Australia, Switzerland, and Ireland.
- **India ranked 121st** in the index with a **score of 56.5 points** under the category of 'mostly unfree'.
- In **Asia-Pacific**, **India ranked 26th** among the 40 countries.

9. Banks Board Bureau

Why in News?

- The Banks Board Bureau may be entrusted with the job to select MDs and DMDs of a proposed ₹1-lakh crore development financial institution (DFI) being set up to accelerate infrastructure financing.

About BBB

- It was set up in **February 2016** as an autonomous body– based on the recommendations of the RBI-appointed **Nayak Committee**.
- It was part of the **Indradhanush Plan**.
- It will make recommendations for **appointment of whole-time directors** as well as **non-executive chairpersons** of Public Sector Banks (**PSBs**) and state-owned financial institutions.
- The **Ministry of Finance** takes the **final decision** on the appointments in consultation with the Prime Minister's Office.

- Composition → Banks Board Bureau comprises the **Chairman, three ex-officio members** i.e Secretary, Department of Public Enterprises, Secretary of the Department of Financial Services and Deputy Governor of the Reserve Bank of India, and **five expert members**, two of which are from the private sector.

10. Agriculture Voltage Technology

Why in News?

- An Agri-voltaic system of 105 KW capacity has been developed by ICAR-Central Arid Zone Research Institute, Jodhpur.

About

- Under it, **repetitively operated and compact high-voltage power supplies** with moderate peak power have been developed for **controlling discharge plasmas** and **electric field distribution**.
- These are mainly based on the **biological effects of a spatially distributed electric field** and the chemically active species produced by the plasma.
- The intense **Pulsed Electric Fields** (PEFs) are caused by **applying pulse voltage between the electrodes**.
- Different high voltages and plasmas may have **different biological effects** on substrates via the electric field and reactive species.
- These high-voltage technologies are **used in agriculture and food processing applications**.
- The agricultural applications of plasma are categorized as **seed germination promotion, plant growth acceleration, the inactivation of bacteria in soil** and **liquid hydroponic media** and the promotion of fruit-body formation.
- Post-harvest, these technologies can also contribute to **maintaining freshness** by decontaminating the air and liquid in agricultural products storage containers.
- In the **food processing phase**, an intense PEF can be **used to extract juice, nutritional agents** and antioxidants from fruits and vegetables.
- Under **component-I of the KUSUM** (Kisan Urja Suraksha Utthan Mahabhiyan) scheme, there is a provision for **installation of the agri-voltaic system** in farmers' fields with a capacity ranging from 500 KW to 2 MW.
- Moreover, **National Solar Energy Federation of India** (NSEFI) has also documented **13 operational agri-voltaic systems** in the country managed by different solar PV functionaries and public Institutes.

11. Stand Up India Scheme

Why in News?

- The government has informed the Lok Sabha about the implementation of the Stand Up India Scheme. More than 81% of the accounts under the Stand Up India Scheme belong to women entrepreneurs.

About

- Ministry → Launched in **2016 by the Department of Financial Services**, Ministry of Finance.
- Objective → The Stand-Up India Scheme **facilitates bank loans** for **setting up a new enterprise** in manufacturing, services, agri-allied activities, or the trading sector by SC/ST/Women entrepreneurs.
- Bank Loan → It **provides bank loans** between **Rs 10 lakh and up to 1 crore**.

- The **government** does **not allocate funds for loans** under the Scheme. They are **extended by Scheduled Commercial Banks**(SCBs).
- Eligibility condition for Stand Up India Scheme →
 - SC/ST and/or woman entrepreneurs **above 18 years of age**.
 - Loans under the scheme are available **only for greenfield projects**. Greenfield signifies the first time venture of the beneficiary in the manufacturing, services, agri-allied activities or the trading sector.
 - In the case of non-individual enterprises, **51% of the shareholding** and controlling stake should be **held by either SC/ST** and/or **Women Entrepreneur**.
 - Borrowers should **not** be in **default to any bank/financial institution**.
- Repayment → The loan is **repayable in 7 years** with a maximum moratorium period of 18 months.
- Duration of the Scheme → The Stand-Up India Scheme has been **extended up to the year 2025**.

12. Miyawaki Technique

Why in News?

- In a year, a patch of land in Mumbai's eastern suburbs has become a testament to create the "urban forests" through the Miyawaki technique.

About

- Miyawaki is an **afforestation technique** to create urban forests based on the work of Japanese botanist **Akira Miyawaki** in the **1980s**.
- Miyawaki forests are **tiny forests grown** on **small plots of land** in 2 to 3 years and are self-sustaining, like how a forest is.
- Three layers of greens - **shrubs and undergrowth**, **medium-height trees** and **taller canopies** - are integral components of the Miyawaki forests.
- Before plantation, **local agro-climatic conditions** are **studied**. Around 3 to 4 saplings per sq. m of 30 or more native varieties of plants are planted.
- **Mulching**, **natural water retention** and **perforation material** like rice husk and use of organic compost, cow dung **support their growth**.

13. AT-1 Bonds

Why in News?

- The decision of the Securities and Exchange Board of India (Sebi) to slap restrictions on mutual fund (MF) investments in additional tier-1 (AT1) bonds has raised a storm in the MF and banking sectors.

About AT-1 Bonds

- Bonds stand for **additional tier-1 bonds**.
- These are **unsecured bonds** which have perpetual tenure. In other words, the bonds have **no maturity date**.
- They have **call option**, which can be **used by the banks to buy** these bonds back from investors.
- These bonds are typically used by banks to **bolster their core or tier-1 capital**.
- AT1 bonds are **subordinate to all other debt** and only **senior to common equity**.
- Mutual funds (MFs) are among the **largest investors in perpetual debt instruments**, and **hold over Rs 35,000 crore** of the outstanding additional tier-I bond issuances of Rs 90,000 crore.

👉 What action has been taken by the Sebi recently?

- In a recent circular, the Sebi told mutual funds to **value these perpetual bonds** as a **100-year instrument**. This essentially means MFs have to make the assumption that these bonds would be **redeemed in 100 years**.
- The regulator also asked **MFs to limit the ownership of the bonds at 10 per cent of the assets** of a scheme.

14. Forex Reserves

Why in News?

- India's foreign exchange reserves surpass Russia's to become world's fourth largest.

About Forex Reserves

- These are assets **held on reserve by a central bank in foreign currencies**, which can include bonds, treasury bills and other government securities.
- Most foreign exchange reserves are **held in U.S. dollars**.
- These assets are held to ensure that the **central bank has backup funds** if the national currency rapidly devalues or becomes altogether insolvent.
- It is an **important component** of the **Balance of Payment** and an **essential element** in the **analysis of an economy's external position**.
- Forex Reserves in India: Forex reserves are external assets accumulated by India and controlled by the RBI in the form of:
 - Gold**
 - SDRs** (special drawing rights of the International Monetary Fund - IMF)
 - Foreign currency assets** (capital inflows to the capital markets, Foreign Direct Investment and external commercial borrowings)
 - Reserve Position** with IMF.
- India's FOREX is governed by **RBI under RBI Act, 1934**.
- India's reserves**, enough to **cover roughly 18 months of imports**, have been bolstered by a rare current-account surplus, rising inflows into the local stock market and foreign direct investment.
- China** has the **largest reserves**, followed by Japan and Switzerland on the International Monetary Fund table.

15. National Bank for Financing Infrastructure and Development

Why in News?

- The Union Cabinet has approved a Bill to set up a Development Finance Institution – National Bank for Financing Infrastructure and Development (NaBFID).

About

- Owned by → Initially, the **Government of India** will own it with a **100% stake**. They will gradually bring it **down to 26% in a few years**.
- Purpose → It will provide **finance for social and economic infrastructure projects** identified under the National Infrastructure Pipeline (NIP).
- Managed by → A **professional board** with **at least 50 percent** of the members as **non-official directors**. An **eminent person** will be appointed chairperson.

- Capital Infusion → The capital infusion by the Government will be **Rs 20,000 crore** with an **initial grant of Rs 5,000 crore**. It is later expected to raise around **Rs 3 lakh crore** in the **next few years by Market funds**.
- Tax Exemption → The government will provide a **10-year tax exemption** to funds invested in the DFI. It will **attract long-term players** such as insurance and pension funds.

📌 Development Finance Institution(DFI)

- DFI is an **agency** that **finances infrastructure projects of national importance**.
- In most cases, these agencies are **government-owned**. Their borrowings enjoy the **government guarantees** which help bring down the cost of funding.
- DFI in India → The **first DFI** in India was the **Industrial Financial Corporation of India(IFC)**. It got launched in **1948**. The IDBI, UTI, NABARD, EXIM Bank, SIDBI, NHB were the other major DFIs. **Most later converted into banks**.

16. Vehicle Scrapping Policy

Why in News?

- Recently, the Union Minister of Road Transport & Highways has announced the Vehicle Scrapping Policy or Voluntary Vehicle-Fleet Modernization Program (VVMP).

About Key Provisions

- **Fitness Test** → The criterion for a vehicle to be scrapped is primarily based on the **fitness of vehicles through Automated Fitness Centres** in case of commercial vehicles and Non-Renewal of Registration in case of private vehicles.
- The criterion is adapted from **international best practices** after a comparative study of standards from various countries like Germany, UK, USA and Japan.
- The vehicle **failing the fitness test** or failing to get a renewal of its registration certificate may be declared as **End of Life Vehicle**.
- The criteria to determine vehicle fitness will be primarily **emission tests, braking, safety equipment, among many other tests** which are as per the Central Motor Vehicle Rules, 1989.
- The policy will **not be applicable** on **vintage cars**.
- **Road Tax Rebate** → The state governments may be advised to **offer a road-tax rebate of up to 25% for personal vehicles** and up to **15% for commercial vehicles** to provide incentive to owners of old vehicles to scrap old and unfit vehicles
- **Vehicle Discount** → **Vehicle manufacturers** will also give a **discount of 5%** to people who will produce the **'Scrapping Certificate'** and registration fees will be waived off on the purchase of a new vehicle.
- Disincentive → As a disincentive, **increased re-registration fees** would be applicable for **vehicles 15 years or older** from the initial date registration.

17. World Happiness Report 2021

Why in News?

- The Sustainable Development Solutions Network for the United Nations released the World Happiness Report 2021, a day before the International Happiness Day.

About

- The World Happiness Report is an **annual report** published by the United Nations **Sustainable Development Solutions Network (SDSN)**.
- The report ranks countries **by how happy their citizens perceive** themselves to be.
- This year it focuses on the **effects of Covid-19** and how people all over the world have fared.
- Parameters → The rankings are **based on polling (Gallup World Poll)** which looks at **six variables**:
 1. Gross Domestic Product Per Capita (Purchasing Power Parity).
 2. Social Support.
 3. Healthy life expectancy at birth.
 4. Freedom to make life choices.
 5. Generosity.
 6. Perceptions of corruption.
- Respondents are asked to **rate their own** current lives on **a 0-10 scale**.

📌 Key Findings

- Top Performers → **Finland** has been ranked as the happiest country in the world for the fourth consecutive year.
- Worst Performers → **Afghanistan** (149) is the most unhappy country.
- Related to India →
 - India has been **ranked 139** out of 149 countries in the World Happiness Report 2021.
 - In **2020**, India was **ranked 144** out of 156 countries.

📌 Sustainable Development Network Solution

- The SDSN, launched in **2012**, **mobilizes global scientific and technological expertise** to promote practical problem solving for the Sustainable Development Goals (SDGs) and the Paris Climate Agreement.
- It was established under the **auspices of the United Nations Secretary-General**.
- The **SDSN** and the **Bertelsmann Stiftung** have been publishing the **annual SDG Index & Dashboards Global Report** since 2016.

18. Shyamala Gopinath Committee

Why in News?

- The Reserve Bank of India has set up a five-member Standing External Advisory Committee, headed by former RBI Deputy Governor Shyamala Gopinath, for evaluating applications for universal banks and Small Finance Banks (SFBs).

About

- Tenure → The committee will have a **tenure of three years**.
- Mandate → The applications for **universal banks and SFBs** will first be evaluated by the RBI to ensure prima facie eligibility of the applicants, after which the SEAC will **evaluate the applications**.
- This is **part of the central bank's** earlier announced plan to give banking permits on a continuous basis to candidates, a process that is commonly known as '**on-tap' licensing**.

- On tap licensing → It means the **RBI window** for **granting banking licences** will be open **throughout the year**.

Universal banking

- It is a **system of banking** where banks undertake a **blanket of financial services** like investment banking, commercial banking, development banking, insurance and other financial services including functions of merchant banking, mutual funds, factoring, housing finance, insurance etc.

19. RoDTEP Scheme

Why in News?

- The notification of benefit rates payable to exporters under the Remission of Duties and Taxes on Export Products (RODTEP) scheme is expected to take more time as it is facing 'teething issues'.

About

- RoDTEP is a scheme **for Exporters** to make Indian products **cost-competitive** and create a **level playing field for them** in the Global Market.
- It has **replaced** the current **Merchandise Exports from India Scheme**, which is not in compliance with WTO norms and rules.
- It came in effect from **1st January 2021**.
- Features →**
 - Refund of the previously non-refundable duties and taxes.**
 - Automated system** of credit.
 - Quick verification** through digitisation.
 - Multi-sector scheme.**
 - Compliant** with the World Trade Organisation (**WTO**) **norms**.
- Eligibility to Obtain Benefits →**
 - All sectors**, including the **textiles sector**, can benefit.
 - Labor-intensive sectors will be given priorities.
 - Manufacturer exporters** and **merchant exporters** (traders) are both eligible.
 - No particular turnover threshold to claim the RoDTEP.
 - Re-exported products** are **not eligible**.
 - Exported products need to have the **country of origin** as India to be eligible.
 - Special Economic Zone Units** and **Export Oriented Units** are also eligible.
 - Applies to goods exported via courier through **e-commerce platforms**.

20. Oxfam inequality index

Why in News?

- Recently, the Minister of Labour and Employment has given a written reply to a question on India's performance under Oxfam Inequality Index.

About

- Released by → **Oxfam International**.
- Parameters → The index **ranked 158 countries**. The Index measures the policies and actions in three areas directly related to reducing inequality.
- The three areas are →
 - Public services**(health, education and social protection)
 - Taxation** and
 - Worker's rights**.

👉 Findings

- The index has been **topped by Norway** followed by **Denmark** and **Germany**.
- India** has been **ranked 129** overall in the index out of 158 countries.

21. International Intellectual Property Index

Why in News?

- India ranked 40 among 53 global economies on the latest annual edition of the International Intellectual Property (IP) Index.

About

- It is an **annual report** released by the US Chamber of Commerce **Global Innovation Policy Centre**(GIPC).
- Aim → The index **evaluates Intellectual Property rights** in **53 global economies**. These economies represent together over 90% of global GDP.
- Parameters → It ranks countries based on **50 unique indicators**. These indicators are divided across nine categories of protection: 1) **Patents** 2) **copyrights** 3) **trademarks** 4) **design rights** 5) **trade secrets** 6) **commercialization of IP assets** 7) **enforcement** 8) **systemic efficiency** and 9) **membership and ratification of international treaties**.
- Significance → The IP Index serves as a **roadmap for policymakers** who look to support creativity, innovation and economic growth through more robust IP policy.

👉 Key Findings

- The **US**, the **UK**, **Germany**, **France**, and **Japan** are the **top five** economies on the IP Index in 2021.
- Related to India:
 - India** has been ranked **40th in the 2021 index** among the 53 global economies. In 2020 also, India was ranked 40th.
 - Among BRICS nations**, India registered the **second-highest growth** with an overall improvement of over 13%.

👉 Extra Gyan

India's initiative in safeguarding IPR

- National IPR Policy for India** → It was adopted by the Government of India on **12th May 2016**, as a **vision document** that lays the future roadmap of IPRs in India.

- **Cell for IPR Promotion and Management (CIPAM)** → It has been set up to coordinate the implementation of the National IPR Policy.
- **IP awareness programmes** → They have been undertaken in academic institutions, at both school and college level, as also for industry.

World Intellectual Property Organization (WIPO)

- It is the global forum for intellectual property (IP) services, policy, information and cooperation.
- It is a self-funding agency of the United Nations, with 193 member states.
- Its mission is to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.
- Its mandate, governing bodies and procedures are set out in the WIPO Convention, which established WIPO in 1967.

22. Gram Ujala

Why in News?

- Recently, the Government has launched the Gram UJALA Programme - an ambitious scheme offering the world's cheapest LED bulbs in rural areas at a mere Rs. 10.

About

- Under this program Convergence Energy Services Limited (CESL), a wholly owned subsidiary of Energy Efficiency Services Limited (EESL), will distribute high quality LED bulbs, at an affordable cost of 10 rupees per bulb in rural areas.
- Implementation →
 - 7 watt and 12-watt LED bulbs with 3 years warranty will be given to rural consumers against submission of working Incandescent bulbs.
 - Each household will get up to 5 LEDs.
 - Participating rural households will also have metres installed in their houses to account for usage.
- Financing Mechanism →
 - The programme will be financed entirely through carbon credits and will be the first such programme in India.
 - The revenue earned from carbon credits will contribute Rs. 60 per LED bulb piece, with the balance Rs. 10 to be paid by the rural consumer.
- Significance → Help in meeting intended nationally determined contributions under paris climate accord

23. Central Scrutiny Centre and IEPFA Mobile App

Why in News?

- Union Minister for Corporate Affairs launched Central Scrutiny Centre (CSC) and Investor Education and Protection Fund Authority's (IEPFA) Mobile App — two tech-enabled initiatives by Ministry of Corporate Affairs (MCA).

About Central Scrutiny Centre

- Central Scrutiny Centre is an initiative of the **Ministry of Corporate Affairs**. It aims to **scrutinize** the **forms filled by companies** under straight-through processes.
- Objective → The objective is to **ensure** that **data quality is free from flaws**.
- Features of the Central Scrutiny Centre → CSC will primarily do the following things,
 - It will **Scrutinize the filings made by users** under straight-through processes
 - The CSC will identify **data quality issues** and **irregularities**.
 - Further, It will **communicate the data quality issues** to the **concerned Registrar of Companies**. Then the corrective steps can be taken to restore the authenticity and correctness of data.

👉 Investor Education and Protection Fund Authority (IEPFA) App:

- It is a **mobile app**.
- Aim → It aims to achieve the **goal of financial literacy**, **spreading awareness** and **education** among investors.
- Features →
 - The IEPFA App will have the facility of **tracking the status and progress** of the **IEPF claim** and **refund process**.
 - The app will also provide a **mechanism for investors** and **common citizens** to report on suspected fraudulent schemes.

👉 Investor Education and Protection Fund (IEPF):

- IEPF has been established under the **Companies Act, 1956** by the **Companies (Amendment) Act, 1999**.
- Purpose → IEP Fund has been established **for the promotion of investors awareness** and **protection** of the interests of investors.
- If the amounts such as dividends, applications money, matured deposits, etc. **remained unpaid** or **unclaimed** for a **period of 7 years**, then they will be **transferred to the IEPF**.
- Credited to → The amounts **credited to IEPF** are maintained under the **consolidated fund of India** (Article 266 of the Constitution).
- Utilisation of Fund → The fund is utilized for **promoting investor awareness** and **protection of investor interests**.
- Based on the order of the court, the Fund can also be **utilized for distribution of any disgorged amount** among eligible applicants who suffered losses due to wrong actions by any person.

👉 IEPF Authority:

- IEPF has been set up under the **Ministry of Corporate Affairs** as a **statutory body** under the **Companies Act 2013**.
- Aim → It aims to **administer** the **Investor Education and Protection Fund**.
- Chairperson → **Secretary** Ministry of Corporate Affairs is the Chairperson of the authority.

24. One Nation One Ombudsman

Why in News?

- Recently, Reserve Bank of India (RBI) announced an integrated ombudsman scheme “One Nation One Ombudsman” to improve grievance redressal mechanism for bank customers.

About News

- Currently, there are three separate **ombudsmen for banks, non-banking finance companies (NBFCs) and non-bank prepaid payment issuers (PPIs)** that are wallets.
- These are **operated by the RBI from 22 ombudsman offices** located across the country.
- Now, the RBI has decided to integrate the three Ombudsman schemes and introduce **centralised processing of grievances** following a ‘One Nation One Ombudsman’ approach.
- The move is expected to make the ombudsman mechanism simpler, efficient and more responsive.
- The integrated ombudsman scheme **will be rolled out in June 2021**.

About Bank Ombudsman (BO):

- BO is quasi-judicial authority** which is an Alternate Dispute Redressal mechanism for resolution of disputes between a bank and its customers.
- RBI in 1995 introduced the BO scheme** under Section 35A of the Banking Regulation Act, 1949.
- In 2006, the RBI revised the BO scheme under which the BO and the staff in the offices of the BO are drawn from the serving employees of the Reserve Bank.
- It is **fully funded by the RBI** and **virtually covers all banking transactions** related grievances except their business decisions like sanctioning of credit etc.
- It covers grievances of the customers **against Commercial Banks, Scheduled Primary Cooperative Banks and Regional Rural Banks**.
- One can **file a complaint before the BO** if the bank rejects the complaint or the satisfactory **reply is not received** from the bank **within a period of one month** after the bank concerned has received one's complaint.

25. Draft Blue Economy Policy

Why in News?

- Recently, the Ministry of Earth Sciences (MoES) has rolled out the draft Blue Economy policy, inviting suggestions and inputs from various stakeholders. It is in line with the Government of India's Vision of New India by 2030.

About Blue Economy

- According to World Bank, **Blue Economy refers to sustainable use of ocean resources for economic growth, improved livelihood and jobs, and ocean ecosystem health**.
- Blue Economy seeks to **promote economic growth, social inclusion** and the **preservation or improvement of livelihoods** as well as ensuring environmental sustainability of the oceans and coastal areas.
- The economic philosophy of the Blue Economy was first introduced in **1994 by Professor Gunter Pauli** at the United Nations University (UNU) to reflect the needs of future growth and prosperity, along with the threats posed by global warming.

Draft Blue Economy Policy:

- The draft blue economy policy document outlines the vision and strategy that can be adopted by the Government of India to **utilize the plethora of oceanic resources available in the country**.

- The **policy document aims**:
 - to enhance contribution of the blue economy to India's GDP,
 - improve lives of coastal communities,
 - preserve marine biodiversity,
 - maintain the national security of marine areas and resources.
- It is in line with the **Government of India's Vision of New India by 2030** stressing the need for a coherent policy integrating different sectors so as to improve the lives of the coastal communities and accelerate development and employment.
- **6th Dimension of Vision 2030** deals with scaling up **Sagarmala**, India's coastline and ocean waters will power development.
- It highlights **blue economy as one of the ten core dimensions** for national growth.
- The draft policy framework emphasizes policies across several key sectors to achieve holistic growth of India's economy.

The document recognizes the following seven thematic areas-

- **National accounting framework for the blue economy and ocean governance** → A new robust mechanism to **generate and collect reliable data** pertaining to the Blue Economy would be developed.
- **Coastal marine spatial planning and tourism** → India needs to adapt the Coastal Marine Spatial Planning (CMSP) approach of the Intergovernmental Oceanic Commission (**IOC**)-**UNESCO guidelines** and to establish a national level authority to define the scope and nature of CMSP.
- This will allow **integration of various sectors of blue economy**, local communities private players and government to meet local and national needs.
- **Marine fisheries, aquaculture, and fish processing** → To increase sustainability of marine fisheries through a new national policy along with proper legal and institutional framework for effective its management.
- Manufacturing, emerging industries, trade, technology, services, and skill development → To ensure high capital infusion through public-private partnership (PPP) and enhance Ease of Doing Business in the sector.
 - Logistics, infrastructure and shipping, including trans-shipments: Government should formulate a **30 year holistic shipbuilding plan** across existing and Greenfield shipyards under Atmanirbhar Bharat to boost shipping and ship building sector.
 - Coastal and deep-sea mining and offshore energy: Envisaged to launch a **National Placer Mission** to explore workable placer deposits and evolve a roadmap for their extraction. India will also take a lead role in exploration of **cobalt rich Sea Mount Ferro Manganese Crust (SFMC)** in the **Indian Ocean**.
- **Security, strategic dimensions, and international engagement** → MDA needs to be strengthened by integrating national geo-intelligence framework and space applications along with international partnerships with key partner countries.

26. Pradhan Mantri Awas Yojana-Gramin (PMAY-G)

Why in News?

- The Ministry of Rural Development has informed the Parliamentary Standing Committee about the progress of the Pradhan Mantri Awas Yojana-Gramin.

About PMAY-G

- Launched by → **Ministry of Rural Development** in **2016**.
- Aim → To **provide a pucca house** with **basic amenities to all rural families** by end **of March 2022**. People who are homeless or living in kutchra or dilapidated houses are eligible for benefits.
- Beneficiaries → Beneficiaries are identified as per the **housing deprivation parameters** and **exclusion criteria** prescribed under Socio Economic Caste Census (**SECC**) **2011**. **Gram Sabha verifies** the eligible beneficiaries.
- Target → The scheme had a target of construction of **2.95 crore pucca houses** for **eligible rural households by March, 2022**.
- Fund sharing pattern → The grants under the scheme are **shared between the Centre and States** in the ratio of:
 - **90:10** in case of **NE States, Himalayan States & Himalayan UTs**.
 - For **all other States**, funds are shared in the ratio of **60:40** by the Centre and the States.
 - In cases of **other UTs**, entire funds are **provided by the Centre**.
- Monitoring → The programme implementation is monitored not only **electronically** but also **through community participation** (Social Audit), Member of Parliament (DISHA Committee), **Central and State Government officials, National Level Monitors**, etc.

27. Unique Land Parcel Identification Number (ULPIN) scheme

Why in News?

- Recently, the Department of Land Resources has provided information to the Standing Committee on Rural Development on the Unique Land Parcel Identification Number (ULPIN) scheme.

About

- It has been launched in **ten States in 2021** and will be **rolled out across the country by March 2022**.
- It has been described as “**Aadhaar for land**”, in which the central government has the plan to introduce a **14-digit alpha-numeric unique identification number** for **every plot of land** in the country within a year.
- The identification will be based on the **longitude and latitude coordinates of the land parcel** and is dependent on detailed surveys and geo-referenced cadastral maps.
- The unique IDs would be of **international standard** and **compliance with** the Electronic Commerce Code Management Association (**ECCMA**) standard and Open Geospatial Consortium (**OGC**) **standards**.
- The **land records database** will then reportedly be **integrated with revenue court records** and **bank records**.
- Benefits → The benefits of ULPIN are **multitudinous**. The **single source of information** can authenticate the ownership and in turn it can **end the dubious ownership**. It will help **identify the government lands easily** and protect land from shabby land transaction.

Environment

1. Caracal

Why in News?

- The National Board for Wildlife includes the caracal in the list of critically endangered species. The recovery programme for critically endangered species in India now includes 22 wildlife species.

About

- It is a **medium-sized wild cat** native to Africa, Middle East, Central Asia and South Asia including India.
- The caracal has long legs, a **short face, long canine teeth**. It has distinctive ears that are long and pointy with tufts of black hair at their tips.
- Nocturnal Animal → It is an **elusive, primarily nocturnal animal**. Its sightings are not common.
- Diet → The caracal is a **carnivore**. It typically preys upon small mammals, birds, and rodents.
- Habitat →
 - Earlier Caracals could be found in **arid and semi-arid scrub forest regions** of 13 Indian states. It was also found in **nine out of the 26 biotic provinces**.
 - However, currently, its presence is **restricted to Rajasthan, Kutch**, and **parts of Madhya Pradesh**(MP).
- Conservation Status →
 - IUCN Red List: **Least Concern**
 - Wildlife Protection Act, 1972: **Schedule I**
 - CITES listing: **Appendix I** for Asian population and **Appendix II** for others.
- Significance → The caracal has traditionally been valued for **its flexibility** and its **extraordinary ability to catch birds in flight**.

Why is the wild cat named Caracal?

- Its name is on the basis of the **Turkish word karakulak**, meaning '**black ears**'. It is named due to its **iconic ears**.
- Different Names:
 - In India, Caracal is called **siya gosh**, a Persian name that translates as '**black Ear**'.
 - A **Sanskrit fable** (short story) exists about a small wild cat named **deergha karn** or '**long-eared**'.

📌 National Board for Wildlife

- National Board for Wildlife(NBWL) is a **statutory body** constituted under **Wildlife Protection Act,1972**.
- Chairman → **Prime minister**.
- Vice-Chairperson → **Minister of Environment, Forests & Climate Change**.
- Powers → The board is **advisory in nature** and **advises the Central Government** on framing policies and measures for conservation of wildlife in the country.
- Functions → It is the **apex body** to **review all wildlife-related matters** and approve projects in and around national parks and sanctuaries.

- **No alteration of boundaries** in national parks and wildlife sanctuaries can be done **without approval** of the NBWL.

2. Global Bio India 2021

Why in News?

- For the first time in the country, the Periyar Tiger Reserve (PTR) in Kerala has taken up training of a tiger cub to equip it to naturally hunt in the forest environment.

About

- Organized by → It is organised by the **Department of Biotechnology**, Ministry of Science & Technology **along with BIRAC** in partnership with the Confederation of Indian Industry(CII), Association of Biotechnology Led Enterprises and Invest India.
- Purpose → To **showcase the strength** and opportunities of **India's biotechnology sector** at national and global level.
- Inaugural Edition → The **first edition** of Global Bio-India was **held in 2019**.
- Theme for 2021 → The theme is "**Transforming lives**" and the tagline is "**Biosciences to Bioeconomy**".

About Biotechnology Industry Research Assistance Council(BIRAC)

- It is a **not-for-profit Public Sector Enterprise** set up by the Department of Biotechnology (**DBT**).
- It is an **industry-academia interface**. Likewise, it aims to **strengthen and empower** the **emerging Biotech enterprise** to undertake strategic research and innovation, addressing nationally relevant product development needs.

3. Swachhta Saarthi Fellowships

Why in News?

- The Office of the Principal Scientific Adviser to the Government of India has launched the Swachhta Saarthi Fellowship.

About

- This fellowship comes under the "**Waste to Wealth**" **Mission** - One of the nine national missions of the PM's Science, Technology, and Innovation Advisory Council (**PM-STIAC**).
- There are **three categories** of awards under this fellowship - **School students from 9th to 12th standards**, **College students** (UG, PG, Research students) and **Citizens working in the community**.
- This fellowship **recognizes people engaged in tackling** the **challenge of waste management, scientifically** and **sustainably**.
- It will **empower young students** and **innovators** as Swachhta Saarthis and implement actions to reduce waste for a greener planet.

Waste To Wealth Mission:

- The Waste to Wealth Mission is **one of the nine national missions** of the Prime Minister's Science, Technology, and Innovation Advisory Council (**PM-STIAC**).

- Aim → To **identify, develop, and deploy technologies to treat waste** and generate energy, recycle materials and extract value from waste.
- The mission is the “**scientific arm**” of the Swachh Bharat Mission.
- Objectives of the Waste To Wealth Mission:
 - To support the **development of new technologies** that can help create a cleaner and greener environment.
 - To **boost and augment** the **Swachh Bharat Mission** and **Smart Cities Project** by leveraging science, technology and innovation.
 - To create **circular economic models** that are financially viable for waste management.
 - To **streamline waste handling** in India.
- Significance: The **benefits of effective waste management** is **huge**. As it is predicted that India has the potential to **generate 3GW** of electricity from **waste by 2050**.

👉 Office of the Principal Scientific Adviser (PSA) to the Government of India:

- It was set-up in **1999 by the Cabinet Secretariat**. It is currently a **Secretary level position**.
- Mandate → It is the **chief advisor** to the government on matters related to scientific policy. The policies will focus on critical infrastructure, economic and social sectors.
- PM-STIAC → It is an **overarching council**. The Principal Scientific Adviser (PSA) is the chairman of the council. The council will perform **functions** such as,
 - Assess the **status of specific S&T domains**
 - **Comprehends challenges** in S&T domains
 - **Formulates immediate, mid and long term interventions** and presents a roadmap to the Prime Minister.

4. Himalayan Serow

Why in News

- Himalayan Serow has been spotted in the Manas Tiger Reserve in Assam.

About

- Himalayan serow is a **subspecies of the mainland serow**. It **resembles** a cross between a goat, a donkey, a cow, and a pig.
- Species → There are **several species** of serows in the world. **All of them are found in Asia**. However, the Himalayan serow is restricted to the **Himalayan region**.
- Habitat → They are found at **high altitudes between 2,000 metres and 4,000 metres**. They are known to be found in the eastern, central and western Himalayas but not in the Trans Himalayan region.
- Diet → Himalayan serows are **herbivores animals**.
- Conservation Status →
 - IUCN Red List: **Vulnerable**
 - CITES: **Appendix I**
 - The Wildlife Protection Act, 1972: **Schedule I**
- Threats →
 - Loss of habitat

- The decline in population size
- The decline in natural range size.

📌 **Manas National Park**

- Manas national park is a **UNESCO World Heritage Site**, a Project Tiger reserve, an elephant reserve and a biosphere reserve.
- Location → It is located in the **Himalayan foothills in Assam**. It is contiguous with the **Royal Manas National Park** in Bhutan.
- The name of the park is originated from the **Manas River**.
- Significance → The park is known for its rare and endangered endemic wildlife such as the Assam **roofed turtle**, **hispid hare**, **golden langur** and **pygmy hog**. It is also famous for its population of **wild water buffalo**.
- River → The **Manas river** flows through the **west of the park**. Manas is a **major tributary of Brahmaputra river**. The river is named after the **serpent goddess Manasa**.

5. World Wildlife Day

Why in News?

- The World Wildlife Day is celebrated every year on 3rd March.

About

- Background → In 2013, the UNGA decided to proclaim **3 March**, the **day of the adoption** of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (**CITES**) **in 1973**.
- Theme this year → **“Forests and Livelihoods: Sustaining People and Planet”**.

📌 **CITES**

- Also known as **Washington Convention**, CITES is an international agreement which aims to ensure that **international trade in specimens of wild animals and plants does not threaten their survival**.
- It entered into **force in 1975**.
- At present it has **183 parties**.
- CITES is **legally binding** on state parties to the convention, which are obliged to adopt their own domestic legislation to implement its goals.
- CITES Appendices →
 - **Appendix I** includes species **threatened with extinction**. Trade in specimens of these species is permitted only in exceptional circumstances.
 - **Appendix II** includes species **not necessarily threatened with extinction**, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
 - **Appendix III** contains species that are **protected in at least one country**, which has asked other CITES Parties for assistance in controlling the trade.

6. Black-browed Babbler

Why in News?

- After 170 years, a 'lost' bird was found in the jungles of Indonesian Borneo.

About

- Scientific Name → **Malacocincla perspicillata**.
- It is a songbird species in the **family Pellorneidae**.
- It is a **small brown-grey songbird** with a distinctive broad, black eye-stripe running all the way around its head.
- The species is **endemic to Borneo**.
- Habitat → **Subtropical** or **Tropical moist lowland forests**, at altitudes of 200-1170 m.
- **Due to insufficient information**, it is still not classified by IUCN.
- The songbird is threatened by →
 - Agriculture.
 - Logging allowed within protected areas.
 - Plantations for rubber and palm oil.
 - Drought fires.
- Significance → Discoveries like this give hope that it's **possible to find other species** that have been lost to science for decades or longer.

About Borneo Island

- The Island boasts of Three Nations →
 - **Borneo**: A country in itself
 - **Pulau Borneo**: Part of Malaysia
 - **Kalimantan**: Part of Indonesia: It is new Capital of Indonesia.
- **Third-largest island** in the world and the largest in Asia.
- At the geographic centre of **Maritime Southeast Asia**, in relation to major Indonesian islands, it is **located north of Java, west of Sulawesi, and east of Sumatra**.

7. Similipal Biosphere Reserve: Odisha

Why in News?

- Recently, a massive fire broke out in the Similipal Biosphere Reserve in Odisha. The core area of the biosphere was untouched by the fire, however the fire is threatening damage to its rich biodiversity.

About

- Similipal, which derives its name from the '**Simul**' (**silk cotton**) **tree**, is a **national park** and a **tiger reserve** situated in the northern part of Odisha's Mayurbhanj district.
- It was declared a **biosphere reserve** by the Government of India in June, 1994.
- It has been **part of the UNESCO World Network of Biosphere Reserve** since 2009.
- It is part of the **Similipal-Kuldiha-Hadgarh Elephant Reserve** popularly known as **Mayurbhanj Elephant Reserve**, which includes 3 protected areas i.e. Similipal Tiger Reserve, Hadagarh Wildlife sanctuary and Kuldiha wildlife sanctuary.
- Vegetation → Similipal has **1,076 flowering species** and **96 species of orchids**. It boasts of having tropical semi-evergreen forests, tropical moist deciduous forests, dry deciduous hill forests, high level sal forests and sprawling meadows.

- Wildlife → Similipal is home to a wide range of wild animals including **tigers and elephants, besides 304 species of birds, 20 species of amphibians and 62 species of reptiles.**
- Tribes → Two tribes, the **Erenga Kharias** and the **Mankirdias**, inhabit the reserve's forests and practise traditional agricultural activities (the collection of seeds and timber).

Other Major Protected Areas in Odisha

- National Parks → **Bhitarkanika National Park.**
- Wildlife Sanctuaries → **Badrama** WLS, **Chilika** (Nalaban island) WLS, **Hadgarh** WLS, **Baisipalli** WLS, **Kotagarh** WLS, **Nandankanan** WLS, **Lakhari Valley** WLS, **Gahirmatha** (Marine) WLS.

8. Nationally Determined Contributions (NDC) Synthesis Report

Why in News?

- The UN Framework Convention on Climate Change (UNFCCC) has released the Nationally Determined Contributions (NDC) Synthesis Report.

About

- In this report, the UNFCCC has updated the NDC **till December 31, 2020 for 75** of the 197 Parties to the UNFCCC.
- These Parties account for **30% of the global greenhouse gas** (GHG) emissions.

Findings

- The **UK and the European Union** are the only regions among 18 of the world's biggest emitters that have **substantially increased their GHG reduction targets.**
- Sixteen of the world's biggest emitters have **not increased their emission reduction targets** substantially or at all.
- UNFCCC called for more **ambitious climate action plans** by the countries to achieve the Paris Agreement target of containing global temperature rise to 20C (ideally 1.5°C) by the end of the century.

UNFCCC

- UNFCCC stands for **United Nations Framework Convention on Climate Change.**
- The UNFCCC secretariat (UN Climate Change) is the **United Nations entity tasked** with **supporting the global response** to the threat of climate change.
- The Convention has **near universal membership** (197 Parties) and is the **parent treaty of the 2015 Paris Agreement.** The UNFCCC is also the parent treaty of the 1997 Kyoto Protocol.
- Secretariat → The UNFCCC secretariat is located in **Bonn, Germany.**
- Objective → The ultimate objective of all three agreements under the UNFCCC is to **stabilize greenhouse gas concentrations** in the atmosphere at a level that will **prevent dangerous human interference with the climate system,** in a time frame which allows ecosystems to adapt naturally and enables sustainable development.

India's INDC, to be achieved primarily, by 2030

- To **reduce the emissions intensity** of the **GDP by about a third**.
- A total of **40% of the installed capacity** for electricity will be **from non-fossil fuel sources**.
- India also promised an **additional carbon sink** (a means to absorb carbon dioxide from the atmosphere) of **2.5 to 3 billion tonnes** of carbon dioxide equivalent through additional forest and tree cover by the year 2030.

9. Whale shark

Why in News?

- Fishers in Odisha rescue second whale shark in a week.

About

- Scientific Name → **Rhincodon typus**.
- Features → The whale shark has a **lifespan of around 130 years** and has a unique pattern of dots on its body.
- Whale sharks are the **largest shark** and they **feed on plankton** and travel large distances to find enough food to sustain their huge size, and to reproduce.
- It can grow up to **10 metres in length** and **weigh around 20 tonnes**.
- Habitat → Whale sharks are found in **all the tropical oceans** of the world. Whale sharks are found along the **coast of India**.
- Protection Status →
 - IUCN Red List: **Endangered**
 - CITES: **Appendix II**
 - Indian Wildlife Protection Act, 1972: **Schedule I**.
- Threats → **Oil & gas drilling, shipping lanes** etc.

10. Pench Tiger Reserve: Maharashtra

Why in News?

- Recently, a female cub of 'man-eater' tigress Avni has been released into the wild in the Pench Tiger Reserve (PTR) of Maharashtra.

About

- It is located in Nagpur District of **Maharashtra** and named after the **pristine Pench River**.
- History → Pench was declared as a **sanctuary in 1965** but in 1975, it rose to the status of a National Park. It was established as a **tiger reserve in 1992** and now is working under Project Tiger.
- Flora → **Mahua, White Kulu, Salai, Saja, Bijiyasal, Dhaora, Amaltas** and many other. Apart from trees, the park is filled with **grasslands, plants** and **saplings**.
- Fauna → **Royal Bengal tiger, jackal, peafowl, wild dog, wild boar, sloth bear, Indian leopard, fox, striped hyena**, monkey, gaur, barking deer, four-horned antelope, Indian wolf, and more such species.
- It is among the sites notified as **Important Bird Areas (IBA)** of India.
 - The IBA is a programme of **Birdlife International** which aims to identify, monitor and protect a global network of IBAs for **conservation of the world's birds** and **associated diversity**.

11. Dumping Inert Waste in Bhatti Mines

Why in News?

- Members of Ridge Management Board (RMB) decided to form an expert committee to study a proposal by the SDMC for dumping “inert material” in Bhatti mines at Asola Bhatti Wildlife Sanctuary.

About Inert Waste

- Inert waste is waste that is **neither biologically nor chemically reactive** and is waste that will not decompose or decompose very slowly.
- Inert waste **includes**, but is not limited to: **construction and demolition material** such as metal, wood, bricks, masonry and cement concrete; asphalt concrete; **metal; tree branches; bottom ash from coal-fired boilers**; and **waste coal fines** from air pollution control equipment.
- These wastes usually **don't pose a threat** to the environment, or the health of animals or other people and will not endanger the quality of watercourses.
- However, when there is a large amount of this type of waste, it can become an **issue** as it **begins to take up a lot of space**.

📌 Asola Bhatti Wildlife Sanctuary

- Asola-Bhatti Wildlife Sanctuary covering **32.71 sq km area** lies on the **Southern Delhi Ridge of Aravalli hill range**, one of the **oldest mountain** systems of the world, on Delhi-Haryana border.
- An area of 1km around the Asola Bhatti Wildlife Sanctuary in Gurugram and Faridabad is an **Eco-sensitive zone**.
- The Asola wildlife sanctuary has **both floral and faunal diversity** in form of
 - Wide variety of trees, **shrubs, herbs** and **grasses**.
 - Large numbers of mammals, reptiles, amphibians, butterflies and dragonflies.
- Sanctuary comprises around **200 species of resident** and **migratory birds**.
- Wildlife habitats inside the sanctuary act as a **water recharge zone** for **Delhi, Faridabad** and **Gurugram**.

📌 Ridge Management Board

- History → The **Supreme Court mandated** the Delhi Government to constitute a Ridge Management Board **for protection of the Delhi Ridge** through their orders in the **M.C. Mehta case 1987**.
 - The Delhi Ridge is the **northern extension** of the **Aravalli Range** covering a distance of about 35km.
- Date of Establishment → **6th October 1995**.
- Members → The **Chairman** of the board is **Chief Secretary of Delhi** and Head of the Forest Department of Delhi Government is its Member Secretary.
- The Board also has **members from** the **Non-governmental Organizations** (NGOs).

12. Benzene Pollution

Why in News?

- The National Green Tribunal (NGT) appointed a joint committee to study air pollution in Kerala. It made several recommendations to improve air quality in Kerala.

About

- Benzene is a **colorless, flammable liquid with a sweet odor**. It evaporates quickly when exposed to air.

- Source → Benzene is formed from **both natural processes and human activities**. Natural sources of benzene include **volcanoes and forest fires**. It is also a natural part of crude oil, gasoline, and cigarette smoke.
- Uses → Benzene is a widely **used industrial chemical**. It is found in **crude oil** and is a **major part of gasoline**.
 - It's also used to **make plastics, resins, synthetic fibers, rubber lubricants, dyes, detergents, drugs, and pesticides**.
- Exposure to Benzene →
 - Industrial processes → Benzene **occurs naturally** in **crude petroleum**. Thus, human activities using petroleum, lead to exposure. These activities include **processing petroleum products, coking of coal**, and their **use in industrial and consumer products**.
 - Indoor residential air → In homes, benzene may be **found in glues, adhesives, cleaning products, paint strippers, tobacco smoke, and gasoline**. Levels are increased in homes close to petrol filling stations.
- Side Effects → Human exposure to benzene has been associated with a **range of acute and long-term adverse health effects and diseases**, including cancer and hematological effects.

13. Energy Efficiency Enterprise(E3) Certification Programme

Why in News?

- Minister for Power launches the “Energy Efficiency Enterprise(E3) Certifications Programme” for the Brick manufacturing Sector.

About

- What is it? → Energy Efficiency Enterprise (E3) is a **certification scheme**.
- Aim → It aims to **recognise burnt clay brick manufacturers** for adopting energy-efficient manufacturing.
- Furthermore, it **encourages customers** to **source bricks** from such **E3 certified manufacturing units**.
- Nodal Agency → **Bureau of Energy Efficiency** will provide certification.
- How will the E3 certification be awarded? →
 - Brick Manufacturing Enterprises need to **meet** the **minimum Specific Energy Consumption performance criteria**.
 - The criteria can be met by **Brick Manufacturing Enterprises** by **adopting a combination of measures**, such as:
 - **improving energy efficiency** in manufacturing
 - producing bricks having **lower (bulk) densities** e.g. porous, perforated and hollow bricks.
- Significance of this programme → The programme will help the brick industry **shift towards more efficient technologies**. Such energy-efficient bricks will be useful in complying with the requirements of Energy Conservation Buildings Code (ECBC).

📌 Bureau of Energy Efficiency

- Bureau of Energy Efficiency (BEE) is a **statutory body** under the **Ministry of Power** which was setup in **2002** under the provisions of the Energy Conservation Act, 2001.
- It is mandated to **implement policy and programmes** in the area of energy efficiency and conservation.

- It **assists in developing policies and strategies** with the primary objective of reducing energy intensity of the Indian economy.
- Major Programmes: **State Energy Efficiency Index**, **Perform Achieve and Trade (PAT) scheme**, The Standards & Labeling Programme, Energy Conservation Building Code, etc.

14. Seabuckthorn

Why in News?

- The Himachal Pradesh government has decided to start planting seabuckthorn in the cold desert areas of the state this year.

About Seabuckthorn

- It's a **shrub** that produces an **orange-yellow coloured edible berry**.
- In India, it is found **above the tree line** in the **Himalayan region**, generally in dry areas such as the **cold deserts of Ladakh and Spiti**.
- In Himachal Pradesh, it is locally called **chharma** and **grows in the wild in Lahaul and Spiti** and **parts of Kinnaur**.
- A major part is covered by this **plant in Himachal Pradesh, Ladakh, Uttarakhand, Sikkim and Arunachal Pradesh**.

Benefits

- Medicinal benefits → As a **folk medicine**, Seabuckthorn has been widely used for **treating stomach, heart and skin problems**.
 - Its fruit and leaves are **rich in vitamins, carotenoids and omega fatty acids**.
- Ecological benefits → Besides being an **important source of fuelwood** and **fodder**, Seabuckthorn is a **soil-binding plant** that prevents soil-erosion, checks siltation in rivers and helps preserve floral biodiversity.
- Commercial benefits → Seabuckthorn also has **commercial value**, as it is used in **making juices, jams, nutritional capsules** etc.

15. Project REHAB

Why in News?

- Khadi and Village Industries Commission(KVIC) has launched a unique project called Project REHAB (Reducing Elephant – Human Attacks using Bees).

About

- Under this Project, **bee boxes** will be **used as a fence** to prevent the attack of elephants.
- Aim → The project aims to create "**bee-fences**" to **mitigate Human– elephant conflicts** in the country. It will **reduce the loss of lives** of both, humans and elephants.
- Where was it launched? → It was launched as a **pilot project** at **four places** located on the periphery of **Nagarhole National Park** in Karnataka.
- Sub Mission → The project has been launched as a **sub-mission of KVIC's National Honey Mission**.

 **Nagarhole National Park**

- It is also known as **Rajiv Gandhi National Park**.
- It was established as a **wildlife sanctuary in 1955** and was upgraded into a national park in 1988. It was declared as the **37th Tiger reserve** under **Project Tiger in 1999**.
- There are **51 Tiger reserves** in India.
- Location → The Park lies in the **Western Ghats** and is a **part of the Nilgiri Biosphere Reserve**.
- Rivers → The **Nagarahole River** flows through the park, which **joins the Kabini River** which also is a boundary between Nagarahole and Bandipur National Park.
- Flora → The vegetation consists mainly of **moist deciduous forests** with **predominating trees of teak and rosewood**.
- Fauna → **Asian elephants, chital** (spotted deer), **Indian mouse deer, gaur, stripe-necked** and **ruddy mongooses, grey langur, bonnet macaque, Asian wild dog**, leopard, tiger, sloth bear among others.

👉 **National Honey Mission:**

- Launched by → **Khadi and Village Industries Commission (KVIC)**.
- Aim →
 - To provide **sustainable employment and income to rural** and urban unemployed youth.
 - To **conserve the honeybee habitat** and tapping untapped natural resources.
 - Moreover, to **promote beekeeping for increasing** crop productivity and pollination services avenue for beekeepers and farmers.

👉 **Khadi and Village Industries Commission**

- KVIC is a **statutory body** established under the Khadi and Village Industries Commission Act, 1956.
- The KVIC is **charged with the planning, promotion, organisation and implementation of programmes** for the development of Khadi and other village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary.
- It functions under the **Ministry of Micro, Small and Medium Enterprises**.

16. Great Indian Bustard

Why in News?

- The Supreme Court has decided to examine on a priority basis whether overhead power cables in natural habitats of Great Indian Bustards in Rajasthan and Gujarat can be replaced with underground ones to save these birds.

About

- Scientific Name → **Ardeotis nigriceps**.
- Great Indian Bustard is **one of the heaviest flying birds** in the world.
- It inhabits **dry grasslands** and **scrublands** on the Indian subcontinent.
- Habitat → It is **endemic to Indian Sub Continent**. In India, the population is confined mostly to **Rajasthan** and **Gujarat**. Small population occurs in **Maharashtra, Karnataka** and **Andhra Pradesh**.
- Conservation Status →
 - IUCN Red List: **Critically Endangered species**
 - CITES: **Appendix I**

- Wildlife (Protection) Act, 1972: **Schedule I**.
- Protected areas → **Desert National Park Sanctuary** — Rajasthan, **Rollapadu Wildlife Sanctuary** — Andhra Pradesh and **Karera Wildlife Sanctuary** — Madhya Pradesh.
- Identified as one of the species for the **recovery programme** under the **Integrated Development of Wildlife Habitats** of the Ministry of Environment and Forests.
- Project Great Indian Bustard → **state of Rajasthan** — **identifying** and **fencing off bustard breeding grounds** in existing protected areas as well as provide secure breeding enclosures in areas outside protected areas.
- Threats →
 - **Loss of natural habitat**
 - **Collision/electrocution** with power transmission lines,
 - **Mining**
 - **Wind turbines** and solar farms.

17. World Air Quality Report

Why in News?

- Recently, Swiss technology company IQ Air has released the World Air Quality report.

About

- World Air Quality is an **annual report**.
- The report is **based on PM2.5 data**.
- It is from **106 countries** based on data from ground-based monitoring stations.
- The report is **handled by government agencies mostly**.

📌 Key Findings

- The topmost polluted city in the world is **Xinjiang in China**, followed by **Ghaziabad in Uttar Pradesh**.
- Related to India →
- India is **home to 35 of the world's 50 most polluted cities** in the World.
- Delhi has gotten listed as the **10th most polluted city** and the top polluted capital city in the world in 2020. However, **Delhi's air quality improved** by approximately **15% from 2019 to 2020**.
- India ranked as the **world's 3rd most polluted country** in 2020 after Bangladesh and Pakistan.

18. Gregarious Bamboo Flowering in Wayanad Wildlife Sanctuary

Why in News?

- The gregarious flowering of bamboo inside the Wayanad Wildlife Sanctuary, Kerala poses a potential threat to wildlife in the Nilgiri biosphere, a major tiger and elephant habitat.

About

- Thorny bamboo (**Bamboosa Bambos**) is a **monocarpic** (flowering only once) **plant**.
- It belongs to the **Poaceae family** (grass family) and its **flowering cycle varies** from 40 to 60 years.
- They grow in **more than 500 hectares of the 344.44 sq.km.** of the sanctuary and are the mainstay of herbivores during summer.

- They have **fully bloomed**, a phenomenon said to **occur once in the life cycle** of **bamboo plants**.
- With the **advent of the season** and **shortage of fodder and water**, **migration of wild animals starts** from the adjacent sanctuaries in Karnataka and Tamil Nadu to Wayanad.
- Impact of Flowering
 - It may **adversely affect migration**, especially **by elephants**, **wild gaur**, and **other lower herbivores** owing to the mass destruction of bamboo groves after the flowering.
 - Farmers living near the sanctuary fear that the **destruction of bamboo groves** may **worsen** the **increasing man-animal conflict**.
 - Threat to wildlife as well as the ecology, it is reported that **over 25% of bamboo groves** have **bloomed since 2010**, and the phenomenon is continuing.
- **Profuse natural regeneration** occurs from seeds **after gregarious flowering**. Seeds have **no dormancy**, and it **helps germination** under favourable conditions soon after seed fall.
 - **Protection from forest-fires** and **grazing** is essential for proper establishment of seedlings.

Wayanad Wildlife Sanctuary

- Location → It is contiguous to the protected areas of **Nagarhole and Bandipur of Karnataka** on the **northeast** and **Mudumalai of Tamil Nadu** on the **southeast**.
- It is an **integral part** of the **Nilgiri Biosphere Reserve**. It was declared as a Sanctuary in **1973**. The highest peak of WWS is **Karottimala**.
- Fauna → Of the **45 species of mammals** here, **6 are endemic** to the Western Ghats. The avian population (203 species) also boasts of 10 endemic, 6 ranges.
- The forest types include South Indian **Moist Deciduous forests**, **West coast semi-evergreen forests** and plantations of teak, eucalyptus and Grewelia.
- Tribes → **Kuruma**, **Paniya**, **Kattunaicka**, **Uruli**, **Kurichiar** and **Adiyar** are some of the tribal communities that inhabit this area.

19. Pilibhit Tiger Reserve: Uttar Pradesh

Why in News?

- A carcass of a five-year-old tigress was found in the Pilibhit Tiger Reserve (Uttar Pradesh).

About

- Location → It is located in Pilibhit district, Lakhimpur Kheri District and Bahraich District of **Uttar Pradesh**.
- It was notified as **Tiger Reserve in 2014**.
 - In 2020, it bagged **international award TX2** for doubling up the number of tigers in the past four years.
- It forms the **part of Terai Arc Landscape** in the **upper Gangetic Plain**.
- The northern edge of the reserve lies along the **Indo-Nepal border** while the **southern boundary** is marked by the **river Sharada and Khakra**.
- Flora and Fauna →
 - It is home to a **habitat for over 127 animals**, **326 bird species** and **2,100 flowering plants**.
 - Wild animals include **tiger**, **swamp deer**, **bengal florican**, **leopard**, etc.
 - It has **high sal forests**, **plantation** and **grasslands** with several water bodies.

- Other Protected Areas in Uttar Pradesh →
 - **Dudhwa National Park**
 - **National Chambal Sanctuary**
 - **Chandraprabha Wildlife Sanctuary**
 - **Hastinapur Wildlife Sanctuary.**

20. Coalition for Disaster Resilient Infrastructure

Why in News?

- The 27-member European Union joins the Coalition for Disaster Resilient Infrastructure (CDRI) initiative.

About

- Prime Minister of India launched it **in 2019** at the **UN Climate Change Summit**.
- What is it? → It is a **multi-stakeholder global partnership** of national governments, UN agencies, multilateral development banks, private sector, academic and knowledge institutions.
- Purpose → It aims to **promote the resilience of new** and **existing infrastructure systems** to climate and disaster risks. It also supports sustainable development.
- Governing Council → The Governing Council is the **highest policy-making body** of the CDRI. It is **co-chaired by India** and a representative of another nation, nominated by rotation every two years.
- Funding → A large share of the fund over the **first five years** has been **invested by India**. There are **no obligations** on the part of members to make financial contributions to CDRI. However, at any point, members of the CDRI may make **voluntary contributions**.
- Secretariat → **New Delhi, India**.

21. Ranthambore Tiger Sanctuary

Why in News?

- Six tigers are missing in Ranthambore Tiger Sanctuary (Rajasthan).

About Ranthambore Tiger Sanctuary

- Location → Ranthambore Tiger Reserve lies in the **eastern part of Rajasthan** state in Karauli and Sawai Madhopur districts, at the junction of the Aravali and Vindhya hill ranges.
- Parks and Sanctuaries Included → It comprises of the **Ranthambore National Park** as well as **Sawai Mansingh** and **Keladevi Sanctuaries**.
- The Ranthambore fort, from which the forests derive their name, is said to have a **rich history of over 1000 years**. It is strategically located atop a **700 feet tall hill** within the park and is believed to have been **built in 944 AD by a Chauhan ruler**.
- Vegetation → The vegetation includes **grasslands** on plateaus and **dense forests** along the seasonal streams.
 - The forest type is mainly **tropical dry deciduous** with '**dhak**' (*Butea monosperma*), a species of tree capable of withstanding long periods of drought, being the commonest.
 - This tree is also called as '**Flame of forest**' and is one of the many flowering plants that add colour to the dry summers here.
- Wildlife → The park is **rich in wildlife** with **tiger** at the apex of the food chain in mammals.

- Other animals found here are **leopards, striped hyenas, common** or **hanuman langurs, rhesus macaques**, jackals, jungle cats, caracals, blackbuck, Blacknaped hare and chinkara, etc.
- The park is **rich in birds** with about **272 species** recorded so far.
- Other Protected Areas in Rajasthan →
 - **Sariska** National Park, Alwar
 - **Desert** National Park, Jaisalmer
 - **Keoladeo** National Park, Bharatpur
 - **Sajjangerh** wildlife sanctuary, Udaipur
 - **National Chambal** Sanctuary.

👉 About Tiger Reserves

- Tiger Reserves are **protected areas** that aim at **conserving the habitat** to ensure a viable population of the tigers along with their prey base in their habitat.
- Declared by → Tigers Reserves are **declared by** the **National Tiger Conservation Authority** via Wild Life (Protection) Amendment Act, 2006 under Project Tiger.
 - Project Tiger → It is a **Centrally Sponsored Scheme** of the Government of India **launched in 1973**. It aims for **in-situ conservation** of wild tigers in designated tiger reserves.
- Proposal for tiger reserves → To declare an area as Tiger Reserve, the **state governments** can **forward their proposals to NTCA**.
 - The **Central Government** via NTCA may also **advise the state governments** to **forward a proposal** for creation of Tiger Reserves.
- Tigers Reserves in India → There are **51 tigers reserves** in India. These are **governed by Project Tiger** which is administered by the National Tiger Conservation Authority (NTCA).
 - **Bandipur Tiger Reserve** in Karnataka is the **first tiger reserve** in India
 - **Srivilliputhur- Megamalai Tiger Reserve** in Tamil Nadu is the **51st Tiger Reserve** in India.
- Largest Tiger Reserve → **Nagarjunsagar-Srisailem Tiger Reserve** located in **Andhra Pradesh** is the largest tiger reserve in India.

22. Catch the Rain Campaign

Why in News?

- The Prime Minister has launched the 'Jal Shakti Abhiyan: Catch the Rain' campaign on World Water Day.

About

- Catch the Rain is a **Jan Andolan campaign**.
- It aims to take **water conservation at the grass-root level** through people's participation.
- The campaign intends to **accelerate water conservation** across the country.
- Aim → To **encourage all stakeholders** to create **rainwater harvesting structures** (RWHS). As it is suitable for the climatic conditions and subsoil strata. These structures will **ensure the proper storage of rainwater**.
- Tag line → **Catch the rain, where it falls, when it falls**.
- Implementation: The campaign will be **implemented by the National Water Mission (NWM)**, **Ministry of Jal Shakti**.

- Coverage → The campaign will be undertaken across the country, in both rural and urban areas. It will be implemented from **March 22 to November 30** (the pre-monsoon and monsoon period) in the country.
- The Catch the Rain Campaign will include certain key activities like,
 - **Removal of encroachments** and desilting of tanks.
 - **Repairs to traditional Water Harvesting Systems**(WHS) like step-wells.
 - States have been requested to **open Rain Centers in each district**. These Rain Centres will act as a **technical guidance centre** in RWHS.

👉 World Water Day

- World Water Day is being observed on **22 March** by the United Nations (UN).
- Aim → To **raise awareness** about people living without access to safe water and tackle the global water crisis.
- Theme of world water day 2021 → **“Valuing Water”**.

23. Greater One-Horned Rhino

Why in News?

- The claims by different political parties over significant reduction in poaching of Greater One-Horned Rhino has become an issue in Assam Assembly Elections.

About

- There are three species of rhino in Asia—**Greater one-horned** (Rhinoceros unicornis), **Javan** and **Sumatran**.
- Only the **Great One-Horned Rhino** is **found in India**.
- Also known as **Indian rhino**, it is the **largest of the rhino species**.
- It is identified by a **single black horn** and a **grey-brown hide with skin folds**.
- They primarily graze, with a diet consisting almost **entirely of grasses** as well as **leaves, branches of shrubs and trees, fruit**, and **aquatic plants**.
- Protection Status →
 - Javan and Sumatran Rhino are **critically endangered** and the **Greater one-horned** (or Indian) rhino is **vulnerable** in IUCN Red List.
 - All three listed under **Appendix I** (CITES).
 - Greater one-horned rhino is listed under the **Schedule I of the Wildlife Protection Act, 1972**.
- Habitat → The species is restricted to small habitats in **Indo-Nepal terai** and **northern West Bengal** and **Assam**.
 - In India, rhinos are mainly found in **Assam, West Bengal** and **Uttar Pradesh**.
 - **Assam** has an estimated **2,640 rhinos** in **four protected areas**, i.e. Pabitora Wildlife Reserve, Rajiv Gandhi Orang National Park, Kaziranga National Park, and Manas National Park.
 - About **2,400 of them** are in the **Kaziranga National Park** and **Tiger Reserve** (KNPTR).
- Threats → **Poaching for the horns, Habitat loss, Population density**, Decreasing Genetic diversity.

👉 Conservation Efforts by India

- The **five rhino range nations** (India, Bhutan, Nepal, Indonesia and Malaysia) have signed a declaration **‘The New Delhi Declaration on Asian Rhinos 2019’** for the conservation and protection of the species.

- Recently, the Ministry of Environment Forest and Climate Change (**MoEFCC**) has begun a **project to create DNA profiles of all rhinos** in the country.
- Indian Rhino Vision 2020 → **Launched in 2005**, it is an ambitious effort to attain a wild population of **at least 3,000 greater one-horned rhinos** spread over **seven protected areas** in the Indian state of Assam **by the year 2020**.

24. Earth Hour

Why in News?

- The Earth Hour is being observed on 27th March 2021.

About Earth Hour

- Earth Hour is the **World Wildlife Fund for Nature** (WWF)'s **annual initiative** that began in 2007.
- It is **held every year** on the **last Saturday of March**.
- It encourages people from **more than 180 countries** to **switch off the lights** from 8.30 pm to 9.30 pm as per their local time.
- The idea is to **refrain from** the **use of non-essential lighting** to save energy in a symbolic call for environmental protection.
- It was started as a **lights out event in Sydney, Australia in 2007**.
- Impact → Earth Hour has become a **catalyst** for **positive environmental impact, driving major legislative changes** by harnessing the power of the people and collective action.

👉 World Wildlife Fund for Nature

- It is the **world's leading conservation organization** and works in more than 100 countries.
- It is an international **non-governmental organization**.
- Established → It was established in **1961**.
- Headquartered → **Gland, Switzerland**
- Mission → To **conserve nature** and **reduce the most pressing threats** to the diversity of life on Earth.
- Other Initiatives of WWF →
 - **TX2 Goal**
 - **TRAFFIC**
 - **Living Planet Report**.

25. International Day of Forests

Why in News?

- The United Nations observes March 21 as the International Day of Forests, commemorating the green cover around the world and reiterating its importance.

About

- The United Nations General Assembly proclaimed **March 21** as the **International Day of Forests** (IDF) in **2012**.
- Aim → The day **celebrates and raises awareness** about the importance of all types of forests.

- Celebrated by → The day is celebrated by the **United Nations Forum on Forests and the Food and Agriculture Organization**(FAO). The celebrations are done in **collaboration with** governments, Collaborative Partnership on Forests(CPF), and other relevant organisations in the field.
- On this day, the UN encourages the countries to **undertake local, national, and international activities** for forests and trees. For example tree-planting campaigns.
- The theme for 2021 → **“Forest restoration: a path to recovery and well-being”**.

📌 **United Nations Forum on Forests**

- Established by → **Economic and Social Council of the United Nations** (ECOSOC).
- Objective → To **promote the management, conservation, and sustainable development of all types of forests**. Further, It aims to strengthen long-term political commitment to this end.
- Membership → The Forum has **universal membership**, and is **composed of all Member States** of the United Nations and specialized agencies.
- Headquarters → **New York, United States**.

📌 **Collaborative Partnership on Forests(CPF)**

- It is an **informal, voluntary arrangement among 15 international organizations** and **secretariats**. These organizations run substantial programs on forests.
- Purpose → The mission of the CPF is to **help enhance the contribution of all types of forests and trees outside forests**. It aims to **achieve the 2030 Agenda** for Sustainable Development and other internationally agreed development goals.

26. Inter-state tiger relocation project

Why in News?

- The first inter-state tiger relocation project launched in 2018 has been suspended.

About

- The first Tiger Relocation Project was launched in **2018 by the National Tiger Conservation Authority(NTCA)**.
- Under the Project, **two tigers a male** (Mahavir) from Kanha Tiger Reserve and a **female** (Sundari) from Bandhavgarh from MP were **relocated to Satkosia Tiger Reserve in Odisha**.
- Why Relocation of Tigers? → The relocation was meant to serve two purposes:
 - To **reduce the tiger population in areas** with excess tigers to majorly reduce territorial disputes
 - To **reintroduce** tigers in areas where the **population** has **considerably reduced due to various reasons**.

📌 **Satkosia Tiger Reserve**

- Components → Satkosia Tiger Reserve comprises of **two adjoining Sanctuaries** of central Odisha named as **Satkosia Gorge Sanctuary** and **Baisipalli Sanctuary**.
- Establishment → These two sanctuaries together covering an **area of 963 sq.km**, have been **notified as Satkosia Tiger Reserve in 2007**.

- Location → It is located in the **Angul district of Odisha** where the **Mahanadi River passes** through a 22 km long gorge in the Eastern Ghats mountains. The area is also a part of the **Mahanadi elephant reserve**.
- Biodiversity → Satkosia is the meeting point of two bio-geographic regions of India; the **Deccan Peninsula** and the **Eastern Ghats**, contributing to **immense biodiversity**. The major plant communities are **mixed deciduous forests** including **Sal** and **riverine forest**.
- It had a population of **12 tigers** then. However, the numbers **reduced to two in 2018**.
- Hence, the purpose of the relocation was to **repopulate tigers in the reserve areas**. Also, Satkosia was found to fall under reserves where there is a **potential** for **increasing tiger populations**.

27. Hypnea indica and Hypnea bullata

Why in News?

- Two new species of seaweed have been discovered by a group of marine biologists from Central University of Punjab, Bathinda.

About

- Named **Hypnea indica** (after India) and **Hypnea bullata** (because of the blisterlike marks on its body – bullate), the seaweeds are **part of the genus Hypnea** or **red seaweeds**.
- While Hypnea indica was **discovered Kanyakumari in Tamil Nadu**, and **Somnath Pathan and Sivrajpur in Gujarat**, Hypnea bullata was discovered from **Kanyakumari** and **Diu island of Daman and Diu**.
- They grow in the **intertidal regions of the coast**, namely the area that is **submerged during the high tide** and exposed during low tides.
- The genus Hypnea consists of **calcareous, erect, branched red seaweeds**. There are 61 species of which 10 were reported in India. With our two new species, the total number of species now **would be 63**.

28. Heavy metal pollution

Why in News?

- Recent study shows significant reduction of heavy metal pollution during COVID-19 pandemic in the Ganga water.

About

- According to study, **reduction in industrial wastewater** can substantially **reduce heavy metal pollution** in Ganga water.
- It is estimated that **industrial wastewater contributes nearly 20% of the total volume** of wastewater generated in the Ganga basin.
- In **lockdown**, the effluent discharge from various industries was negligible while inputs from agricultural runoff and domestic sewage remained almost the same.

About Heavy Metal Water Pollution in India:

- Heavy metal refers to any metallic chemical element that has a relatively **high density and is toxic** or **poisonous at low concentrations**. Examples include mercury (Hg), cadmium (Cd), arsenic (As).
- **Density of more than 5 g/cm³** is a Commonly used criterion.
- It is found that **two-thirds of water quality stations** on major rivers have **presence of one or more heavy metal beyond limits** specified by the Bureau of Indian Standards.

- **Lead, cadmium, nickel, chromium** and **copper contamination** were **more common** in non-monsoon periods.
- While **iron, lead, chromium** and **copper** exceeded '**tolerance limits**' in monsoon periods.

Sources of pollution:

- Natural sources of metal pollution in **water are seepage from rocks into water, volcanic activity, forest fires, storm water runoff** from urbanised areas etc.
- Anthropogenic sources are **mining, milling, plating, industrial** and **domestic wastewater effluents**, sanitary landfill, agricultural runoff and fossil fuel combustion etc.

Metal	Sources	Health effects
<i>Chromium (Cr)</i>	Mining, industrial coolants, chromium salts manufacturing, leather tanning.	Lung cancer, nasal ulcer and hypersensitivity reactions, Chromium VI can cause damage to DNA
<i>Lead (Pb)</i>	lead acid batteries, E-waste, coal- based thermal power plants, Paint, Pesticide, Batteries, Crystal Glass Preparation.	Inhibition of the synthesis of haemoglobin; dysfunctions in the kidneys, damage to the central and peripheral nervous systems
<i>Mercury (Hg)</i>	Chlor-alkali plants, thermal power plants, fluorescent lamps, hospital waste (thermometers, barometers), electrical appliances.	Minamata disease, damage to organs the brain and kidneys
<i>Arsenic (As)</i>	Geogenic/natural processes, smelting operations, thermal power plants, fuel combustion.	Black foot disease, cancer and skin lesions
<i>Cadmium (Cd)</i>	Zinc smelting, waste batteries, e-waste, paint sludge, incinerations and fuel combustion.	Itai-Itai, cadmium pneumonitis, renal dysfunction, tubular proteinuria
<i>Copper (Cu)</i>	Mining, electroplating, smelting operations.	Irritation of the nose, mouth and eyes, headaches, stomach aches, vomiting and diarrhea.
<i>Nickel (Ni)</i>	Stainless Steel Manufacturing Units, thermal power plants, battery Industry.	Allergy, cardiovascular and kidney diseases, lung fibrosis, lung and nasal cancer.
<i>Barium</i>	computers in the front panel of a CRT, e-waste.	brain swelling, muscle weakness, damage to the heart, liver, and spleen
<i>Beryllium</i>	E-waste, coal burning.	lung cancer, skin disease, poor wound healing and wartlike bumps
<i>Fluorides</i>	coal-fired power plants and other industrial sources, community water fluoridation.	Dental and skeletal fluorosis
<i>Nitrates</i>	runoff or seepage from fertilized agricultural, municipal and industrial waste urban drainage and decaying plant debris.	Blue baby syndrome (methemoglobinemia) which reduces oxygen level in blood.

29. Geothermal Energy

Why in News?

- An agreement for establishing India's first-ever geothermal field development project in Leh has been signed.

About

- The power project known as Geothermal Field Development Project will be established at **Puga village of eastern Ladakh**. Puga has been identified as the hotspot of geothermal energy in the country (potential of more than 100 mw of geothermal energies.)
- It is to be **developed by ONGC Energy, Ladakh Autonomous Hill Development Council, and Power Department of UT Ladakh.**

What is Geothermal Energy?

- Geothermal energy is the thermal energy **generated and stored inside the Earth's crust**. Geothermal power is the electricity generated from the heat source within the earth's crust.
- This geothermal energy originates from the **geological processes during formation of the planet, radioactive decay of minerals**, and from solar energy absorbed at the surface.
- Geothermal energy is **converted into electricity in following ways**:

Dry steam plants	Flash steam plants	Binary cycle plants
Hot steam is piped directly from geothermal reservoirs into generators in the power plant. The steam spins turbines, which generate electricity.	Hot water is brought up through a well. Some of the water turns to steam, which drives the turbines. When the steam cools it condenses back into water and is returned to the ground.	These operate on water at relatively lower temperatures. These plants use the heat from the hot water to boil a liquid that boils at a lower temperature than water. When the fluid is heated it turns to steam and spins the turbines.

Geothermal energy in India:

- GSI (Geological Survey of India) has **identified 350 geothermal energy locations** in the country which have a potential of 10000 MW GE power.
- There are seven geothermal provinces in India → **Himalayas** - Ladakh, Manikaran, Tapoban; **Sohana** - Haryana, Rajasthan; **West coast** – Maharashtra; **Cambay** – Khambet; Son-Narmada-Tapi (SONATA) - **Tatapani**, AnthoniSamoni; **Godavari** – Manuguru; **Mahanadi** – Bakreshwar.

30. African Forest Elephants

Why in News?

- The International Union for Conservation of Nature (IUCN) has declared African Forest and Savanna (or bush) elephants as 'critically endangered' and 'endangered' respectively.

About African Forest Elephants

- African elephants are the **largest land animals** on Earth. They are **slightly larger than Asian Elephants** and can be identified by their larger ears (Asian elephants have smaller, rounded ears.)
- Elephants are **matriarchal**, meaning they live in **female-led groups**. The matriarch is usually the biggest and oldest.
- Keystone Species → African elephants are **keystone species** meaning they play a **critical role in their ecosystem**. They are also known as “**ecosystem engineers**” as they shape their habitat in many ways.
- Range → African elephants are distributed **throughout the savannas of sub-Saharan Africa** and the **rainforests of Central and West Africa**.
- Types → There are two subspecies of African elephants
 - African Savanna (or bush) elephant → They are **larger animals** that **roam the plains of sub-Saharan Africa**. It is listed as **endangered** under the IUCN Red List.
 - African Forest Elephants → They are **smaller animals** that live in the forests of **Central and West Africa**. It is listed as **Critically Endangered** under the IUCN Red List.

About Asian Elephants:

- The Asian elephant is the **largest land mammal** on the **Asian continent**. They inhabit **dry to wet forest and grassland habitats** in 13 range countries spanning South and Southeast Asia.
- Asian elephants are **extremely sociable, forming groups of six to seven** related females that are led by the oldest female, the matriarch.
- Conservation Status →
 - IUCN Red List: **Endangered**
 - CITES: **Appendix I**.
 - Wildlife (Protection) Act, 1972: **Schedule I**.
- Subspecies → There are **three subspecies** of Asian elephants – **the Indian, Sumatran, and Sri Lankan**. The Indian has the **widest range** and accounts for the majority of the remaining elephants on the continent.
- In **India**, the Asian elephant is **found in four fragmented populations**, in the **south, north, central** and **north-east India**.

Science and Technology

1. Pastuerella Multoceda

Why in News?

- Recently, the death of six elephants at Karlapat Wildlife Sanctuary in Kalahandi due to a bacterium has raised concern among the environmental experts.

About

- It is a **common bacteria** found in the **respiratory tract of herbivores**, especially in cattle.
- It **multiplies rapidly** and moves from the **respiratory tract to the bloodstream** only in times of **stress in the animal**, or when the animal has low immunity or is unhealthy.
- It causes **diarrhoea** and often **haemorrhagic septicemia**.
- It is a **small, gram-negative, non-motile, non-spore-forming coccobacillus** with bipolar staining features.
- It can cause a **zoonotic infection in humans**, which typically is a result of bites or scratches from domestic pets.

2. Amazonia-1 and 18 Satellites

Why in News?

- ISRO's Polar Satellite Launch Vehicle (PSLV-C51) rocket launched Brazil's Amazonia-1 and 18 co-passenger satellites.

About PSLV-C51

- It is the **53rd flight** of the Indian Polar Satellite Launch Vehicle (**PSLV**) **program**.
- It was also the **first dedicated mission** for **New Space India Ltd (NSIL)**, the commercial arm of ISRO.
- The mission was undertaken under a **commercial arrangement** with **Spaceflight Inc., USA**.
- Amazonia-1 Satellite →**
 - It is an **earth observation satellite**. Brazil's National Institute for Space Research designed, integrated, tested, and operated the satellites.
 - Purpose → It will provide **remote sensing data** for **users monitoring deforestation** in the Amazon forests. Furthermore, it will **analyze diversified agriculture** across the **Brazilian territory**.
 - The satellite injected into its precise orbit of **758 km in a sun-synchronous polar orbit**.
 - Significance → It is the **first commercial venture** for New Space India Limited (NSIL).
- Satish Dhawan SAT (SDSAT) Satellite →**
 - Developed by → **Space Kidz India**.
 - Purpose → It is a **nano-satellite**. It will **study the radiation levels**, space weather and will demonstrate long-range communication technologies.
 - The satellite has an **engraving on the top panel of the satellite**. This engraving shows solidarity and gratitude for the Atma Nirbhar initiative and Space privatization.
- UNITYsat Satellites →**

- Built by → It is a **combination of three satellites**. It is designed and built jointly by the Jeppiaar Institute of Technology, G.H. Rasoni College of Engineering, Nagpur, and Sri Shakthi Institute of Engineering and Technology, Coimbatore.
- Purpose → The satellites were launched for **providing radio relay services**.
- **Sindhu Netra Satellite →**
 - Developed by → Students of Bengaluru based PES University under a contract by **Research Centre Imarat**, which is a part of the DRDO.
 - Purpose → The satellite is capable of **automatically identifying the warships and merchant ships in the Indian Ocean Region** (IOR).
 - Significance → The satellite **enhances India's surveillance capabilities** on land borders with China and Pakistan.
 - It will be useful to **identify suspicious movements** of sea-faring vessels close to India's maritime borders.
 - Furthermore, It will also be helpful in **carrying out surveillance** in areas such as the **South China Sea** or the **pirate-infested areas** near the Gulf of Aden and the African coast.
- **Other Satellites →**
 - The other satellites were from the **U.S.A.**. Among them, one was a **technology demonstration satellite**.
 - Technology demonstration satellites help in the **demonstration of new technologies and techniques testing**. These technologies will have a use in future space missions.

3. National Science Day

Why in News?

- National Science Day (NSD) is celebrated every year on 28th February to commemorate the discovery of the 'Raman Effect' by Sir Chandrasekhara Venkata Raman, for which he was awarded the Nobel Prize in 1930.

About

- Basic Objective → To **propagate the message** of the **importance of science** and its application among the people.
- Nodal Agency to Support Celebration → **National Council for Science & Technology Communication (NCSTC)** of Ministry of Science and Technology.
- The **first** National Science Day was celebrated on **February 28, 1987**.
- 2021 Theme → '**Future of STI** (Science, Technology and Innovations): **Impacts on Education, Skills, and Work**'.

What is Raman Effect?

- A phenomenon in **spectroscopy** discovered by the eminent physicist **Sir Chandrasekhara Venkata Raman** in **1928**.
- Raman Effect is a **change in the wavelength of light** that occurs when a **light beam** is **deflected by molecules**.

- When a beam of light traverses a **dust-free, transparent sample of a chemical compound**, a **small fraction** of the light emerges in directions other than that of the incident (incoming) beam.
- **Most of this** scattered light is of **unchanged wavelength**. A small part, however, has wavelengths different from that of the incident light; its presence is a result of the **Raman Effect**.

4. Arktika-M satellite

Why in News?

- Russia has successfully launched the Arktika-M satellite. The satellite was launched from the Soyuz carrier rocket from the Baikonur Cosmodrome in Kazakhstan.

About

- Arktika-M satellite is a **remote-sensing** and **emergency communications satellite**
- Objective → It is designed to **monitor the climate and environment** in the Arctic region.
- Russia plans to send up a **second satellite in 2023**. This satellite will be combined with the Arktika-M Satellite.
- These two satellites will offer **round-the-clock, all-weather monitoring of the Arctic Ocean** and the surface of the Earth.
- Significance → The satellite will help create **more accurate models for compiling short-term weather forecasts**. The compilation will give researchers a large amount of new data for studying global climate change.

5. Aries Devasthal Spectrograph (ADFOSC)

Why in News?

- Indian scientists have indigenously designed and developed a low-cost optical spectrograph named “Aries-Devasthal Faint Object Spectrograph & Camera (ADFOSC)”.

About

- Developed by → It has been indigenously designed and developed by **Aryabhata Research Institute of Observational Sciences (ARIES)**.
 - ARIES is an **autonomous institute** of the Department of Science and Technology (DST).
- Purpose → The spectrograph can **locate sources of faint light** from:
 - Distant galaxies in a very young universe
 - Regions around supermassive black-holes around the galaxies
 - Cosmic explosions like supernovae, young and massive stars and faint dwarf galaxies.
- Location → The spectrograph has been successfully **commissioned on** the **3.6-m Devasthal Optical Telescope (DOT)**. It is located near **Nainital Uttarakhand**.
- Spectrograph → Spectrograph is an **instrument** that **obtains and records an astronomical spectrum**. It **separates incoming light** by its wavelength or frequency. It records the resulting spectrum in multichannel detectors like a photographic plate for analysis.

3.6-m Devasthal Optical Telescope

- Setup by → It was **set up in 2016** by Aryabhata Research Institute of Observational Sciences (**ARIES**).
- Purpose → It has been set up for the **study of celestial objects at optical wavelengths**.

- Celestial objects are any natural body outside the Earth's atmosphere. Examples are the Moon, Sun, the other planets of our solar system among others.
- Location → It is located at the **Devasthal Observatory site** near **Nainital, Uttarakhand**.
- Collaboration → The telescope is built in **collaboration with the Belgian firm Advanced Mechanical and Optical System (AMOS)**.
- Significance → It is currently the **largest reflecting telescope** in **Asia**.

6. Solid Fuel Ducted Ramjet Technology

Why in News?

- The DRDO successfully carried out a flight demonstration based on Solid Fuel Ducted Ramjet (SFDR) technology from the Integrated Test Range (ITR) Chandipur off the coast of Odisha.

About

- It is a **missile propulsion system** developed by the Defence Research and Development Organisation (**DRDO**).
- It is a missile propulsion system that **comprises the thrust modulated ducted rocket** along with the reduced smoke nozzle-less missile booster.
 - Thrust modulation of the system is achieved through a hot gas flow controller.
- It uses a **solid fuelled air-breathing ramjet engine**.
- It was developed with the aim of **developing the critical technologies** which are required in the propulsion systems of **future long-range air-to-air missiles** of India.
- Significance → The SFDR technology will help DRDO with the technological advantage to **develop long-range air-to-air missiles** (AAMs).
 - At present, such technology is available only with a handful of countries in the world and India is one of them.
- With this technology, India can have **fastest long-range missiles** in two categories, providing **full-fledged** and **multi-layered aerial protection** from hostile attacks.

👉 About Ramjet

- It is a form of **air-breathing jet engine** that uses the engine's forward motion to **compress incoming air without an axial compressor** or a **centrifugal compressor**.
- A ramjet-powered vehicle **requires an assisted take-off** like a rocket assist to accelerate it to a speed where it begins to produce thrust.
- Ramjets work most efficiently at **supersonic speeds** around **Mach 3** (three times the speed of sound) and can **operate up to speeds of Mach 6**.
- However, the ramjet efficiency **starts to drop** when the vehicle **reaches hypersonic speeds**.
- Ramjet powered missiles provide **greater range** and a **higher average speed compared** to missiles powered by solid propellants.
- ramjet missiles can carry a **bigger warhead** as they do **not have to carry an oxidizer**.
- Application →
 - Ramjets can be particularly useful in applications **requiring a small and simple mechanism for high-speed use**, such as missiles.

- They have also been used successfully, though not efficiently, as tip jets on the **end of helicopter rotors**.

📌 Defence Research and Development Organisation (DRDO)

- It is under the administrative control of the **Ministry of Defence**, Government of India.
- It is charged with the **military's research and development**.
- It was formed in **1958** and has its Headquarter in **Delhi**.
- DRDO is India's **largest and most diverse research organisation** with a network of 52 laboratories, which are engaged in developing defence technologies covering various fields.

7. India Science and Research Fellowship(ISRF) 2021

Why in News?

- 40 scholars from 6 countries have been awarded under the India Science Research Fellowship(ISRF) Program 2021.

About

- Launched by → the **Department of Science and Technology(DST)**, Government of India in **2015**.
- Purpose → **Awarded scientists and researchers from neighboring countries** are provided an opportunity to carry out their **research in Indian Institutes and Universities**. They will get benefits of using state-of-the-art facilities in these places.
- Countries Covered → **Afghanistan, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, Sri Lanka, and Thailand**.
- Significance → The fellowship is a platform that **establishes research cooperation** with neighboring countries of India. This is one of the important mandates of DST's International Science and Technology Cooperation.

8. Malaria

Why in News?

- El Salvador has become the first country in central America and the third in all Americas to get the malaria-free certificate from the World Health Organization (WHO) in recent years.

About

- A disease caused by a **plasmodium parasite** that commonly infects a certain type of mosquito which feeds on humans.
- Spread → **Female Anopheles mosquitoes** deposit parasite sporozoites into the skin of a human host.
- Four kinds of malaria parasites infect humans →
 - **Plasmodium falciparum, P. vivax, P. ovale, and P. malariae**.
 - In addition, **P. knowlesi**, a type of malaria that naturally infects macaques in Southeast Asia,



also infects humans, causing malaria that is transmitted from animal to human ("zoonotic" malaria).

- Symptoms → Malaria causes symptoms that typically include **fever**, **tiredness**, **vomiting**, and **headaches**. In severe cases, it can cause **yellow skin**, **seizures**, **coma**, or **death**.

📌 Durgama Anchalare Malaria Nirakaran (DAMaN) initiative

- Among states, Odisha's Durgama Anchalare Malaria Nirakaran (DAMaN) initiative is **significant**.
- The initiative aims to **deliver services** to the **most inaccessible and hardest hit people of the State**. The initiative has in-built innovative strategies to combat asymptomatic malaria.
- The programme is **jointly implemented by** Indian Council of Medical Research-National Institute of Malaria Research (**ICMR-NIMR**), National Vector Borne Disease Control Programme (**NVBDCP**), Odisha and Medicines for Malaria Venture (**MMV**).

9. Most Distant Quasar P172+18

Why in News?

- Recently, an international team of astronomers has discovered the most distant 'Radio-Loud' Quasar with the help of European Southern Observatory's Very Large Telescope (ESO's VLT).

About Quasars

- Quasars are **very luminous objects** in faraway galaxies that **emit jets at radio frequencies**.
- The word quasar is short for "**quasi-stellar radio source**".
- Most quasars are larger than our solar system. A quasar is **approximately 1 kiloparsec in width**.
- They are **only found in galaxies that have supermassive blackholes** which power these bright discs.
- Most **active galaxies have a supermassive black hole** at the centre which sucks in surrounding objects.
- Quasars are **formed by the energy emitted by materials swirling around a blackhole right** before being sucked into it.
- They are further categorised into the "**radio-loud**" and the "**radio-quiet**" classes.
 - Radio-loud → They are with powerful jets that are **strong sources of radio-wavelength emission**.
 - These make up about 10% of the overall quasar population.
 - Radio-quiet → They are those quasars lacking powerful jets, with relatively **weaker radio emission** than the radio-loud population.
 - The majority of quasars (about 90%) are radio-quiet.

📌 About the Discovery

- It is named **P172+18**, the quasar emitted wavelengths which had a **redshift of 6.8**.
 - Gravitational redshift occurs as **particles of light** (photons) **climb out of a gravitational well like a black hole** and the light's wavelength gets drawn out. This shifts the wavelength to the red part of the light spectrum - hence "**redshift**".
 - It took **13 billion years** for the **quasar's light to reach earth**.
 - The **higher** the redshift of the radio wavelength, the **farther away is the source**.
- The **glowing disc** around a blackhole is **300 million times more massive than our Sun**.

- It is also one of the **fastest accreting quasars**, which means it is accumulating objects from the galaxy at an **enormous speed**.
- Only three other '**radio-loud**' sources with redshift greater than six have been discovered so far and the most distant one had a **redshift of 6.18**.
- The scientists think that the powerful radio jets shooting out of the quasar fuelled the **appetite of the black hole**.
 - The jets are thought to be capable of disturbing the gas around the black hole, increasing the rate at which gas falls in.
- Inference → The **blackhole at its centre is consuming** from its galaxy at a stunning rate.
- Significance →
 - A detailed study of these 'radio-loud' super bright objects can help the astronomers to understand **how the supermassive black holes in their core grew to be as big** so rapidly since the Big Bang.
 - The team believes that **more such quasars** that tell stories about the **ancient universe will be found, perhaps even farther away from earth**.

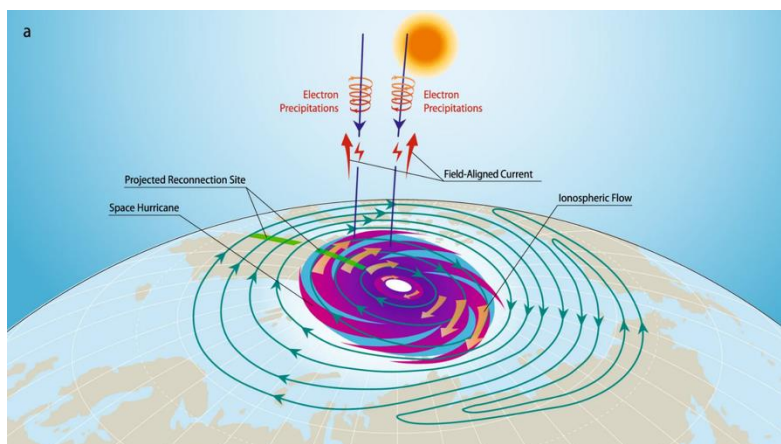
10. Space hurricanes

Why in News?

- Scientists from China recently discovered a space hurricane for the first time ever above the North pole. Previously, it was believed, space hurricanes were a theoretical phenomenon.

About Space hurricanes

- They are thought to be a **result of the solar wind and Earth's magnetic field interacting**.
- It is a **huge, funnel-like, spiral geomagnetic storm** that occurs above the polar Ionosphere of Earth, during extremely quiet conditions.
- They are related to the **aurora borealis phenomenon**, as the **electron precipitation** from the storm's funnel produces gigantic, cyclone-shaped auroras.
- They are made up of **plasmas**, consisting of **extremely hot ionized gases** that **rotate at extremely high speeds**.
- Formation → Space hurricanes are **caused by plasma unleashed from the sun as solar wind**. These charged particle clouds travel through space and fuel magnetic storms as they **interact with magnetic fields**.
- Impact → The researchers think these **kinds of storms** could **create more drag on satellites** and **interfere with radio signals** and communications, making these events particularly important to understand.



11. Project Information System & Management

Why in News?

- The Science and Engineering Board (SERB) has set up a portal called PROject Information System & Management (PRISM) that offers real time information on the various research projects supported by it.

About

- It is called '**SERB – PROject Information System & Management**' (SERB – PRISM)'.
 • The **e-platform** will provide a whole range of information regarding **all projects sanctioned by SERB from 2011 onwards**, including funding details, status, research summary and project output details such as publications and patents.
- Significance of PRISM →
 - The portal is expected to work as a **comprehensive tool** to **help forge stronger scientist-scientist, and science-society connections**.
 - It may be linked with important sectors such as water, energy, and climate and with the new concept of Scientific Social Responsibility (SSR).
 - It helps in the **democratisation of Research & Development funding trends**.

📁 Science and Engineering Board (SERB)

- SERB is a **statutory body** of the **Department of Science and Technology** (DST).
- It is chaired by **the Secretary to the Government of India** in the Department of Science and Technology and has other senior government officials and eminent scientists as members.
- Mandate → To **plan, promote** and **fund internationally competitive research** in emerging areas.
- Some important schemes of SERB →
 - **SERB-POWER Scheme**
 - **Accelerate Vigyan Scheme**: SERB
 - **National Mission on Interdisciplinary Cyber-Physical Systems**

12. Asteroid 2001 FO32

Why in News?

- The asteroid "2001 FO32", the largest asteroid predicted to pass by Earth in 2021, will be at its closest on 21st March 2021.

About

- Discovery → It was discovered **20 years ago** and ever since the **scientists** have been **tracking its orbital path** around the Sun very accurately.
- Orbit → It is in a **highly eccentric orbit around the Sun**. It completes one orbit every 810 days (about 2¼ years). The orbit is **tilted 39° to Earth's orbital plane**.
- Speed → The **asteroid will pass by** at about **1,24,000 kph**. It is faster than the speed at which most asteroids encounter Earth.
- No Threat of Collision → The **near-Earth** asteroid will make its **closest approach** at a **distance of about 2 million kilometers** or 5 1/4 times the distance from Earth to the Moon.
 - The distance is close in astronomical terms, that's why it has been designated a "**potentially hazardous asteroid**".
 - There is **no threat of a collision** with our planet now or for centuries to come.

- Next Close Approach → The asteroid will **not come this close to Earth again until 2052**, when it will pass by at about seven lunar distances, or 2.8 million km.

Asteroid

- Asteroids, sometimes called **minor planets**, are **rocky, airless remnants left** over from the early formation of the solar system about 4.6 billion years ago.
- Most of this ancient space rubble can be found **orbiting the Sun between Mars and Jupiter** within the **main asteroid belt**.
 - Some asteroids go in front of and behind Jupiter, which are called **Trojans**.
 - Asteroids that come close to Earth are called **Near Earth Objects** (NEOs) for short. NASA keeps close watch on these asteroids.
- Asteroids range in **size from Vesta** (the largest at about 329 miles in diameter) to bodies that are **less than 33 feet across**. The total mass of all the asteroids combined is less than that of Earth's Moon.
- Asteroids are **not all round like planets**. They have **jagged** and **irregular shapes**.
- Structure → Most asteroids are made of **different kinds of rocks**, but some have **clays** or **metals**, such as **nickel and iron**.

13. Genome Mapping in the Indian Ocean Project

Why in News?

- National Institute of Oceanography (NIO) is going to launch the first-of-its-kind project of Genome Mapping in the Indian Ocean. Indian Ocean is the third largest water body in the world, covering about 20% of the Earth's water surface.

About Project

- Aim →
 - To **gather samples** for genome mapping of microorganisms in the Indian Ocean.
 - To **understand the biochemistry** and the response of the ocean to climate change, nutrient stress and increasing pollution.
- Project Cost & Duration → **Rs. 25 crore** and will take **three years** to complete.
- How will the Project get conducted? →
 - The NIO research team onboard its **research vessel Sindhu Sadhana** will travel from India's east coast, all the way to Australia, then onward towards Port Louis in Mauritius and up to the border of Pakistan.
 - During this journey, they will **gather samples for genome mapping** of microorganisms at an average depth of 5 km.
 - They will then **map the DNA and RNA of these microorganisms** just like gene mapping on human blood samples.
- Significance of the Project → The genome mapping will **enable scientists to identify the factors controlling** the changes in RNA, DNA in the oceans and various stressors impacting them.
 - Next, the project will also help in **identifying which part of the ocean** has a **greater concentration** of which **mineral or element**.

📁 Genome Mapping

- Genome refers to an **organism's complete set of DNA** that **includes all its genes**. And mapping these genes simply means finding out the location of these genes in a chromosome.
- Therefore, Genome mapping essentially means figuring out the **location of a specific gene** on a **particular region of the chromosome**. It also means to determine the location of and relative distances between other genes on that chromosome.

📁 National Institute of Oceanography(NIO)

- NIO is an **autonomous research organization** established in **1966**. It is one of the 37 constituent laboratories of the Council of Scientific & Industrial Research (CSIR), New Delhi.
- Focus → The principal focus of **research** has been on **observing and understanding special oceanographic characteristics** of the Indian Ocean.
- Headquarters → **Goa**.

14. Artificial photosynthesis

Why in News?

- A team of Scientists from Jawaharlal Nehru Centre for Advanced Scientific Research have found a method that mimic the Photosynthesis which is the natural process of reducing the carbon dioxide in the atmosphere.

About

- This artificial photosynthesis **harnesses solar energy** and **converts the captured carbon dioxide to carbon monoxide**, which can be used as a fuel for internal combustion engines.
- In artificial photosynthesis, scientists are essentially conducting the **same fundamental process** in **natural photosynthesis** but with **simpler nanostructures**.
- However, there are **plenty of hurdles** to overcome as a successful catalyst to carry out AP.
- A team of scientists from JNCASR has designed and fabricated an **integrated catalytic system** based on a **metal-organic framework (MOF-808)** comprising a **photosensitizer** (molecules which absorb light and transfer the electron from the incident light into another nearby molecule) that can **harness solar power** and a **catalytic centre** that **can eventually reduce CO₂**.
- The developed **catalyst** exhibited **excellent visible-light-driven CO₂ reduction to CO** with more than 99% selectivity.
- The catalyst also **oxidizes water to produce oxygen (O₂)**.
- The photocatalytic assembly, when **assessed for CO₂ reduction** under **direct sunlight** in a water medium without any additives, showed superior performance of CO production.
- Being **heterogeneous**, the **integrated catalytic assembly** can be **reused for several catalytic cycles** without losing its activity.
- Remember → JNCASR or Jawaharlal Nehru Centre for **Advanced Scientific Research** is an **autonomous institute** under the **Dept. of Science and Technology**, GOI, located in Bangalore.

15. Baikal-GVD

Why in News?

- Russian scientists have deployed Baikal-GVD, a giant underwater space telescope in Lake Baikal.

About

- It will **search for neutrinos**, which are nearly massless subatomic particles with no electrical charge.
- **Clear freshwater and thick**, protective ice cover make Lake Baikal an **ideal place to search for neutrinos**.
- **Neutrinos →**
 - Neutrinos are the **smallest particles** currently known.
 - Neutrinos are **everywhere**, but they **interact so weakly** with the forces around hence, are **hard to detect**.

📌 Lake Baikal

- Situated in **south-east Siberia**, the 3.15-million-ha lake is the **oldest** (25 million years) and **deepest** (1,700 m) lake in the world.
- It contains **20% of the world's total unfrozen freshwater reserve**.
- Known as the '**Galapagos of Russia**', its age and isolation have produced one of the world's richest and most unusual freshwater faunas.
 - It is home to approximately 1,700 to 1,800 endemic plant and animal species
- In 1996, it was declared a **UNESCO World Heritage Site**.

16. Candida Auris

Why in News?

- Candida Auris (deadly hospital pathogen) identified for the first time in the Andaman and Nicobar Islands.

About

- Candida Auris or C.auris is a **multidrug-resistant fungus**. It presents a serious global threat to human health.
- Origin of Candida Auris → Candida Auris was first identified in **2009** in a **patient in Japan**. The fungus emerged in more than 40 countries across five continents in the last decade.
- The fungus is mostly found in **tropical marshes** and **marine environments, outside hospital environments**.
- However, It is an **emerging pathogen**, thus very little is known about the Candida Auris so far.
- Symptoms of C. Auris →
 - C. Auris infections can show **no symptoms before turning into a fever and chills**. These symptoms don't go away despite the use of medicines and can lead to death.
 - C. auris **survives on the skin** before **entering** the body **through wounds**. Once in the bloodstream, it causes severe illness and can lead to death.
- Why is C. Auris considered harmful? C.Auris is considered dangerous because of three reasons →
 - C. Auris is often **multidrug-resistant**. It means that it is resistant to multiple antifungal drugs commonly used to **treat Candida infections**.
 - C. Auris can **survive and persist** within the **hospital environment for prolonged periods**. It is capable to survive on dry environmental surfaces for prolonged periods. It means that it is well adapted to survival outside human host settings as well.
 - C. Auris is **difficult to identify with standard laboratory methods**, and it can be misidentified in labs without specific technology. Misidentification may lead to inappropriate management.

- Vulnerable Population → C. Auris can be **deadly for immunocompromised patients**. The incidence of deaths from this fungal infection is **high in countries** such as **the US and the UK**, but its prevalence is less in Indian hospitals.
- Treatment → Most C. auris infections are **treatable** with a **class of antifungal drugs** called **echinocandins**. However, some C. auris infections have been resistant to **antifungal medications** making them **more difficult to treat**.

17. Diatom test

Why in News?

- Maharashtra Anti-Terrorism Squad (ATS) relied on a diatom tests for leads in the alleged murder case of Mansukh Hiran.

About

- **Diagnosis of death by drowning** is **difficult in forensic pathology**; the mere recovery of a body from a water body does not necessarily imply that the death was due to drowning.
- This where the diatom test comes in: it is an **important one** among a number of tests that have been developed to **confirm if the cause of death in such cases was indeed drowning**.
- A diatom is a **kind of algae** found in almost **every aquatic environment**, including fresh and marine waters, soils and, in fact, **almost anywhere moist**. A diatom test, therefore, **entails finding if there are diatoms in the body recovered**.

The science

- If a **person is alive** when he or she enters the water, diatoms will **enter the lungs** when he or she inhales water while drowning. These diatoms then get carried to various parts of the body, including the brain, kidneys, lungs and bone marrow by blood circulation.
- If the **person is dead** when thrown into the water, there is **no circulation** and therefore **no transport of diatoms** to the organs.

18. NISAR

Why in News?

- NASA and ISRO are collaborating on developing a satellite called NISAR (NASA-ISRO Synthetic Aperture Radar).

About

- The satellite will be **launched in 2022** from the **Satish Dhawan Space Center** in Sriharikota, India, into a near-polar orbit.
- It will **scan** the **globe every 12 days** over the course of its three-year mission of **imaging the Earth's land, ice sheets** and **sea ice** to give an **"unprecedented"** view of the planet.
- It will **detect movements of the planet's** surface **as small as 0.4 inches** over areas about half the size of a tennis court.
- **NASA** will provide **one of the radars for the satellite**, a **high-rate communication subsystem** for science data, **GPS receivers** and a payload data subsystem.

- **ISRO** will provide the **spacecraft bus**, the second type of **radar** (called the S-band radar), the **launch vehicle** and **associated launch services**.
- NISAR will be equipped with the **largest reflector antenna** ever launched by NASA and its primary goals include **tracking subtle changes in the Earth's surface**, spotting warning signs of imminent volcanic eruptions, helping to monitor groundwater supplies and tracking the rate at which ice sheets are melting.

Synthetic aperture radar

- The name NISAR is short for **NASA-ISRO-SAR**. SAR here refers to the synthetic aperture radar that NASA will **use to measure changes in the surface of the Earth**.
- Essentially, SAR refers to a **technique for producing high-resolution images**. Because of the precision, the radar can penetrate clouds and darkness, which means that it can collect data day and night in any weather.

19. New Bacterial Strains

Why in News?

- Researchers have discovered three new strains of bacteria on the International Space Station.

About

- The bacterial strains belong to the **family Methylobacteriaceae**.
- The **rod-shaped bacteria** contain genes that can **help in nitrogen fixation**, plant growth and biocontrol activity against plant pathogens.
- The researchers named the novel species as **Methylobacterium ajmalii**, in honour of the renowned Indian biodiversity scientist, Dr Ajmal Khan, a former professor at Annamalai University in Tamil Nadu.

20. Humans in Space Policy for India - 2021

Why in News?

- The Department of Space has put up for public consultation, the draft "Humans in Space Policy for India - 2021" and guidelines and procedures for its implementation.

About

- **Applicability** → The guidelines are applicable to **activities presently postulated under Indian human space program (IHSP)** and for those activities which shall be defined and carried out in future in conjunction with IHSP.
- **Aim** → It envisages **undertaking demonstration of human spaceflight to LEO** (low-earth orbit) in the **short-term** and lay the foundation for a sustained exploration in the long run that will enable presence in LEO and beyond.

Indian Human Spaceflight Programme (IHSP):

- IHSP was **initiated in 2007** by the Indian Space Research Organisation (ISRO) to develop the technology needed to launch crewed orbital spacecraft into **Low Earth orbit**.
- Under it, **first unmanned mission is planned in December 2021**. Second unmanned flight is planned in 2022-23, followed by human spaceflight demonstration (Gaganyaan).

- Gaganyaan has been designed to **carry three Indian astronauts to the low earth orbit** (an orbit of 300-400 km) for a period of **five to seven days**.
- It will take off on a **GSLV Mk III** which is capable of launching **four tonne** satellites in the **Geosynchronous Transfer Orbit (GTO)**.
- **GSLV Mk III is configured as a three-stage vehicle**: Two solid strapon motors; One liquid core stage and a high thrust **cryogenic (mixture of liquid oxygen and liquid hydrogen)** upper stage Test.
- **Gaganyaan National Advisory Council** has been created with members from different institutions and industries to deliberates on various aspects of the mission.
- Gaganyaan includes a **Space Capsule Recovery Experiment** (SRE- 2007), Crew module **Atmospheric Reentry Experiment** (CARE-2014), GSLV Mk-III (2014), **Reusable Launch Vehicle** Technology Demonstrator (RLV-TD), **Crew Escape System** and **Pad Abort**.

Geography

1. Mount Etna

Why in News?

- Recently, the Mount Etna has awed seasoned volcanologists with spectacular spurts of lava lighting up the Sicilian sky each night.

About

- It is the **highest** and **most active volcano in Europe**.
- It is an **active stratovolcano** on the **east coast of Sicily, Italy**, in the Metropolitan City of Catania, between the cities of Messina and Catania.
- It is associated with the **subduction of the African plate** under the Eurasian plate.



2. Nag River

Why in News?

- The Nag River Pollution Abatement Project has been approved at a cost of Rs. 2,117.54 crores. It will be implemented by the National River Conservation Directorate.

About Nag River

- The Nag River, which flows **through Nagpur city**, is now a **highly polluted** water channel of sewage and industrial waste.
- Origin - **Western weir of Ambazari Lake** in west Nagpur.
- Nag River is the **main river** along with the other, **River Pili Nadi**.
- These two rivers later merge, and join the **River Kanhan** near the city outskirts.

🏠 National River Conservation Directorate:

- The National River Conservation Directorate (NRCD) is **implementing the Centrally Sponsored Schemes** of National River Conservation Plan (**NRCP**) and National Plan for Conservation of Aquatic Ecosystems (**NPCA**) for the conservation of rivers, lakes and wetlands in the country.
- NRCD is under the **Ministry of Environment, Forests and Climate Change**.
- NRCD only provides **financial assistance** to the State Governments/local bodies to **set up infrastructure for pollution abatement of rivers** in identified polluted river stretches under the National River Conservation Plan (**NRCP**).
- The objective of the NRCP is to **improve the water quality** of the rivers, which are the major water sources in the country, through the implementation of pollution abatement works.

3. Red Rice

Why in News?

- The first consignment of red rice was shipped from India to the US.

About

- Iron-rich 'red rice' is grown in the **Brahmaputra valley of Assam**, without the use of any chemical fertilizer.
- The rice variety is referred to as '**Bao-dhaan**', which is an **integral part of Assamese food**.
- The red colour is due to the **presence of the pigment** called **anthocyanin**.
- It would **enhance** the **incomes of farming families** of the Brahmaputra flood plains.
- The red rice has **more nutritional value** than conventional rice varieties and a **distinctive nutty flavour**.
- Red rice is enriched with the **goodness of antioxidants** and **magnesium**, which helps in preventing and curing several diseases.
- Red rice helps in **regulating insulin level**. The **low glycemic index** of red rice helps in controlling the sugar level and is good for diabetic patients.

4. Brahmaputra river

Why in News?

- In its new Five-Year Plan (2021-2025), China has proposed to build first dams on the lower reaches of Yarlung Zangbo river, as the Brahmaputra is known in Tibet before it flows into India.

About

- Brahmaputra River also called **Yarlung Tsangpo in Tibet, Siang/ Dihang River in Arunachal Pradesh**. It is **a trans-boundary river** that flows through Tibet, India, and Bangladesh.
- Origin → The river rises in the **Chemayungdung Glacier** in the Kailash Range in Tibet.
- It descends rapidly from Tibet forming a **Grand Canyon** and then **flows eastward** and **reaches Namche Barwa**. It then takes a **U-turn** and **enters India in Arunachal Pradesh** and known as **dihang**.
- Important Tributaries of River Brahmaputra →
 - Major left bank tributaries: **Burhi Dihing, Dhansari (South), Kailang, Lohit, Dibang**
 - Major right bank tributaries: **Subansiri, Kameng, Manas, Sankosh, Teesta**.
- Perennial River → the Brahmaputra is a **perennial river**. It has several peculiar characteristics due to its geography and prevailing climatic conditions.
- Perennial Rivers can be defined as the river with the **continuous flow throughout the year**, such as the rivers Ganges and Brahmaputra.
- Significance → **Most rivers** on the Indian subcontinent have **female names**. But this river has a **rare male name** that literally translates as '**Son of Brahma**'. The river is also revered by Hindus, Jains, and Buddhists.
- Biodiversity → The rich rainforests of this basin is home to **many species of flora and fauna**. It hosts National Parks like the Kaziranga, Manas, and Kanchanjunga.
- Importance of Brahmaputra River for India:
 - The river Brahmaputra and its tributaries carry **more than 30% of the total water resource potential of India**.

- The river is also extremely **important for livelihood** and for **transportation of people** and materials in the North East India.

5. Maitri Setu

Why in News?

- Recently, the Prime Minister's Office has announced that the Prime Minister will inaugurate the Maitri Setu.

About

- It is a **bridge between India and Bangladesh**.
- It is built **over Feni River** which flows between Indian boundary in **Tripura State and Bangladesh**.
- The name 'Maitri Setu' symbolizes **growing bilateral relations** and friendly ties between India and Bangladesh.
- Its construction was taken up by the **National Highways and Infrastructure Development Corporation Ltd.**
- It is a **1.9 Km long bridge** which joins Sabroom in India with Ramgarh in Bangladesh.

📌 About Feni River

- The Feni River, which forms part of the **India-Bangladesh border**, originates in the **South Tripura district**.
- It passes through **Sabroom town on the Indian side**, and **meets the Bay of Bengal** after it flows into Bangladesh.

6. Sanaa

Why in News?

- A Saudi-led military coalition mounted air strikes on Yemen's Houthi-controlled capital Sana'a after it intercepted 10 drones launched by the Iran-backed rebels.

About

- Sanaa also spelled **Sana'a** or **Sana**, is the **largest city in Yemen**.
- Under the Yemeni constitution, **Sana'a is the capital** of the country, although the seat of the Yemeni government **moved to Aden**, the former capital of South Yemen in the aftermath of the Houthi occupation.
- Aden was declared as the **temporary capital** by President Abdrabbuh Mansur Hadi in March 2015.
- It is located **next to the Sarawat Mountains** of Jabal An-Nabi Shu'ayb and Jabal Tiyal, considered to be the **highest mountains in the country** and amongst the highest in the region.



- The Old City of Sana'a, a **UNESCO World Heritage Site**, has a distinctive architectural character, most notably expressed in its multi-storey buildings decorated with geometric patterns.

7. Indonesia's Mt. Sinabung

Why in News?

- Recently, Mt. Sinabung, an active volcano on Indonesia's Sumatra island has erupted.

About

- Mt. Sinabung (2,600-metre) is located in **Karo regency, North Sumatra**.
- Sinabung is among **more than 120 active volcanoes** in Indonesia, which is prone to seismic upheaval due to its location on the Pacific Ring of Fire.
- The volcano was **dormant for 400 years** before exploding in 2010.
- It **exploded again** in **2014**, **2016** and **2020**.

👉 Ring of Fire

- The Ring of Fire, also referred to as the **Circum-Pacific Belt**, is a **path along the Pacific Ocean** characterized by active volcanoes and frequent earthquakes.
- It traces boundaries between **several tectonic plates**—including the Pacific, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.
- The abundance of volcanoes and earthquakes along the Ring of Fire is **caused by the amount of movement of tectonic plates** in the area.



8. Bhadar Dam

Why in News?

- Recently, the Dam Safety Organisation of the Central Water Commission has recommended replacement of floodgates of Bhadar dam which were damaged in the flash flood of 2015.

About

- Bhadar dam is **located in Rajkot** and is **second largest in Saurashtra region** after Shetrunji dam.
- Bhadar dam is **on the Bhadar River** in Saurashtra region in Gujarat.
- The construction work for this dam **started in 1952** and water for irrigation from it was given to farmers for the **first time in 1963**.

- The Bhadar Dam and Shetrunji Dam are **constructed across Shetrunji and Bhadar rivers**.

👉 Shetrunji Dam and River

- It originates from the **Amreli district of Rajkot**.
- Its tributaries are **Satali, Thebi, Gagario, Rajaval, Kharo, Shel, Khari** and **Talaji**.

👉 Bhadar River

- The Bhadar is one of the **major rivers of Kathiawar (Saurashtra) peninsula in Gujarat**.
- It **originates near Vaddi** in Rajkot district at an elevation of 261 m above mean sea level.
- It flows through the Saurashtra region and finally **confluence with Arabian sea** at Naviobandar (Porbandar).
- The total length of this river is **198 km**. It drains about 1/7th of the area of Saurashtra.

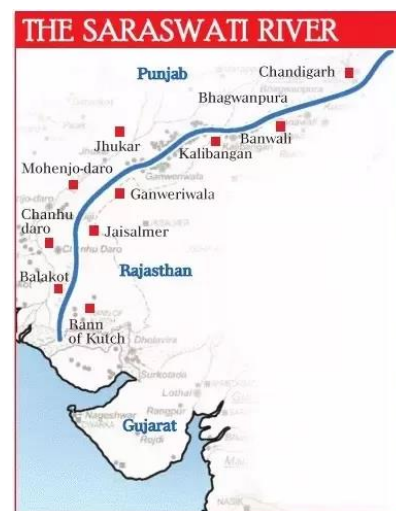
9. Advisory Committee on Saraswati River

Why in News?

- The Central Government reconstitutes an advisory committee for studying the mythical Saraswati river for the next two years. The earlier panel's term ended in 2019.

About Committee

- The Archaeological Survey of India(ASI) had **first set up** the Advisory Committee for the Study of the River Saraswati in **2017 for two years**. The committee has now been **reconstituted**.
- Purpose → To study the mythical Saraswati river and draw up a **plan to identify its basin and define its path**.
- Chaired by → The committee is chaired by the **Culture Minister**.
- It would **include officials from** the Culture, Tourism, Water Resources, Environment and Forest, Housing and Urban Affairs Ministries; representatives of the Indian Space Research Organisation; officials from the governments of Gujarat, Haryana and Rajasthan; and an ASI official.



About Saraswati River:

- Historical evidence → Saraswati River is a **mystical river** mentioned in the **Rig Veda and later Vedic and post-Vedic texts**. The river played an important role in the Vedic religion appearing in all but the fourth book of the Rigveda.
- The river, which had originated **from Kapal tirth in the Himalayas** in the west of Kailash, was flowing **southward to Mansarovar** and then taking a turn towards west.
- The river flowed through **Haryana, Rajasthan** and **North Gujarat**. It also flowed **through Pakistan** before meeting Western Sea through Rann of Kutch and was approximately 4,000 km in length.
- The river had two branches: **western** and **eastern**.

About Archaeological Survey of India (ASI):

- ASI is the **premier organization for** the archaeological research, scientific analysis, excavation of archaeological sites, conservation, and preservation of protected monuments.
- Nodal Ministry → It is an **attached office** under the **Department of Culture, Ministry of Culture**.
- Founded in → It was founded in **1861** by **Alexander Cunningham**. He was the first Director-General of ASI.

10. Baralacha Pass

Why in News?

- For the first time ever, the Border Roads Organisation (BRO) has started work on reopening the crucial Baralacha Pass in Himachal Pradesh much before schedule to restore connectivity to Leh in Ladakh.

About

- Bara-lacha la also known as **Bara-lacha Pass** is a high mountain pass in Zaskar range, **connecting Lahaul district in Himachal Pradesh to Leh district in Ladakh**, situated along the **Leh–Manali Highway**.
- The pass also acts as a **water-divide** between the Bhaga river and the Yunam river.
- The **Bhaga river**, a tributary of the Chenab river, **originates from Surya taal lake**, which is situated a few of kilometers from the pass towards Manali.



Major Passes in India

Geog.

11. Mullaperiyar dam

Why in News?

- The Supreme Court has issued a warning to Tamil Nadu in the Mullaperiyar case.

About

- The Mullaperiyar, a **123-year-old dam**, is located on the **confluence of the Mullayar and Periyar rivers** in Kerala's Idukki district.
- The dam stands at the **height of 53.66 metres** and **365.85 metres** in **length**.
- It is **operated and maintained by the Tamil Nadu** for meeting the drinking water and irrigation requirements of five of its southern districts.
 - According to a 999-year lease agreement made during the British rule the operational rights were handed over to Tamil Nadu.
- The dam intends to **divert the waters** of the **west-flowing river Periyar eastward** to the arid rain shadow regions of the Tamil Nadu.



📌 Periyar River

- The Periyar River is the **longest river in the state** of **Kerala** with a length of 244 km.
- It is also known as '**Lifeline of Kerala**' as it is one of the **few perennial rivers** in the state.
- A **perennial river** is a channel that has continuous flow in parts of its stream bed all year round.
- Periyar River originates from **Sivagiri hills of Western Ghats** and flows through the Periyar National Park.
- The main tributaries of Periyar are **Muthirapuzha, Mullayar, Cheruthoni, Perinjankutti**.

12. Chenab Bridge

Why in News?

- World's highest railway bridge.

About

- World's highest rail bridge, located **over the Chenab river** in **Jammu and Kashmir**.
- Connects the **Kashmir valley to the rest of the nation**.
- It is **1315m long** and has an **arch of 467m** and is 359m above sea level.
 - 35m higher than the Eiffel Tower.
- Design **life of the bridge** is estimated to be **120 years**.
- Constructed in **hostile terrain** in **young fold mountains** of Himalayas and inclement climate.
- Part of Indian Railways' **Udhampur- Srinagar-Baramulla rail link project**.
 - Expected to form an important link in the 111 km long stretch present between Katra and Banihal.
- Designed to **withstand earthquake forces** up to **Seismic Zone V**.
- Designed to be "**blast-proof**" in **consultation with DRDO**.

📌 Chenab River

- Source → It rises in the upper Himalayas in the **Lahaul and Spiti district of Himachal Pradesh state**.
- The river is formed by the confluence of two rivers, **Chandra and Bhaga**, at **Tandi**, 8 km southwest of Keylong, in the **Lahaul and Spiti district**.
 - The **Bhaga river** originates from **Surya taal lake**, which is situated a few kilometers west of the Baralacha la pass in Himachal Pradesh.
 - The **Chandra river** originates from **glaciers east of the same pass** (near Chandra Taal).
- Flows Through → It flows through the **Jammu region** of Jammu and Kashmir into the plains of **Punjab, Pakistan**, before flowing into the Indus River.

13. National Cyclone Risk Mitigation Project

Why in News?

- The government of India has informed Lok Sabha about the implementation of the National Cyclone Risk Mitigation Project (NCRMP).

About

- It was launched by the **Ministry of Home Affairs** with the support of the World Bank. It **addresses the cyclone risks** in the country.
- Aim → To undertake **suitable structural and non-structural measures** to mitigate the effects of cyclones in the coastal states and UTs of India.
- Objectives →
 - **Improving early warning dissemination systems**
 - **Enhancing the capacity of local communities** to respond to disasters
 - **Improving access to emergency shelter**, evacuation, and protection against wind storms, flooding, and storm surge in high areas
 - **Strengthening Disaster Risk Management**(DRM) capacity at central, state, and local levels.
- Implementation → **National Disaster Management Authority**(NDMA) in **coordination** with participating State Governments and the National Institute for Disaster Management (**NIDM**).
- Coverage → The Project has **identified 13 cyclone-prone States** and **Union Territories**(UTs) with varying levels of vulnerability. These States/UT have further been **classified into two categories**:
 - **Category I → Higher vulnerability States** namely Andhra Pradesh, Gujarat, Odisha, Tamil Nadu, and West Bengal.
 - **Category II → Lower vulnerability States** i.e. Maharashtra, Karnataka, Kerala, Goa, Pondicherry, Lakshadweep, Daman and Diu, Andaman, and the Nicobar Islands.

14. Ken-Betwa Link Project

Why in News?

- Chief Ministers of Madhya Pradesh and Uttar Pradesh signed a memorandum of agreement to implement the Ken Betwa Link Project (KBLP), the first project of the National Perspective Plan for interlinking of rivers.

About

- The Ken-Betwa Link Project is the River **interlinking project** that aims to **transfer surplus water from the Ken river in MP to Betwa in UP** to irrigate the drought-prone Bundelkhand region.
- The project involves building a **77-metre tall** and a **2-km wide Dhaudhan dam** and a **230-km canal**.
- Ken-Betwa Link Project is the **first project** under the **National Perspective Plan for the interlinking of rivers**.
- This project will **spread across** the districts of **MP** and **UP** i.e. Tikamgarh, Panna and Chhatarpur districts of MP and in UP; Jhansi, Banda, Lalitpur and Mahoba districts.
- Phases under the Project → The Ken-Betwa Link Project has **two phases**.
 - Under Phase-I, **Daudhan dam complex** and **Ken-Betwa link canal** and **Powerhouses** — will be completed.
 - Under Phase-II, three components — **Lower Orr dam**, **Bina complex project**, and **Kotha barrage** — will be constructed.



- Benefits → The project will be of immense **benefit** to the **water-starved region of Bundelkhand** in Uttar Pradesh.

📌 National River Linking Project(NRLP)

- National River Linking Project (NRLP) also known as the **National Perspective Plan** aims to **link Indian rivers** by a network of reservoirs and canals.
- Objective → The main objective is to **transfer water from water 'surplus' basins suffering from floods to water 'deficit' basins** suffering from drought/scarcity.
- Prepared by → The then **Ministry of Irrigation** prepared this plan in August 1980.
- Managed by → The NRLP is managed by **National Water Development Agency** (NWDA) under the **Ministry of Jal Shakti**.
- Components → The plan **proposes 30 river links** to **connect 37 rivers** across India under two components:
 - **Himalayan Rivers Development Component** → Under this, 14 river links have been identified.
 - **Peninsular Rivers Development Component or the Southern Water Grid** → It includes 16 river links. Ken Betwa Link Project is one among them.

15. Suez Canal

Why in News?

- Recently, the Suez Canal has been blocked after a large cargo ship ran aground while passing through it, bringing traffic on the busy trade route to a halt.

About

- It is a critical shipping artery that **connects the Mediterranean and Red Seas** through Egypt.
- It is a **human-made waterway** and as one of the **world's most heavily used shipping lanes**, carrying over **12% of world trade** by volume.
- It was **built in 1869** to provide a **major shortcut for ships** moving between Europe and Asia.
- The **150-year-old canal** was **controlled by British and French interests** in its initial years, but was **nationalised in 1956 by Egypt**.
- In 2015, **Egypt** announced plans to **further expand the Suez Canal**, aiming to reduce waiting times and double the number of ships that can use the canal daily by 2023.
- Significance of Suez Canal →
- The canal is a **major source of income for Egypt's economy**, with the African country **earning \$5.61 billion** in revenues from it in 2020.
- According to reports, nearly 50 ships pass through it every day, and it accounts for **12% of world trade**.



16. Tulip garden

Why in News?

- Prime Minister Narendra Modi asked everyone to visit tulip garden, located at the foothills of Zabarwan range in Jammu and Kashmir.

About

- Location → The tulip garden is located at the **foothills of the Zabarwan range**.
- It is **Asia's largest tulip garden**, spreading over an area of about **30 hectares**.
- Significance → This garden is home to more than **64 varieties of tulips in bloom**. It was started in **2007** to boost floriculture and tourism in Kashmir Valley.

📌 Zabarwan Range:

- It is a **short sub-mountain range** between Pir Panjal and Great Himalayan Range. It is located in the **central part of the Kashmir Valley**.
- The Highest Peak → The highest peak of this range is **Mahadev Peak** at **13,013 feet** (3,966 m). It forms the distant background of the eastern mountain wall.
- Temple → The **Shankaracharya Temple** is built on the edge of the central part of the Zabarwan Range.
- Significance → On the northern slopes of the central part of the range there are **three Mughal gardens built by Emperor Shah Jahan**. These include **Chashma Shahi**, **Nishat Bagh**, and **Shalimar Garden** alongside the Pari Mahal.
- Wildlife → The Zabarwan mountain range possesses great Himalayan features with **rich wildlife**. The **Dachigam National Park** is the **main feature of the range**.
- The Dachigam National Park holds the last viable population of **Kashmir stag** (Hangul). Further, the National Park also has the **largest population of black bear in Asia**.



17. Climate Data Service Portal

Why in News?

- India Meteorological Department celebrated World Meteorological Day on 23rd March, 2021. Ministry of Earth Science inaugurated Climate Data Services Portal of IMD on this occasion.

About

- Developed by → **India Meteorological Department** (IMD), **Pune**.
- Aim → Climate Data Service Portal serves as an **integrated platform** that aims to provide **weather and climate services** to the users.
- It complements **fully automated climate data management process** from real-time data acquisition to expeditious data dissemination.
- The major components of the portal are listed below →
 - **Real-Time monitoring** of weather observations recorded by IMD Observatories.
 - **Encapsulated IMD Metadata Portal**, other reports and dashboards
 - **Online access to meteorological data** through Data Supply Portal.
 - **Free download facility** for Gridded Temperature and Rainfall Data of India.

- Climatological Tables, Extremes and Normal.
- Information on Monsoon Rainfall and Cyclone frequencies.
- Data analytics and info graphics.

📌 India Meteorological Department (IMD):

- India Meteorological Department (IMD) was established in **1875**. It is an agency of the Ministry of Earth Sciences.
- It is the principal agency responsible for meteorological observations, weather forecasting, and seismology.
- IMD is also one of the six Regional Specialised Meteorological Centres of the World Meteorological Organization.

📌 World Meteorological Organization (WMO):

- World Meteorological Organization (WMO) is a specialized agency of the United Nations. It is responsible for promoting international cooperation in atmospheric science, climatology, hydrology, and geophysics.
- WMO originated from the International Meteorological Organization (IMO). The idea of IMO is rooted in the Vienna International Meteorological Congress, 1873.
- WMO was then established by the ratification of the WMO convention in 1950. After that, the organization became a specialized agency of the United Nations(UN) in **1951**.
- Headquarters → Geneva, Switzerland.

📌 World Meteorological Day:

- World Meteorological Day is observed on March 23rd every year. It is observed to mark the establishment of the World Meteorological Organization (WMO).
- The theme for 2021 → The Ocean, Our Climate, and Weather.

18.Eritrea

Why in News?

- Eritrea will withdraw troops from Ethiopia almost five months after a conflict started in the Tigray region.

About

- Eritrea, a country of the Horn of Africa, located on the Red Sea.
- The country is bounded to the southeast by Djibouti, to the South by Ethiopia, and to the West by Sudan.



Polity

1. Contempt of Court

Why in News?

- The Sircilla collector and his two subordinates were sentenced to three months' jail by the Telangana high court for wilful violation of the court's order in a contempt case.

About

- Contempt of Court Act of 1971 defines 2 types:
 - Civil contempt → **Wilful disobedience** to any judgment, decree, direction, order, writ or other process of a court or **wilful breach** of an **undertaking given to a court**.
 - Criminal contempt → **Publication** or **any act scandalising** or **lowering authority of court** or interfering with any judicial proceeding or obstructing administration of justice in any other manner.
- In general, **prior permission** of the **Attorney General is required** for filing Criminal Contempt Cases.
- However, as stated in **Prashant Bhushan Case**, courts can also take **Suo moto cognizance** as per **Article 129**.
- Civil Contempt doesn't require** such **prior permission**.
- 2006 Amendment → Included **"truth and good faith"** as a defence.
- Punishments granted only if the **act of the other person substantially interferes, or tends to interfere** with the due course of justice.
- Punishment → Imprisonment upto **6 months** or **fine of Rs. 2000 or both**.
- Contempt of Court is **not defined in the Constitution** but the word has been mentioned over there. It's definition comes from Contempt of Court Act, 1971.
- Relevant provisions → **Article 129 and 215 of the Constitution** of India empowers the Supreme Court and High Court respectively to punish people for their respective contempt.

2. Freedom in the World 2021 Report

Why in News?

- The Freedom in the World 2021 report has downgraded India's status from 'Free' to 'Partly Free'.

About

- Published By → USA based **human rights watchdog Freedom House**, which is **largely funded through USA** government grants, has been tracking the course of democracy since 1941.
- The report assesses the **individual's real-world rights and freedoms**. It doesn't focus on governments or government performance in Human Rights.
- Countries → The 2021 edition covers developments in **195 countries** and **15 territories** from January 1, 2020, through December 31, 2020.
- Scores are Based on →
 - Political rights indicators** such as the electoral process, political pluralism and participation and government functioning.

- **Civil liberties indicators** related to freedom of expression and belief, associational and organisational rights, the rule of law and personal autonomy and individual rights.
- Countries are declared as “**free**”, “**partly free**” or “**not free**”.

📌 Key Findings Related to India:

- India's rank has **fallen from 83 to 88** out of 195 countries and 15 territories.
- India's score **decreased from 71 to 67**.
- India's status has been downgraded from '**Free**' to '**Partly Free**'.

3. No-Confidence Motion

Why in News?

- Recently, the Haryana Assembly Speaker has accepted the no-confidence motion against the Manohar Lal Khattar government moved by Leader of Opposition.

About

- **Rule 198 of the Rules of Procedure and Conduct of** Lok Sabha specifies the procedure for moving a no-confidence motion.
- It can be **moved only in the Lok Sabha** and not Rajya Sabha.
- If **any member** of the House feels that the government in power does not have a majority then he/she can move a no-confidence motion.
 - The member **need not give a reason** for moving the no-confidence motion.
- The member has to give **written notice of the motion before 10 am** which will be read out by the Speaker in the House.
- A **minimum of 50 members have to accept** the motion and accordingly, the Speaker will announce the date for discussion for the motion.
- The **allotted date has to be within 10 days from the day** the motion is **accepted**. **Otherwise, the motion fails** and the member who moved the motion will be informed about it.
- If the **motion is accepted**, then the **party in power has to prove its majority** in the House.
- If the government is **not able to prove** its majority in the House, then the **government of the day has to resign**.
- Article 75 spells it out that the council of ministers shall be collectively responsible to the House of the People which implies that the majority of Lok Sabha members must support the prime minister and his cabinet.

4. Unlawful Activities (Prevention) Act

Why in News?

- A local court in Gujarat recently acquitted 122 persons arrested under the Unlawful Activities (Prevention) Act for participating in a meeting organised in December 2001 as members of the banned outfit Students' Islamic Movement of India (SIMI).

About

- It is an **anti-terror legislation** that seeks to **designate an individual** as a “**terrorist**”.
- It is **aimed at** “more effective prevention of certain unlawful activities of individuals and associations for dealing with terrorist activities”.
- It was first promulgated in **1967** to **target secessionist organisations** and is considered to be the **predecessor of laws** such as the (now repealed) Terrorist and Disruptive Activities (Prevention) Act (**TADA**) and Prevention of Terrorism Act (**POTA**).
- Any **Indian** or **foreign national charged under UAPA** is **liable for punishment** under this Act, irrespective of the location of crime/offence committed.
- It has **death penalty** and **life imprisonment** as highest punishments.
- Under the UAPA, the investigating agency can file a charge sheet in **maximum 180 days after the arrests** and the duration can be **extended further** after intimating the court.

As per amendments of 2019

- The Act **empowers** the **Director General of National Investigation Agency** (NIA) to grant approval of **seizure** or **attachment of property** when the case is investigated by the said agency.
- The Act empowers the officers of the NIA, of the **rank of Inspector** or **above**, to **investigate cases of terrorism** in addition to those conducted by the DSP or ACP or above rank officer in the state.
- It also has the provision of **designating an individual as a terrorist**. Prior to this amendment, only organizations could be designated as terrorist organizations.

5. Inner-Line Permit (ILP)

Why in News?

- Recently, the Uttarakhand government had sought withdrawal of “inner-line permit” (ILP) system in Niti Valley and Nelang Valley.

About

- It is **colonial-era concept** of separating the tribal-populated hill areas in the Northeast from the plains.
- It has its origin from the **Bengal Eastern Frontier Regulation Act (BEFR), 1873**.
- During the British rule, the BEFR **prohibits an outsider's** i.e. “**British subject or foreign citizen**”, entry into the area beyond the Inner Line without a pass and his purchase of land there.
 - After Independence, the Indian government replaced “**British subjects**” with “**Citizen of India**”.
- Its aim is to **prevent settlement** of other Indian nationals in the States where **ILP regime is prevalent**, in order to **protect the indigenous/tribal population**.
- It is valid in **Arunachal Pradesh, Nagaland, Mizoram** and **Manipur**.
- It is **issued by** the **concerned state governments**.

📌 About Nelang Valley

- It is an **inner line area** (India-China border) **opened to domestic tourists only during the day**.
- The ITBP and the Army are deployed in the **two villages of Nelang Valley** i.e. **Nelong** and **Jadong**.
- The **foreign tourists are prohibited** in this area while domestic tourists are allowed entry with ILP.
- The maximum number of people allowed is **24 in a day** and they **cannot stay there at night**.

About Niti Valley

- It is in Joshimath in **Chamoli district**.
- It is the **last populated village** before China border.
- The foreign tourists can travel to Niti village after **obtaining ILP** from Joshimath for a **single-day visit**, but **night stay remains prohibited**.
- The **domestic tourists** can travel to the village **any time in the year** by producing any identity proof.

6. State Election Commission

Why in News?

- The Supreme Court held that independent persons should be appointed State Election Commissioners, not the Bureaucrats holding government office. Because the independence of EC cannot be compromised at any cost.

About

- State Election Commission is a **constitutional authority**. It is constituted under the provisions of **Article 243K** read with **article 243ZA** of The Constitution of India.
- Purpose → They were constituted for **superintendence, direction, and control of the preparation of electoral rolls** for all elections to the **Panchayats** and the **Municipalities**.
- Composition → The State Election Commission is a **single-member Commission** comprising the State Election Commissioner.
- Appointment →
 - **Governor appoints** the State Election Commissioner of the State.
 - They enjoy the **same powers as Election Commission of India (ECI)**.
 - SEC can only be **removed** from his office on the same grounds and procedures as a judge of a High Court.

7. Index Monitoring Cell

Why in News?

- Pointing out that the right to dissent should be the central focus of press freedom, independent journalist P. Sainath struck a dissenting note in the report submitted by the Index Monitoring Cell (IMC).

About IMC

- Set up by the **Information and Broadcasting Ministry** in **2020**.
- Its task is to **improve India's ranking in the World Press Freedom Index** and to evolve an objective yardstick to gauge media freedom.
- The group will also **put in place a mechanism** for States to come up with **their own rankings** of press freedom.
- Composition of the IMC → It will include the **director-general of the Press Information Bureau, officials from the Registrar of newspapers of India, Bureau of outreach and communication**, and from the press facilitation unit, apart from the secretary of the Press Council of India and Niti Aayog.

Recommendations of report

- Among the key recommendations is the **decriminalising of defamation**. India is one of the few countries in the world to criminalise defamation.
- The panel has also recommended that **consent of the Press Council of India** is a **prerequisite** before filing an FIR against the media or a publication.

👉 World Press Freedom Index

- **Reporters Without Borders**, a non-profit organisation that **works to document attacks on journalists** around the world.
- HQ- Paris.
- Ranked **India 142** out of 180 countries in 2020.
- The parameters that are evaluated for these rankings, include **pluralism**, **media independence**, **environment** and **self-censorship**, **legal framework**, **transparency** among others.

8. Places of Worship (Special Provisions) Act 1991

Why in News?

- The Supreme Court asked the Centre to respond to a plea challenging the Places of Worship (Special Provisions) Act, 1991 which freezes the status of places of worship as it was on 15th August, 1947.

About

- The Act was passed in **1991**.
- It seeks to **maintain the “religious character”** of places of worship as it was in 1947.
- The **Ram Janmabhoomi-Babri Masjid dispute** was **exempted** from the Act.

Purpose

- Sections 3 → It says that **no person shall convert any place of worship** of any religious denomination into one of a different denomination or section.
- Section 4(2) → All cases for converting the character of a place of worship that were pending on **August 15, 1947**, will **stand abated with the enforcement of this act**. **No fresh proceedings** can be filed after that.
 - However, legal proceedings can be initiated if the change of status of religious character of worship place, took place **after the cut-off date of August 15, 1947**.
- Section 6 → It prescribes **three-year imprisonment** and a **fine for breach of the provisions of the act**.

Exemption

- Section 5 → It says that the Act shall **not be applied** to **Ram Janma Bhumi Babri Masjid dispute**.
- Other than that, the Act also exempts →
 - Any place of worship, that is an **ancient and historical monument** or **an archaeological site**. It must be covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958;
 - a suit that has been **finally settled** or **disposed of**;
 - any dispute that has been **settled by the parties** or **conversion of any place** that took place by acquiescence before the Act commenced.

Petition Arguments

- It has been challenged on the ground that the **Act violates secularism**.
- It is argued that the Centre has **no power to legislate on “pilgrimages” or “burial grounds”** which is **under the state list**.

9. NCT of Delhi (Amendment) Bill 2021

Why in News?

- The Ministry of Home Affairs has introduced the Government of National Capital Territory of Delhi (Amendment) Bill, 2021 in the Lok Sabha. The bill aims to change some important provisions concerning the National Capital.

About

- It seeks to **amend** the **Government of National Capital Territory of Delhi Act, 1991**.
- The main objective is to give **overarching powers to the Lieutenant Governor** (LG) in the functioning of Delhi.

Key amendments of the proposed NCT of Delhi (Amendment) Bill 2021

- The ‘Government’ from now on will **mean ‘Lieutenant Governor’**: The Bill provides that the term “government” referred to any **law made by the Legislative Assembly** will **imply Lieutenant Governor** (LG).
- LG’s opinion for executive actions → The Bill mentions that on **certain matters**, as specified by the LG, the government has to **obtain LG’s opinion before taking any executive actions**.
- Reservation of bills to President → The NCT of Delhi (Amendment) Bill requires the LG to **reserve bills for the President**. They are the bills that **incidentally cover any of the matters** outside the purview of the powers of the Legislative Assembly.
- It limits the administrative powers of the Delhi Assembly → The bill provides that the rules made by the Delhi Assembly for regulating its procedure and conduct of business shall **not be inconsistent with the Rules of Procedure and Conduct of Business in Lok Sabha**.

About Delhi as a Union Territory:

- Delhi is a **Union Territory with a legislature**. It came into existence in **1991** under **Article 239AA** of the Constitution. This provision was inserted by the Sixty-ninth Amendment Act, 1991.
- As per the existing Act, the Delhi Legislative Assembly makes laws in all matters **except public order, police, and land**.

10. Amicus Curiae

Why in News?

- Solicitor General (SG) made an appeal to the Supreme Court to frame guidelines to demarcate the role and ambit of the court’s amicus curiae in various cases, especially sensitive ones.

About

- Amicus Curiae or **‘friend of the court’** are the lawyers **appointed by the courts** to **present diverse views** and assist the court in specific cases.

- They are **advocates** appointed to **assist the court** in adjudication of important cases.
- Roles and functions →
 - India, thus, if a petition is received from the jail or in any other criminal matter **if the accused is unrepresented**, then, an **Advocate is appointed as amicus curiae** by the Court to defend and argue the case of the accused.
 - In **civil matters** also the Court can **appoint an Advocate as amicus curiae** if it **thinks it necessary** in case of an unrepresented party.
 - The Court can also appoint amicus curiae in any **matter of general public importance** or in which the interest of the public at large is involved.

11. Appropriation Bill

Why in News?

- Recently, the Lok Sabha cleared the Appropriation Bill, allowing the Central government to draw funds from the Consolidated Fund of India.

About

- Appropriation Bill is a **money bill** that allows the government **to withdraw funds from the Consolidated Fund of India** to **meet its expenses** during the course of a financial year.
- As per **article 114** of the Constitution, the government can withdraw money from the Consolidated Fund **only after receiving approval from Parliament**.
- To put it simply, the **Finance Bill** contains **provisions on financing the expenditure of the government**, and **Appropriation Bill** specifies the **quantum** and **purpose** for withdrawing money.
 - Procedure followed →
 - The government introduces the Appropriation Bill in the **lower house of Parliament** after discussions on Budget proposals and Voting on Demand for Grants.
 - The Appropriation Bill is first **passed by the Lok Sabha** and then **sent to the Rajya Sabha**.
 - The Rajya Sabha has the **power to recommend** any amendments in this Bill. However, it is the prerogative of the Lok Sabha to either accept or reject the recommendations made by the upper house of Parliament.
 - The unique feature of the Appropriation Bill is its **automatic repeal clause**, whereby the Act gets repealed by itself after it meets its statutory purpose.
- What happens when the bill is defeated?
 - Since India subscribes to the **Westminster system of parliamentary democracy**, the defeat of an Appropriation Bill (and also the Finance Bill) in a parliamentary vote would **necessitate resignation of a government** or a **general election**. This has **never happened** in India till date, though.
- Scope of discussion → The **scope of discussion is limited** to matters of public importance or administrative policy implied in the grants covered by the Bill and which have not already been raised during the discussion on demands for grants.

12. Electoral Bonds

Why in News?

- The Supreme Court agrees to hear a plea to stay the fresh sale of Electoral Bonds. The hearing of the case is set before the upcoming state assembly elections. It is important considering the dependency of political parties on Electoral Bonds for funding.

About

- Electoral Bonds are **interest-free bearer financial instruments** for making donations to political parties. They were introduced by the Government of India by the Finance Bill, 2017.
- The bonds are issued in **multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore** without any maximum limit.
- Eligibility → Only the **registered Political Parties** which have **secured atleast 1% of the votes** polled in the last Lok Sabha elections or the State Legislative Assembly are eligible to receive the Electoral Bonds.
- Donors → Electoral bonds may be **purchased by a citizen of India** or **entities incorporated or established in India**. A person can buy Electoral Bonds, either singly or jointly with other individuals.
- Authorised Bank → The **State Bank of India (SBI)** has been authorised to issue and encash Electoral Bonds.
- Validity → The Electoral Bonds shall be **valid for fifteen calendar days** from the date of issue. No payment shall be made to the Political Party if the Electoral Bond is deposited after the expiry of the validity period.
- Political parties will create a **specific account**. This account will be **verified by the Election Commission**. The political parties will encash the electoral bonds only in this verified account.
- The Electoral Bond **deposited by an eligible Political Party** in its account shall be **credited on the same day**.

13. Sixth Schedule areas

Why in News?

- The Union Ministry of Home Affairs (MHA) informed the Lok Sabha that “presently, there is no proposal to implement panchayat system in Sixth Schedule areas of Assam”.

About

- It **protects tribal populations** and **provides autonomy** to the communities through creation of **autonomous development councils** that can frame laws on land, public health, agriculture and others.
- Presently, **10 autonomous councils** exist in **Assam, Meghalaya, Tripura and Mizoram**.
- This special provision is provided under **Article 244(2)** and **Article 275(1)** of the Constitution.

Key provisions:

- The **governor is empowered** to organise and re-organise the autonomous districts.
- If there are **different tribes** in an autonomous district, the governor can **divide** the **district into several autonomous regions**.
- Composition → Each autonomous district has a district council consisting of **30 members**, of whom **four are nominated by the governor** and the remaining **26 are elected** on the basis of adult franchise.
- Term → The elected members hold office for a **term of five years** (unless the council is dissolved earlier) and nominated members **hold office** during the **pleasure of the governor**.
- Each autonomous region also has a **separate regional council**.

- Powers of councils → The district and regional councils **administer the areas** under their jurisdiction. They **can make laws** on certain specified matters like land, forests, canal water, shifting cultivation, village administration, inheritance of property, marriage and divorce, social customs and so on. But all such laws **require the assent of the governor**.
- Village councils → The district and regional councils within their territorial jurisdictions can constitute **village councils** or **courts for trial of suits** and **cases between the tribes**. They hear appeals from them. The **jurisdiction of high court over these suits and cases** is **specified by the governor**.

14. Chief Justice of India (CJI)

Why in News?

- Chief Justice of India Sharad A. Bobde has recommended Justice N.V. Ramana, the senior-most judge of the Supreme Court, as the next top judge.

About

- Chief Justice of India is the **chief judge** of the Supreme Court of India. He/she is also **the highest-ranking officer** of the Indian judiciary.
- **Justice Ramana** is now set to take over as the **48th** Chief Justice of India **from April 24**.

👉 Appointment of CJI

- **Article 124 of the Constitution** of India **provides for the manner** of appointing judges to the Supreme Court (SC). But there is **no specific provision in the Constitution** for appointing the Chief Justice.
- CJI should be the **senior most judge of the Supreme Court** (SC).
- Procedure →
 - **Law Minister** has to **seek recommendation** of the **outgoing CJI for appointment** of new CJI at an appropriate time.
 - In **case of doubt** about the fitness of the senior-most Judge to hold office of CJI **consultation with other Judges** under **Article 124(2) to be made**.
 - Law Minister then puts up **recommendation to Prime Minister** (PM) who will **advise the President on appointment**.
- Seniority at the apex court is determined **not by age**, but by the **date a judge was appointed to the SC**.
 - If two judges are elevated to the Supreme Court on the same day,
 - the **one who was sworn in first** as a judge would trump another;
 - if both were sworn in as judges on the same day, the **one with more years of high court service** would 'win' in the seniority stakes;
 - an appointment from the bench would 'trump' in seniority an **appointee from the bar**.
- Are there any exceptions to the above-mentioned procedure? →
 - This convention has been **broken twice**. In **1973**, Justice **A. N. Ray** was appointed **superseding 3 senior judges**.
 - Also, in **1975** Justice **Mirza Hameedullah Beg** was appointed as the CJI **superseding Justice Hans Raj Khanna**.
- Tenure →

- Once appointed, the Chief Justice remains in office **until the age of 65 years**.
- **Article 124(4)** of Constitution of India provides that a SC Judge including CJI can be moved **only through a process of impeachment by Parliament**.

15. National Commission for Allied and Healthcare Professionals Bill

Why in News?

- The Lok Sabha cleared the National Commission for Allied and Healthcare Professionals Bill, 2021. It was passed by the Rajya Sabha last week.

About

- The Bill seeks to **regulate and standardise the education and practice** of allied and healthcare professionals.
- Definition of 'allied health professional' → An **associate, technician, or technologist trained** to support the diagnosis and treatment of any illness, disease, injury, or impairment.
 - Such a professional should have **obtained a diploma or degree under this Bill**.
- Definition of a 'healthcare professional' → **A scientist, therapist, or any other professional** who studies, advises, research, supervises, or provides preventive, curative, rehabilitative, therapeutic, or promotional health services.
 - Such a professional should have **obtained a degree** under this Bill.
- Allied and healthcare professions as recognised categories → **Life science professionals, trauma and burn care professionals, surgical and anaesthesia related technology professionals, physiotherapists, and nutrition science professionals**.
- The Bill sets up the **National Commission for Allied and Healthcare Professions**. It will →
 - **frame policies and standards** for regulating education and practice,
 - create and maintain an **online Central Register** of all registered professionals, and
 - providing for a **uniform entrance and exit examination**, among others.
- The Commission will constitute a **Professional Council** for every recognised category of allied and healthcare professions.
- **Within six months** from the passage of the Bill, state governments will constitute **State Allied and Healthcare Councils**.

16. Adjournment Sine Die

Why in News?

- Recently, the Rajya Sabha has been adjourned sine die at the end of the Budget session of Parliament after the Lok Sabha was adjourned sine die which brought the nearly two-month long Budget session to an end.

About

- The phenomenon of Adjournment Sine Die means **terminating a sitting of Parliament** for an **indefinite period**.
- It implies that when the **House is adjourned without naming a day** for reassembly, it is called adjournment sine die.

- The power of adjournment as well as adjournment sine die **lies with the presiding officer** of the House.
- The **presiding officer** can also **call a sitting of the House** before the date or time to which it has been adjourned or at any time after the House has been adjourned sine die.
- The presiding officer (Speaker or Chairman) declares the House **adjourned sine die**, when the **business of a session is completed**.

17. Sedition law

Why in News?

- Supreme Court rejected a plea urging it to re-examine the constitutional validity of Section 124A of IPC, which deals with sedition.

About Sedition

- The concept of sedition was introduced under **Section 124A** under the **Indian Penal Code in 1870**. It was drafted by **Thomas Macaulay**.
- The section was introduced initially to **deal with increasing Wahabi activities between 1863 and 1870**. These activities posed a challenge to the colonial government.
- However, in the **19th** and **early 20th Centuries**, the law was mainly used **against Indian political leaders** seeking independence from British rule.
- The **first** case was **registered in 1891**, when **Jogendra Chandra Bose**, editor of a newspaper 'Bangobasi' was booked for publishing an article criticising "**Age of Consent Bill**".
- Bal Gangadhar Tilak, Annie Besant, the Ali Brothers, Maulana Azad, Gandhi and very many others suffered imprisonment under this law.

Punishment under Sedition:

- Sedition is a cognisable (No need Court warrant to arrest the person), non-**compoundable**, and **non-bailable offence**. The sentence can be between **three years to imprisonment for life for sedition**.
- A person charged under this law **can't apply for a government job**. They have to **live without their passport**. Apart from that, they must present themselves in the court as and when required.

Supreme Court judgement on sedition law:

- The **constitutionality of sedition** was challenged in the Supreme Court in **Kedar Nath Vs State of Bihar** (1962).
- The Court upheld the law on the basis that this **power was required by the state to protect itself**.
- However, it had **added a vital caveat** that "a person could be prosecuted for sedition only if his acts caused incitement to violence or intention or tendency to create public disorder or cause disturbance of public peace".
- In **Balwant Singh v. State of Punjab** (1995), Supreme Court had clarified that **merely shouting slogans does not amount to sedition**.

International Relations

1. Asia Economic Dialogue

Why in News?

- The 5th edition of the Asia Economic Dialogue(AED) held virtually.

About

- What is it? → It is the **flagship geo-economics conference** of the Ministry of External Affairs (**MEA**), India.
- The AED 2021 is jointly convened by the **MEA** and **Pune International Centre** (PIC).
- This is the **fifth edition** of the AED, and the **second** one **organised by PIC**.
- Theme → The theme for this year's conference is "**Post Covid-19 Global Trade and Finance Dynamics**".
- Focus → It is an **international geo-economics conference**, focusing on trade and finance dynamics in Asia and its extended neighbourhood.

2. Asian Infrastructure Investment Bank

Why in News?

- Centre signs \$304 million pact with AIIB for power transmission network in Assam.

About

- What is it? → Asian Infrastructure Investment Bank (AIIB) is a **multilateral development bank** with a mission to **improve social and economic outcomes** in Asia and beyond.
- Headquartered → **Beijing, China**.
- It commenced operations in **January 2016**.
- Aim → By **investing in sustainable infrastructure** and **other productive sectors today**, it aims to connect people, services and markets that over time will impact the lives of billions and build a better future.
- Membership →
 - There are **more than 100 members** now.
 - Fourteen of the G-20 nations** are **AIIB members** including France, Germany, Italy and the United Kingdom.
- Voting Rights →
 - China** is the **largest shareholder** with **26.61 % voting shares** in the bank followed by **India (7.6%)**, Russia (6.01%) and Germany (4.2 %).
 - The **regional members hold 75%** of the total voting power in the Bank.
- Various organs of AIIB →
 - Board of Governors → The Board of Governors consists of **one Governor** and one **Alternate Governor** appointed by each member country. Governors and Alternate Governors **serve at the pleasure of the appointing member**.
 - Board of Directors → **Non-resident Board of Directors** is **responsible for the direction** of the Bank's general operations, exercising all powers delegated to it by the Board of Governors.

- International Advisory Panel → The Bank has established an International Advisory Panel (IAP) to **support the President and Senior Management** on the **Bank's strategies** and policies as well as on general operational issues.

3. Better Than Cash Alliance

Why in News?

- The Government of India, FICCI, and the Better Than Cash Alliance has come under the partnership to achieve the industry level commitment of responsible digitization of merchants.

About

- Based at the United Nations (UN), it is a **partnership of governments, companies, and international organisations** that accelerates the transition from cash to **responsible digital payments** to help achieve the Sustainable Development Goals (SDGs).
- Created in → **2012**.
- Headquarters → **New York, US**.
- It works with members on their journey to digitise payments by
 - Providing advisory services** based on their priorities.
 - Sharing action-oriented research** and **fostering peer learning** on responsible practices.
 - Conducting advocacy** at national, regional and global levels.
- It has **75 members** which are committed to **digitising payments** in order to
 - Boost efficiency & transparency.
 - Women's economic participation & financial inclusion.
 - Help build economies that are digital & inclusive.
- Members do **not want to abolish physical cash**, as it is **legal tender**, but rather want to provide **responsible digital payment options** that are "**better than cash**".
- India joined** the alliance in **2015**.

4. International North South Transport Corridor

Why in News?

- India wants Chabahar port to be included in the 13-nation International North South Transport Corridor that extends from India to Russia and expand INSTC membership by including Afghanistan and Uzbekistan.

About

- It is a **7,200-km-long multi-mode network** of ship, rail, and road route for moving freight.
- Regions involved → **India, Iran, Afghanistan, Azerbaijan, Russia, Central Asia** and **Europe**.
- The objective of the corridor is to **increase trade connectivity** between major cities such as Mumbai, Moscow, Tehran, Baku, Bandar Abbas, Astrakhan, Bandar Anzali, etc.



- Dry runs of two routes were conducted in 2014,
 1. The first was **Mumbai to Baku** via **Bandar Abbas**.
 2. The second was **Mumbai to Astrakhan** via **Bandar Abbas**, Tehran and Bandar Anzali.
- Significance of the corridor → This will also synchronize with the **Ashgabat agreement**, a **Multimodal transport agreement** signed by India, Oman, Iran, Turkmenistan, Uzbekistan and Kazakhstan, for creating an international transport and transit corridor facilitating transportation of goods **between Central Asia and the Persian Gulf**.

5. Inter-Parliamentary Union

Why in News?

- Recently, the President of the Inter-Parliamentary Union (IPU) addressed Members of Parliament at the Central Hall of the Indian Parliament.

About

- History → The organization was **established in 1889** as the Inter-Parliamentary Congress. Its founders were **statesmen Frédéric Passy of France** and **William Randal Cremer of the United Kingdom**.
- Headquarters → **Geneva, Switzerland**.
- Slogan → **For democracy. For everyone.**
- Objective → The Inter-Parliamentary Union is an **international organization** of national parliaments. Its primary purpose is to **promote democratic governance**, **accountability**, and **cooperation** among its members.
- Members → As of 2020, the national parliaments of **179 countries** are members of the IPU, while **13 regional parliamentary assemblies** are associate members. **India is a member.**
- It works with **close co-operation with the United Nation (UN)**, **regional parliamentary organisations**, international intergovernmental organisations and non-governmental organisations for the arbitration of conflict.
- It is a **unique platform** for observing political opinions and trends around the world.

6. Stop TB Partnership

Why in News?

- Union Minister for Health and Family Welfare appointed as the Chairman of the Stop TB Partnership Board. The Minister will serve a 3-year term commencing July 2021.

About

- Stop TB Partnership was **established in the Year 2000**.
- Aim → Its aim is to **eliminate tuberculosis** as a public health problem.
- Significance → It is a **unique international body** as it aligns countries all over the world in the fight against TB.
- Amsterdam Declaration → In 2000, **Stop TB Partnership** gave a **call for collaborative action** from ministerial delegations of 20 countries with the highest burden of TB.
- Partner organizations → It has **1500 partner organizations**. It includes international, non-governmental, and governmental organizations and patient groups.

- Secretariat → **Geneva, Switzerland.**

📌 India's Initiatives against Tuberculosis

- India has committed to **eliminating TB in the country by 2025**, five years ahead of the global deadline of 2030.
- National Strategic Plan (NSP) for TB Elimination (2017-2025): It is a framework to **provide guidance for the activities of various stakeholders to reduce the burden of TB mortality and morbidity**. It aims to work towards the elimination of TB in India by 2025.
- Nikshay Poshan Yojana: It is a **direct benefit transfer (DBT) scheme** to provide **nutritional support** to TB patients.
- TB Harega Desh Jeetega' Campaign: The campaign aims to **improve and expand the reach of Tuberculosis care services** across the country by 2022.

7. US India Artificial Intelligence (USIAI) Initiative

Why in News?

- Recently, the Ministry of Science & Technology has unveiled the US India Artificial Intelligence (USIAI) Initiative.

About

- It is an initiative of the **Indo-U.S. Science and Technology Forum (IUSSTF)**.
- It focuses on **AI cooperation in critical areas** that are priorities for both countries.
- It will **serve as a platform** to **discuss opportunities, challenges**, and barriers for bilateral AI R&D collaboration.
- It will **enable AI innovation, help share ideas** for developing an AI workforce, and recommend modes and mechanisms for catalyzing partnerships.
- It will provide **an opportunity for key stakeholder groups** to **share experiences**, identify new R&D areas and opportunities that would benefit from synergistic activities.
- It leverages **IUSSTF's unique ability** to **bring together stakeholders** from India and the US to **create synergies** that address challenges and opportunities at the interface of science, technology and society.

8. Istanbul Convention

Why in News?

- Turkey withdraws from the Istanbul Convention to combat violence against women.

About Istanbul Convention

- Istanbul Convention is also called the **Council of Europe Convention**.
- Aim → It aims towards **preventing and combating violence against women** and domestic violence.
- History → The convention was adopted by the Council of Europe Committee of Ministers in **2011**. It came into **force in 2014**.
- Purpose → The convention **sets minimum standards** for governments to meet when tackling violence against women. Once ratified the Convention is **legally binding** on the country.

- Significance → It is the **first legally-binding instrument** that creates a **comprehensive legal framework** and **approach** to combat violence against women.
- Members of the Istanbul Convention → As of March 2019, it has been **signed by 45 countries** and the European Union.

📌 About Council of Europe

- Council of Europe is an **international organisation**. It aims to **uphold human rights, democracy, and the rule of law in Europe**.
- Founded in → The council was founded in **1949**. It has **47 member states**. In that, 27 members are the members of the European Union(EU).
- Relation with EU → The organisation is **distinct from the European Union** (EU) although it is sometimes confused with it.
- Significance →
 - No country has ever joined the EU **without first belonging to the Council of Europe**.
 - The Council of Europe is the **United Nations Observer**.
- Headquarters → **Strasbourg, France**.

9. Permanent Indus Commission

Why in News?

- After a gap of more than two and half years Indian and Pakistani delegations began the 116th Meeting of the Permanent Indus Commission.

About

- The Permanent Indus Commission is a **bilateral commission of officials from India and Pakistan**. It is created to implement and manage the goals of the **Indus Water Treaty, 1960**.
- Meeting: The Commission according to the treaty must **meet regularly** at **least once a year**. The PIC will hold the meeting **alternately in India and Pakistan**.
- Functions of the Permanent Indus Commission →
 - To **establish and promote cooperative arrangements** for the Treaty implementation;
 - **Furnishing** or **exchange of information** or data provided in the Treaty;
 - **Promote cooperation** between the Parties in the development of the waters of the Indus system
 - **Examine and resolve any question** in the agreement that arises between the parties.
- Last Meeting → The last meeting of the PIC was **held in Pakistan in 2018**. The Commission was scheduled to **meet in 2020**, but it was **cancelled** in view of the outbreak of the coronavirus pandemic.

Recent meeting

- India's Projects on Indus River: The PIC will discuss Pakistan's objections about two Indian projects:
 - **Pakal Dul Hydro Electric Project**(1,000 MW): It is being **built by India** on **river Marusudar**, a tributary of the Chenab. The project is located in Kishtwar district of J&K.
 - **Lower Kalnai Hydro Electric Project**: It is being **developed by India** on the **River Chenab**.

📌 About Indus Water Treaty

- The Indus Water Treaty, 1960 is a **water-distribution treaty** between **India and Pakistan**.
- According to the treaty, **waters of the eastern rivers** — Sutlej, Beas and Ravi had been **allocated to India for unrestricted use**. Similarly, the **western rivers** — the Indus, Jhelum and Chenab were **allocated to Pakistan**.
- However, **India** has been given the **right to generate hydroelectricity** through a run of the river projects on the western rivers subject to specific criteria for design and operation.
- Further, **Pakistan** also has the **right to raise concerns** on the design of Indian hydroelectric projects on western rivers.

10. World Summit on the Information Society Forum 2021

Why in News?

- Union Minister of Telecom has represented India at the World Summit on the Information Society Forum 2021.

About

- World Summit on the Information Society(**WSIS**) is one of the **world's largest annual gathering** of the '**ICT for development**' community.
- The UN General Assembly approved the holding of WSIS in **two phases**. One in **2003 at Geneva** and the other in **2005 at Tunis**.
- Aim → WSIS's chief aim is to **bridge the global digital divide** separating rich countries from poor countries. The WSIS aims to achieve this by **increasing internet accessibility** in the developing world.
- Organized by → The summit is co-organized by International Telecommunication Union(**ITU**), **UNESCO**, **UNDP** and **UNCTAD**.

📁 About International Telecommunication Union(ITU):

- International Telecommunication Union(ITU) is the **United Nations specialized agency** for information and communication technologies – ICTs.
- It was originally **established in 1865** as the International Telegraph Union. It is **one of the oldest** international organizations in operations.
- Members → It is **open to all Member States** of the United Nations. There are currently **193 Member States** of the ITU. This includes all the UN member states except the Republic of Palau.
- Headquarters → **Geneva, Switzerland**

11. UN Institute for Training & Research (UNITAR)

Why in News?

- The Prime Minister Narendra Modi has expressed gratitude to UN Institute for Training & Research (UNITAR). UNITAR has commended India's remarkable progress in reducing the premature mortality from Non-Communicable Diseases.

About

- What is it? → The United Nations Institute for Training and Research (UNITAR) is a **dedicated training arm** of the **United Nations system**.
- History → UNITAR was **founded in 1963**, following the recommendation of the UN Economic and Social Council to the General Assembly.
- Mandate → UNITAR provides **training and capacity development activities** to **assist mainly developing countries** with special attention to Least Developed Countries (LDCs), Small Island Developing States (SIDS) and other groups and communities who are most vulnerable.
- Headquarters → **Geneva (Switzerland)**.
- Governance → Operated as an **autonomous body** within the United Nations system, UNITAR is **headed by an Executive Director**. Present executive director is **Nikhil Seth from India** who was appointed in 2015.
- Funding → UNITAR is a project-based organization and does **not receive any funds from the regular United Nations budget**. The institute is financed entirely **from voluntary contributions**.

12. Comprehensive and Progressive Agreement for Trans-Pacific Partnership

Why in News?

- Recently, U.K. announced to apply for joining CPTPP- a free trade block of Asia-Pacific Countries.

About

- CPTPP is a free trade agreement **between 11 countries** in the **Asia Pacific**.
- CPTPP was formerly known as the **Trans-Pacific Partnership (TPP)**.
- After U.S. withdrawal from **TPP**, remaining members **renamed it CPTPP**.
- CPTPP features **ambitious market access commitments in trade in goods, services, investment, labour mobility and government procurement**.
- It also covers the **protection of the environment** and **labour rights**.
- **Benefits of CPTPP →**
 - **Removes tariff** on an estimated 95% of goods traded between CPTPP members and will provide greater market access.
 - Provides **easier Rules of origin** (ROO) criteria to importers/exporters.
 - Facilitates **free cross-border data flow** and **removal of localization requirements**.
 - Product specific rules to **help Small and Medium Enterprises**.
 - **Simple, effective, clear** and **predictable customs procedure** to reduces processing times at the border.
 - **Increases predictability** and eliminates many barriers encountered at the border, such as quotas and labour market tests.

13. Heart of Asia - Istanbul Process

Why in News?

- External Affairs Minister Dr S Jaishankar reached Dushanbe on a three-day visit to Tajikistan. He will attend the 9th Ministerial Conference of Heart of Asia - Istanbul Process on Afghanistan.

About

- It is a platform for **promoting regional security, economic and political cooperation** centred on Afghanistan through dialogue and a set of **Confidence Building Measures** (CBMs).
- The Heart of Asia – Istanbul Process (HoA-IP) is an **initiative of Afghanistan and Turkey**, which was officially launched at a conference hosted by Turkey in Istanbul **on 2 November 2011**.
- Since then, Afghanistan supported by **fourteen Participating Countries** of **the Heart of Asia Region** and **16 Supporting Countries** beyond the region as well as 12 Regional and International Organizations is leading and coordinating this Process.
- The Directorate General for Regional Cooperation of the **Ministry of Foreign Affairs of Afghanistan** is acting as the **de facto Secretariat** of the Process.
- The Heart of Asia Region → The geographical area **covering the 15 Participating Countries** of the **HoA-IP** is defined as the Heart of Asia Region. It is one of the **biggest regions in the world** with a collective geographical area of **more than 40 million km² covering around 27% of the land area of the Earth**.



Society

1. Saras Aajeevika Mela 2021

Why in News?

- Recently, the Union Minister for Rural Development inaugurated Saras Aajeevika Mela 2021 at Noida Haat.

About

- What is it? → It is a programme to **transform rural India in general** and the **lives of rural women in particular**.
- During the Mela, **workshops on product packaging and design, communication skills, social media publicity** and Business to Business marketing will be **organised to educate the rural** self-help groups and craftsmen.
- Organiser → It is an initiative by the **Deendayal Antyodaya Yojana-National Rural Livelihoods Mission** (DAY-NRLM) under the Ministry of Rural Development (MoRD) organised by the Council for Advancement of People's Action and Rural Technology (**CAPART**).
 - CAPART is an autonomous body set up by the Ministry of Rural Development** to interface between the government and Non-governmental Organizations (NGOs) that seek to improve the quality of life in India's rural areas.
- Objective → To bring the **rural women Self Help Groups** (SHGs) **under one platform** so that they can showcase their skills, sell their products, and help them build linkages with bulk buyers.
- Significance →
 - The Mela acts as an **integrated approach towards women empowerment**.
 - The Initiative is **well aligned** with the **government's vision of Atma Nirbhar Bharat**.

2. Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

Why in News?

- The Union Education Minister chaired a review meeting on Rashtriya Uchchatar Shiksha Abhiyan (RUSA).

About

- It was launched in **2013** under the erstwhile Ministry of Human Resource Development (now **Ministry of Education**).
- Aims →
 - To work with **300-plus state universities and their affiliated colleges** to **raise the bar of campus life**.
 - To provide **strategic funding** to eligible state higher educational institutions.
- Funding → It is a **centrally sponsored scheme**.
 - The **central funding** (in the ratio of **60:40** for general category states, **90:10** for special category states and 100% for UTs) is **based on norms** and is **outcome dependent**.
 - Funding to states would be made on the **basis of the critical appraisal of State Higher Education Plans**, which would enlist each state's strategy to **address issues of equity, access and excellence in higher education**.

- Functions →
 - **Improve access, equity and quality in higher education** through planned development of higher education at the state level.
 - Create **new academic institutions, expand & upgrade the existing ones**, develop institutions that are self-reliant in terms of quality education.
 - Provide students with an education that is **relevant to them** as well as the **nation as a whole**.
- Guiding Principles → **Research, Funding, Incentivising, Decision, Autonomy, Governance & Development.**

3. Sugamya Bharat App

Why in News?

- The Minister for Social Justice and Empowerment launched “Sugamya Bharat App” and a handbook entitled “Access - The Photo Digest”.

About

- It is a mobile application developed to **sensitise and enhance accessibility** within the **3 pillars** of the Accessible India Campaign.
- These **pillars** namely- the **transportation sector, building an accessible environment** and the **ICT ecosystem** in India.
- The app will **aid the Accessible India Campaign** towards making a barrier-free and conducive environment for Divyangjans (Persons with Disabilities – PwDs).
- It provides for **five main features** of which four are directly related to enhancing accessibility.
 1. **Registration of complaints** of inaccessibility with easy photo uploads and geotagging
 2. **Positive feedback** of examples and best practices worth emulating being shared by people as jan-bhagidhari (People’s participation)
 3. **Departmental updates**
 4. **Guidelines and circulars** related to accessibility.
 5. The fifth feature is a special feature meant **only for Divyangjan for COVID related issues**.
- The **handbook** is envisaged as a **tool and guide to sensitise stakeholders** about **10 basic features of accessibility** and related good-bad practices in easy-to-understand pictorial form.

4. QS World University Rankings 2021

Why in News?

- 12 leading Indian universities & higher education institutions have managed to get into the top 100 colleges list released by QS World University Ranking (QSWUR).

About

- Released by → **Global higher education consultancy Quacquarelli Symonds** releases annually.
- Parameters → It calculates the performance of the universities based on the following **four parameters**:
 - **Academic reputation**
 - **Employer reputation**

- **Research impact** (citations per paper)
- **Productivity of an institution's research faculty.**
- Subjects Covered → It covers a total of **51 disciplines grouped** into **five broad subject** areas: 1) **Arts & Humanities** 2) **Engineering and Technology** 3) **Life Sciences & Medicine** 4) **Natural Sciences** and 5) **Social Sciences & Management**.

📌 Key Highlights

- **IIT Madras** ranked **30th** in Petroleum Engineering while **IIT Bombay** got the **41st** rank and IIT Kharagpur 44th for Minerals and Mining Engineering.
- **IISc Bangalore** remains at **78th rank** for Materials Science and 93rd for Chemistry.
- These are the **highest ranks** achieved by the **public Institutes of Eminence** across this year's Subject Rankings
- In the life sciences and medicine category, the **All India Institute of Medical Sciences (AIIMS)** bagged the **248th spot**.
- **Jawaharlal Nehru University (JNU)** has been ranked **159th** for arts and humanities, followed by the University of Delhi (252).
- Also, **Delhi University** bagged the **208th spot** worldwide in the social sciences and management category.

5. Ease of Living & Municipal Performance Index 2020

Why in News?

- The Food Safety and Standards Authority of India (FSSAI) has amended its rules to cap trans-fatty acids (TFAs) in food products, just weeks after it tightened the norms for oils and fats.

About Ease of Living Index

- Developed by → **Ministry of Housing and Urban Affairs in 2018**.
- It is an **assessment tool**.
- By this tool, **quality of life** and the impact of various initiatives on urban development are assessed.
- Parameters → The index evaluates cities based on the following parameters: **Quality of Life** (35%), **Economic Ability** (15%), **Sustainability** (20%), **Citizen Perception Survey** (30%).
- Coverage → The index assessed **111 cities** by bifurcating them into two categories:
 - **Million+ populated cities** (those with a population of more than a million) and
 - **Less than A Million populated cities** (those with a population of less than a million) along with all the cities under the Smart Cities Program.

📌 Key Findings

- Million+ category → **Bengaluru** has emerged as the **top performer**. It is followed by Pune, Ahmedabad, Chennai, Surat, Navi Mumbai, Coimbatore, Vadodara, Indore, and Greater Mumbai.
- Less than Million category → **Shimla** is at the **top in this category**. It is followed by Bhubaneswar, Silvassa, Kakinada, Salem, Vellore, Gandhinagar, Gurugram, Davangere, and Tiruchirappalli.

📌 Municipal Performance Index(MPI), 2020

- It has been launched as an **accompaniment to the Ease of Living Index**.
- It seeks to **examine local government practices in municipalities** across areas of services, finance, policy, technology and governance.
- It also seeks to **simplify and evaluate the complexities** in **local governance practice** and promote the ethos of transparency and accountability.
- Coverage → The MPI examined the sectoral performance of **111 municipalities** (with Delhi being assessed separately for NDMC, and the three Municipal Corporations).
- Parameters Used → The **five verticals** under MPI are **Services, Finance, Policy, Technology** and **Governance**. These five verticals comprise 20 sectors and 100 indicators in all totality.
- Categories → The assessment framework under MPI 2020 has classified municipalities based on their population:
 - **Million+** (municipalities having over a million population) and
 - **Less than a Million Population**.

📌 Key Findings

- Million+ category → **Indore** has emerged as the **highest-ranked municipality** followed by Surat and Bhopal.
- Less than Million category → **New Delhi Municipal Council** has **emerged as the leader** followed by Tirupati and Gandhinagar.

6. Mission Shakti

Why in News?

- The Ministry of Women and Child Development has decided to classify all of its major programmes under three Umbrella Schemes- Mission Shakti, Mission POSHAN 2.0, and Mission Vatsalya.

About

- Mission Shakti will consist of the **schemes and policies** for the **empowerment and protection of women**.
- Schemes → Mission Shakti will cover schemes under two categories:
 - **SAMBAL** → This category will include schemes such as **One Stop Centre, Mahila Police Volunteer, Women's Helpline, Swadhar, Ujjawala** among others.
 - **SAMARTHYA** → This category will include schemes such as **Beti Bachao Beti Padhao, Pradhan Mantri Matru Vandana Yojana** among others.
- Mission Shakti will run in **convergence** with the **other two Umbrella Schemes**.

📌 Mission Vatsalya

- Mission Vatsalya will be looking into the **child welfare services** and **child protection services** all over the country.
- Schemes → Mission Vatsalya will include the **Scheme for Child Protection Services**, a Centrally Sponsored Scheme.

📌 Saksham Anganwadi and Mission POSHAN 2.0 scheme

- Schemes → This will **include schemes** such as **Integrated Child Development Scheme (ICDS), Anganwadi Services, Poshan Abhiyan**, Scheme for Adolescent Girls, National Creche Scheme among others.

- Mission Poshan 2.0 → The government will be **merging the Poshan Abhiyan and supplementary nutrition programme** to launch **Mission Poshan 2.0**.
- Mission Poshan 2.0 will look into the ways and measures for **strengthening the nutritional content, outreach, delivery, and outcomes**.

7. Pradhan Mantri Swasthya Suraksha Nidhi

Why in News?

- The Union Cabinet approves the Pradhan Mantri Swasthya Suraksha Nidhi (PMSSN).

About

- This program will **ensure access to universal & affordable health care** through a fund that does **not lapse** at the end of the financial year.
- It has been set up as a **single non-lapsable reserve fund** for a share of Health.
- It will be made from the **share of health** in the **proceeds of Health and Education Cess**.
- The fund will be administered and maintained by the **Ministry of Health & Family Welfare**.
- How will the fund be utilised? → The accruals into the PMSSN will be utilised **for the flagship schemes** of the Health Ministry including Ayushman Bharat–Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and National Health Mission and Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) and also disaster preparedness, and responses during health emergencies.
- Any future programme/scheme that targets to achieve progress towards **SDGs** and the **targets set out in the National Health Policy (NHP) 2017**.

8. LGBTIQ Freedom Zone

Why in News?

- The European Parliament has symbolically declared the entire 27-member bloc as an “LGBTIQ Freedom Zone”.

About

- A **majority of countries** in the **EU** (23/27) **recognise same-sex unions**, with 16 legally recognising same-sex marriage.
- As per the resolution, **LGBTIQ persons everywhere in the EU** should **enjoy the freedom to live and publicly show their sexual orientation** and gender identity without fear of intolerance, discrimination or persecution.
- The resolution further adds that, the **authorities at all the levels** of the governance across the European union **shall protect and promote the equality and fundamental rights** of all including the LGBTIQ.
- This resolution was **supported by 492 MEPs, 141 MEPs voted against** it while **46 abstained from voting**.

9. SAAMAR Campaign

Why in News?

- The Jharkhand government announced the launch of the SAAMAR (Strategic Action for Alleviation of Malnutrition and Anemia Reduction) campaign to tackle malnutrition in the state.

About

- The campaign aims to **identify anaemic women and malnourished children** and **converge various departments** to effectively deal with the problem in a state where malnutrition has been a major problem.
- The campaign also tries to **target Primarily Vulnerable Tribal Groups**.
- It has been launched with a **1000 days target**, under which **annual surveys** will be **conducted to track the progress**.

10. CBSE rolls out assessment framework

Why in News?

- The Central Board of Secondary Education has rolled out a new assessment framework for Classes 6-10 in English, Maths and Science in collaboration with the British Council.

About

- It is aligned with the **National Education Policy's vision** of achieving a global standard in assessments.
- Under the system, **Teachers** will be **trained to create question papers** and **other assessment methods** that test the actual competency of students in these subjects, rather than their ability to memorise chunks of text.
- The framework will **replace** the **“existing rote learning model”** and will focus on assessing students based on **their competencies needed to solve day-to-day problems**.”
- In the **first phase**, the framework will be implemented in select **Kendriya Vidyalayas** and **Navodaya Vidyalayas**, **CBSE schools in Chandigarh**, and a few private schools.
- By **2024**, it will be rolled out to **25,000 CBSE schools** across the country, with **1.32 lakh teachers** and **two crore students**.

11. WASH

Why in News?

- Recently, researchers from the Center for Disease Dynamics, Economics and Policy (CDDEP) US, have estimated the cost of ensuring Water Sanitation and Hygiene (WASH) and taking related steps for infection prevention and control in India.

About

- This study was a part of a larger project to determine the cost-effectiveness of WASH interventions **to reduce healthcare-associated infections among mother and neonates** across the Indian healthcare system.

About Water Sanitation and Hygiene (WASH):

- WASH is a collective term for Water, Sanitation and Hygiene relating to
 - **Access to safe drinking water**
 - **Improved sanitation facilities**
 - **Maintaining basic level of hygiene.**

WHO has adopted WASH Strategy, 2018-25

- **Vision:** To substantially improve health through the safe management of water, sanitation and hygiene services in all settings.

- **Role of the WHO →**
- Being a technical agency, the **WHO does not directly implement WASH** infrastructure projects. In fact it focuses on its roles of
 - Generating and disseminating standards and guidelines.
 - Strengthening health sector capacities in providing WASH support.
 - Public health oversight through surveillance and regulation,
 - Promoting the generation of evidence.
 - Empowering countries through technical cooperation to strengthen. national systems and institutions etc.

12. Tribal TB Initiative

Why in News?

- Union Health Minister launches the Tribal TB Initiative to achieve the goal of TB Mukh Bharat.

About

- Aim → Tribal TB Initiative aims to **address the problem of Tuberculosis in Tribal Population**.
- **Initially**, the initiative will focus on **161 districts** across **18 identified States**. It will focus on **vulnerability mapping, active case finding & promote behavioral change** at the ground level.
- TB Mukh Bharat initiative aims at the **elimination of TB by 2025**.



Why was this initiative launched?

- Over **104 million** tribal populations live in India. It **spreads across 705 tribes** and accounts for **8.6 %** of India's population.
- This tribal population is **highly vulnerable to TB** due to physical remoteness, malnutrition, poor living conditions, and lack of awareness.
- **Lakshadweep** and the **district of Badgam in Jammu and Kashmir** have been declared **TB Free** on World TB Day 2021.

👉 Other Tribal Health-Related Initiatives:

- **ALEKH →** It is an **e-newsletter** that is to be released on a **quarterly basis**. It will showcase the **works of different stakeholders** involved in improving the health and nutrition of tribals.
- **Swasthya Portal →** It aims to **provide health and nutrition-related information** to the tribal population of India.

Security

1. INS Utkrosh

Why in News?

- President Reviews Tri-Service Guard of Honour at INS Utkrosh.

About

- INS Utkrosh is an **Indian naval air station** under the joint-services Andaman and Nicobar Command of the Indian Armed Forces.
- It is located **near naval base INS Jarawa**, on **Port Blair** in the Andaman & Nicobar Islands.
- It is the **first naval air station** in the Andaman and Nicobar Islands.
- It was **transferred** from the Directorate General of Civil Aviation **to the Indian Navy in 1984**.
- It was **initially commissioned as INS Jarawa II** and in **1985**, it was formally commissioned as INS Utkrosh.
- This station operates the **Do-228 maritime patrol aircraft** and a **SAR (Search & Rescue) flight of HAL Chetak helicopters**. The station also handles courier flights from the mainland, and civil flights to and from Port Blair.
- Its location makes it an **important strategic station** for **protecting India's maritime interests** in the Bay of Bengal. It also serves as an important facility for undertaking humanitarian operations, such as disaster relief and evacuation of medical emergencies from the remote islands.

2. Suryakiran Aerobatic Team

Why in News?

- The Suryakiran Aerobatic Team (SKAT) will perform at an airshow at the Galle Face in Colombo from March 3 to 5 as part of the 70th anniversary celebrations of the Sri Lankan Air Force (SLAF).

About

- This will be the **first performance** for the **SKAT team outside India** since it was resurrected in 2015 with the Hawk advanced jet trainers.
- Background → The team was **formed in 1996** with **Kiran Mk-II aircraft** and had enthralled spectators across the country till 2011.
- It was **revived in 2015** with **Hawk trainers** initially with four aircraft and grew to the nine aircraft formation.
- Features →
 - The SKAT team, also known as **52 Squadron** or **The Sharks**, is based in Bidar (Karnataka).
 - Since its inception, the SKAT team has **carried out over 600 displays** all around the country, it has also **represented India** across **southeast Asia** including China.
 - 1971 Commemorations:
 - Marking the **golden jubilee year** of the **1971 Liberation War of Bangladesh**, the SKAT team has been flying **different formations over landmarks** across the country starting from Kanyakumari in the south.
- Sarang Helicopter Display Team →

- The Sarang team has evolved from the **ALH Evaluation Flight** (AEF) which was **formed in 2003 at Bangalore** to evaluate the **indigenous helicopter prior** to its induction into operational service.
- The Indian Air Force aerobatic team **Sarang** (Peacock) comprises **four Indian built Dhruv helicopters** (an Advanced Light Helicopter - ALH, built by Hindustan Aeronautics Limited, Bangalore).

3. Exercise Desert Flag-VI: UAE

Why in News?

- For the first time, the Indian Air Force (IAF) is participating in the Exercise Desert Flag-VI, hosted by the United Arab Emirates (UAE) Air Force.

About

- Ex Desert Flag is an **annual multinational large force employment warfare exercise** hosted by the UAE Air Force.
- Aim → To provide **operational exposure** to the **participating forces** while training them to undertake simulated air combat operations in a controlled environment.
- Exercise Desert Flag-VI →
 - Duration → It is about a **three week long** exercise scheduled from 3rd - 27th March 2021 at Al-Dhafra air base, UAE.
 - Participants → The air forces of the **UAE, India, United States of America, France, Saudi Arabia, South Korea** and **Bahrain**.
 - India's Participation → The IAF is participating with **six Su-30 MKI, two C-17 Globemasters** and **one IL-78 tanker aircraft**.
- Joint Military Exercises with the UAE → With the UAE, India has **In-UAE BILAT** (bilateral naval exercise) as well as **Desert Eagle-II** (bilateral air force exercise).
- Examples of Other Multinational Exercises → **Pitch Black**: Biennial, multilateral air combat training exercise of Australia.
 - **Red Flag**: Multilateral air exercise of USA.

4. Sagar-Manthan-MMDAC

Why in News?

- The government of India has launched Sagar-Manthan: Mercantile Marine Domain Awareness Centre(MMDAC). It is a real-time vessel tracking and seafarers' help system.

About

- It is a **Maritime information system**. Thus, it will enhance maritime safety, search and rescue capabilities, security, and marine environment protection.
- Operated by → It will be operated by the **Director-General of Shipping**.
- Functions →
 - It has a **real-time vessel tracking feature** that can help seafarers and fishermen in times of need.
 - Apart from tracking Indian vessels globally, it can also **track foreign vessels** within **1,000-km of India's coastline**.

- It can also **organize help for other countries** in case of an emergency.
- India will be **sharing this information system** with **Sri Lanka and the Maldives**.

5. INS Sumedha and Kulish

Why in News?

- INS Kulish, Sumedha arrive in Bangladesh to mark 50th anniversary of 1971 war.

About INS Sumedha

- It is an indigenously build **Offshore Patrol vessel**.
- It was commissioned into the **Indian Navy at Goa in 2014**
- It has been designed and built by **Goa Shipyard Limited**.
- It is designed to **embark indigenously-manufactured Dhruv** (ALH) and **Chetak helicopters**.
- The primary is to **undertake EEZ surveillance, anti-piracy patrols, fleet support operations**, providing maritime security to off shore assets and carry out escort operations for high value assets.

👉 About INS Kulish

- It is an indigenously built **guided missile corvette**.
- INS Kulish is the **third** of indigenously-manufactured **Kora Class guided missile corvettes**, commissioned into the Navy in 2001.
- It is equipped with a **multitude of weapons** and **sensors** and also designed to embark indigenously-manufactured Dhruv (ALH) and Chetak helicopters.

6. Exercise Dustlik-II

Why in News?

- Exercise Dustlik-II between India and Uzbekistan will be held in Uttarakhand from March 10 to 19.

About

- Exercise Dustlik is a **military exercise** between the **Indian Army and Uzbekistan Army**.
- Aim → The aim of the exercise is strengthening **Counter Insurgency (CI)** and **Counter-Terrorism (CT) operations**. Especially in mountainous, rural and urban scenarios under United Nations(UN) mandate.
- First Edition → The first edition of the Exercise Dustlik was **held in 2019** at **Tashkent, Uzbekistan**.
- India's Participation → India has nominated Army's **13 Kumaon regiment**. It is also called the **Rezang La battalion** for its heroic action in the 1962 war with China.



Other Exercises between India and Central Asian Countries:

- **Exercise KAZIND** → It is an annual military exercise **between India and Kazakhstan army**.
- **Exercise KHANJAR** → It is a joint military training exercise **between India and Kyrgyzstan**.

7. Air Independent Propulsion

Why in News?

- The Defence Research and Development Organisation (DRDO) has conducted the final development test of Air Independent Propulsion (AIP) System, crucial for diesel electric submarines.

About AIP System

- Submarines are essentially of two types: **conventional** and **nuclear**.
- The **conventional submarines** use **diesel-electric engines**, which require them to surface almost daily to get atmospheric oxygen for fuel combustion.
- If fitted with an Air Independent Propulsion (**AIP**) **system**, the submarine will need to **take in oxygen only once a week**.
- The **indigenously-developed** AIP, which is one of the key missions of the Naval Materials Research Laboratory (**NMRL**), is considered one of the ambitious projects of the DRDO for the Navy.
- The project aims at fitting the technology on India's Scorpene class submarine INS Kalvari around 2023.
- Advantages of AIP →
 - The AIP system based submarines will be **required to surface much less frequently**, thus **increasing their lethality and stealth multifold**.
 - Diesel-electric submarines require them to come to the surface frequently to charge their batteries, thus their **underwater endurance time is less**.

👉 Fuel Cell Based AIP system:

- In a fuel cell based AIP, an **electrolytic fuel cell releases energy by combining hydrogen and oxygen**, with only water as the waste product ensuring less marine pollution.
- The cells are **highly efficient**, and do not have moving parts, thus ensuring that the submarine has a low acoustic emissions of sound.

Naval Materials Research Laboratory

- Naval Materials Research Laboratory (NMRL) is **one of the laboratories functioning under DRDO**, pursuing **basic research** as well as **application-oriented technology development** in several areas viz. Metallurgy, Polymer, Ceramics, Coating, Corrosion and Electrochemical Protection, Marine Biotechnology, Environmental Sciences.
- It's mission →
 - To **develop Air Independent Propulsion (AIP) systems** for Naval Submarine & Fuel Cell technologies.
 - To provide **scientific solutions** for all categories of materials & related technologies for Indian Navy.
 - To **undertake research projects** on strategic materials for Indian Navy.

8. Cyber Crime Volunteer Framework

Why in News?

- Members of Ridge Management Board (RMB) decided to form an expert committee to study a proposal by the SDMC for dumping "inert material" in Bhatti mines at Asola Bhatti Wildlife Sanctuary.

About

- Launched by → **Indian Cyber Crime Coordination Centre (I4C)**
- Aim of Cyber Volunteer programme → To **make citizens contribute** to the **fight against cybercrime in the country**. Further, assisting the State/UT Law enforcement agencies in their endeavour to curb cyber crimes.
- Features → Under the Cyber Volunteer programme, citizens can **register themselves** as **Cyber Crime volunteers**. They will help the law enforcement agencies in **identifying, reporting** and **removing illegal/unlawful online content**.
- **What is Unlawful Content?**
 - The unlawful content has been categorised as the following:
 - Contents **against sovereignty and integrity of India**.
 - Any digital contents **Against defence of India, Security of the State** etc.
 - Contents **affecting friendly relations** with foreign States.
 - Content aimed at **disturbing Public Order** and disturbing communal harmony.
 - Any **Child Sex Abuse materials**.
- **Terms and Conditions:**
 - Cyber Volunteer programme has certain terms and conditions for citizen enrolment as a cyber volunteer. They are:
 - The Cyber volunteer is strictly prohibited from certain things. Such as,
 - creating **social media accounts** in the **name of this programme**
 - Issue **any statement** or **express opinions** on public platforms on **behalf** of the **Cyber Volunteer programme**.
 - Cyber Volunteers have to maintain **strict confidentiality** of tasks assigned or carried out by him/her.
 - Volunteers shall be **de-registered** in **case of any violation** or breach of the conditions.
 - Further, the State nodal officers reserve the **right** to **take legal action**.

Indian Cyber Crime Coordination Centre(I4C):

- It was established in **2018** under the **Ministry of Home Affairs(MHA)**.
- Purpose → I4C act as a nodal point at the **National level** in the **fight against cybercrime**.
- Components → I4C has **seven key components**. They are,
 - National Cybercrime Threat Analytics Unit(TAU)
 - National Cybercrime Reporting
 - Platform for Joint Cybercrime Investigation Team
 - National Cybercrime Forensic Laboratory(NCFL) Ecosystem
 - National Cybercrime Training Centre(NCTC)
 - Cybercrime Ecosystem Management Unit
 - National Cyber Crime Research and Innovation Centre.
- Location → **New Delhi**.

9. INS Karanj

Why in News?

- Indian Navy's third stealth Scorpene-class Submarine INS Karanj was recently commissioned.

About

- The **Scorpène-class submarines** are a class of diesel-electric attack submarines jointly developed by the **French and the Spanish companies**.
- It features **diesel propulsion** and **additional air-independent propulsion** developed by DRDO.
- 6 Scorpene-class submarines, also known as **Kalvari Class**, are being built in India **by the Mazagon Dock Shipbuilders Limited** (MDL) **Mumbai**, under collaboration with Naval Group, France. Their names are
 - **INS Kalvari**: Commissioned in 2017
 - **INS Khanderi**: Commissioned in 2019
 - **INS Karanj**: Commissioned in 2021
 - **INS Vela**: Under Sea Trials
 - **INS Vagir**: Under Sea Trials
 - **INS Vagsheer**: Under Construction.
- The crew of the **previous Karanj**, a Russian origin Foxtrot class submarine that was **decommissioned in 2003** were special invitees for the ceremony.

10. AsterX

Why in News?

- France launched its first military exercise in space this week to evaluate its ability to defend its satellites and other defence equipment from an attack.

About

- The exercise, codenamed "AsterX" in **memory of the first French satellite** from **1965**, will be based on 18 simulated events in an operations room.
- Aim of the Exercise → The drills will simulate the **monitoring** of a **potentially dangerous space object**, as well as a **threat to a satellite**.
- Participants → The new **US Space Force** and **German space agencies** are taking part in the French exercise.

👉 Similar Initiatives of India

- **IndSpaceEx** → India's first ever simulated space warfare exercise.
- **Mission Shakti** → An Anti-Satellite (ASAT) Missile Test.

11. INS Talwar

Why in News?

- Recently, the INS Talwar, stationed at Gulf of Oman, has received a broadcast call from a stranded merchant cargo ship, MV Nayan.

About

- It is a **Talwar-class frigate** of the Indian Navy.
- It is a **modified Krivak III-Class frigate**.
- It was **built in Russia**, and commissioned into the Indian Navy in 2003.
- It is a **multirole frigate** which has participated in various operations and exercises since her commissioning, including **anti-piracy operations** off the coast of Somalia.

- It supports naval forces during **air, surface** and **sub-surface missions**.
- It is used to **detect and destroy enemy** submarines and other surface ships.
- It is fitted with a **Trebovaniye-M combat** information and control system.

12. SIPRI Report

Why in News?

- Swedish think tank Stockholm International Peace Research Institute(SIPRI) releases a report titled “Trends in International Arms Transfers Report”. The report presents global trends in arms exports and arms imports.

About Key findings

- Second Largest Arms Importer → India remains the **second largest arms importer** after Saudi Arabia.
- Decrease in Arms Imports → However, India’s arms imports have **decreased by 33 %** between 2011-15 and 2016-20.
- India’s Arms Imports → India’s **top three arms suppliers** during 2016-20 were **Russia** (accounting for 49% of India’s imports), **France** (18%), and **Israel** (13%).
- India’s Arms Exports → India accounted for **0.2% of the share of global arms exports** during 2016-20.

📌 Stockholm International Peace Research Institute

- This **think tank** is an **independent international institute** dedicated to research into conflict, armaments, arms control and disarmament.
- It was established in **1966** at **Stockholm** (Sweden).
- It provides **data, analysis** and **recommendations**, based on open sources, to policymakers, researchers, media and the interested public.

13. Indian Naval Landing Craft Utility (LCU) L58

Why in News?

- Recently, the Indian Naval Landing Craft Utility (LCU) L58 has been commissioned into the Indian Navy at Port Blair, Andaman & Nicobar Islands.

About

- It is the **eighth and last ship** of the **Landing Craft Utility (LCU) Mark IV Class**.
- It is indigenously designed and built by **Garden Reach Shipbuilders & Engineers Ltd** (GRSE), Kolkata.
- The LCU 58 is an **amphibious ship** which can **carry 160 troops**, in addition to its crew.
- It is capable of **carrying various types of combat vehicles** such as **Main Battle Tanks** (MBTs), **BMPs**, **Armoured Vehicles**, **trucks**, etc.
- It is fitted with an **advanced Electronic Support Measure** (ESM) suite to **intercept enemy radar transmissions**, an advanced Integrated Bridge System (IBS) and a sophisticated Integrated Platform Management System (IPMS).
 - It will allow **single station monitoring** of the **ship’s navigational** and machinery equipment respectively.
- The main armament of the ship includes **two indigenously manufactured 30 mm CRN 91 guns** which are controlled by a Stabilised Optronic Pedestal (SOP).

- The SOP is an **electronic day-night director sight** manufactured by Bharat Electronics Limited (BEL).
- It is manned by a **motivated team of five officers** and **50 sailors**.

14. MILAN-2T Anti-Tank Guided Missiles

Why in News?

- Recently, the Ministry of Defence has signed a ₹1,188 crore deal with state-run Bharat Dynamics Limited (BDL) for supply of 4,960 MILAN-2T Anti-Tank Guided Missiles (ATGMs) for the Indian Army.

About

- The Milan-2T is a **Tandem Warhead ATGM** with the range of 1,850 metres.
- The tandem warheads comprise **a forward charge and a rear charge** separated by a blast shield.
- It is produced by **Bharat Dynamics Limited** (BDL) under license from **MBDA Missile Systems, France**.
- It can be **fired from ground** as well as **vehicle-based launchers**.
- It can be **deployed in anti-tank role** for both offensive and defensive tasks.

👉 MILAN ATGM

- It is a **portable medium-range, anti-tank weapon** manufactured by **Euromissile**, based in Fontenay-aux-Roses in France.
- The system was developed **for the French and German Armies** and over 360,000 missiles and 10,000 launch units have been produced since 1972.
- It is in **service in 41 countries**.
- MILAN 3, armed with a **tandem warhead** with a **new firing post with jam-resistant pulsed-beacon infrared guidance**, has been in production since 1996.
- The **MILAN ADT/ER** is the **latest version** of the missile system with new digitised firing post and new extended-range missile.

15. Exercise Pabbi-Antiterror-2021

Why in News?

- India, Pakistan, China and other members of the Shanghai Cooperation Organisation(SCO) will hold a joint anti-terrorism exercise called “Pabbi-Antiterror-2021”.

About

- Exercise Pabbi-Antiterror was announced during the **36th meeting** of the **Council of the Regional Anti-Terrorist Structure** held in **Tashkent, Uzbekistan**.
- Purpose → To **improve cooperation** between the competent authorities of the SCO member states. Further, helping them in identifying and suppressing channels that finance terrorist activities.

👉 About SCO

- Shanghai Cooperation Organisation (SCO) is a **permanent intergovernmental international organisation** founded in **2001**. It was founded by Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan.

- Members → China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan.
India and Pakistan were admitted to the SCO as permanent members in 2017.
 - Observer States → Afghanistan, Belarus, Iran and Mongolia.
 - Dialogue Partners → Azerbaijan, Armenia, Cambodia, Nepal, Turkey and Sri Lanka.
- Secretariat → Beijing, China.

📌 Regional Anti-Terrorist Structure(RATS)

- It is a **permanent organ** of the SCO.
- Established in → **2004**.
- HQ → Tashkent, Uzbekistan.
- Purpose → RATS serves to **promote cooperation** of member states **against the three evils of terrorism, separatism and extremism**.

16. Ultimate military strength index

Why in News?

- China trumps US in Military Direct's list of strongest armies in the world.

About

- Study released by → **Defence website Military Direct**.
- The Ultimate military strength index **ranks the strongest military forces in the world**.
- Parameters → The index calculated this after taking into consideration **various factors**.
 - The factors include **budgets, average salaries, number of inactive and active military personnel**.
 - The index also includes **total air, sea, land, and nuclear resources** and the weight of equipment.

📌 Key Findings

- China** has the **strongest military force** in the world. Despite the enormous military budget, the **USA gets a second position**. This is followed by **Russia, India, and France**.
- Related to India →
 - India has the **fourth strongest** military force in the world.
 - India is the **world's third-biggest military spender**. According to the index India spends almost a budget of USD 71 billion.

17. ICGS Vajra

Why in News?

- Indian Coast Guard ship 'Vajra' commissioned; to enhance coastal security.

About ICGS Vajra

- Indian Coast Guard Ship Vessel "**Vajra**" is indigenously designed and built by **Larsen and Toubro Shipbuilding Ltd.**
- ICGS Vajra is the **sixth** in the **series of seven Offshore Patrol Vessels (OPVs)**.
- Key Features →

- It is a **98-meter ship** equipped with **state-of-the-art facilities**. It is designed to carry one **twin-engine helicopter** and **four high-speed boats**.
- The vessel can also be used in **Search and Rescue**, **Law Enforcement**, and **Maritime Patrol**.
- The vessel is also capable of **carrying Pollution Response Equipment** for oil spill response at Sea.

👉 **Vikram Class offshore patrol vessel (OPV)**

- Vikram Class offshore patrol vessel (OPV) is a **series of seven offshore patrol vessels** (OPV). **L&T Shipbuilding** for the Indian Coast Guard(ICG) is building them.
- The seven OPVs are → 1) **ICGS Vikram** 2) **ICGS Vijaya** 3) **ICGS Veera** 4) **ICGS Varaha** 5) **ICGS Varad** 6) **ICGS Vajra** and 7) **ICGS Vighraha**.

👉 **Offshore Patrol Vehicles (OPVs)**

- What is it? → Offshore Patrol Vehicles (OPVs) are **long-range surface ships**. They are **capable of operation in maritime zones of India** including island territories with helicopter operation capabilities.
- Roles → Their roles include **coastal and offshore patrolling**, **policing maritime zones of India**, **control and surveillance**, anti-smuggling and anti-piracy operations with limited wartime roles.

18. United Nations Peacekeeping

Why in News?

- India delivered on its promise of 2,00,000 doses of COVID-19 vaccines for the United Nations Peacekeeping Force (UNPKF) worldwide, sending a shipment bound for Copenhagen.

About

- It was created in **1948**. They are often referred to as **Blue Berets** or **Blue Helmets** because of their light blue berets or helmets
- Purpose → It **provides security, political**, and **peacebuilding support** to countries under conflicts. It helps countries make the difficult, early transition from conflict to peace.
- Principles → They are guided by **three basic principles**:
 - **Consent of the parties**
 - **Impartiality**
 - **Non-use of force** except in self-defense and defense of the mandate.
- Authorised by → Every peacekeeping mission is **authorized by the UN Security Council**.
- Peacekeeping forces → Member states contribute their manpower for Peacekeeping forces on a **voluntary basis**.
- Funding → The financial resources of UN Peacekeeping operations are the **collective responsibility of UN Member States**. Every Member State is **legally obligated to pay** their respective share for peacekeeping.
- Present status → There are currently **12 UN peacekeeping operations deployed**.
- For its services, UN Peacekeeping has also received the **Nobel Peace Prize**.

History and Culture

1. Channapatna Toys

Why in News?

- The Prime Minister has called upon to explore the possibility of e-marketing of Channapatna toys across the country and the world, during the India Toy Fair 2021.

About

- Channapatna toys are a **particular form of wooden toys** (and dolls). Artisans of the town Channapatna in **Karnataka** manufactures them.
- In Kannada, Channapatna is also called “**Gombegala Ooru**”, which means toy town in English.
- Origin → The origin of these toys can be traced to the **reign of Tipu Sultan**. He invited **artisans from Persia** to **train the local artisans** in the making of wooden toys.
- The Father of the Channapatna toy is **Bavas Miyan**. He is known for his commitment to **helping the local artisans** with the **art of toy-making** and bringing in new technologies to improvise the toys.
- Wood Used → The Channapatna toys are made of **specific wood**, called “**Aale Mara or the ivory wood**”. Vegetable dyes are used for colors that are safe to use and environment-friendly.
- GI tag → This traditional craft is protected as a **geographical indication**(GI) under the World Trade Organization(**WTO**).

👉 Other Traditional Indian Toys of Different States:

- Kerala**- Kathakali dance dolls, animal-shaped toys, and Woodcraft Toys
- Tamil Nadu**- Thanjavur Thalaiyatti Bommai, Choppu saman Toys
- Punjab**- Folk toys, Handwai, Chankana, Lattu, Ghuggu
- Telangana**: Nirmal Toys
- Madhya Pradesh**– Adivasi Gudia Hastashilpa (Dolls), Betel Nut's Toys, and Tin Toys.
- Uttar Pradesh**- lacquered toys and miniature utensils Toys.
- Jammu & Kashmir**- Walnut wood carving toys
- Chhattisgarh**- Clay & Terracotta, Dhokra Metal Casting, Wood Carving, Metal Craft toys.
- Daman & Diu**- Tortoise Shell toys and crafts,
- Andaman & Nicobar Island** - Timber Toys, Coconut shell toys.

👉 India Toy Fair

- It is a **landmark initiative** of the Government of India in line with the vision of Atmanirbhar Bharat by the year 2022 to **mark 75 years of India's Independence**.
- India's local toy and games industry is set to play a **crucial role in realising these aspirations** and the fair is an effort to make India stand out for its **rich and multifarious toy production**.
- The India Toy Fair 2021 is the first-ever **digitally accessible exhibition** and **platform**.
- The Government has also launched “**Toycathon**”, an **online toy hackathon** for innovative toys/games concepts.

2. St. George's Orthodox Church

Why in News?

- The centuries-old St. George's Orthodox Church at Cheppad in Kerala faced demolition for widening of National Highway 66, but is now set to become a Centrally-protected monument of national importance with Archaeological Survey of India (ASI) recognition.

About

- St George Orthodox church is believed to be established in **AD 950** but **some experts say** it was **built in AD 1050**.
- The church was **rebuilt in 1952**. But, the eastern part of the church was retained (not rebuilt) to **preserve the murals**.
 - The mural is any piece of **artwork painted** or **applied directly on a wall**, ceiling or other permanent surfaces.
- Significance → The most attractive feature of the church is the **murals paintings (around 47)**. These paintings are considered to **be over 600 years old**. Further, they **reflect the blend** between **traditional Kerala mural art and Persian art**.

👉 Monuments of National Importance:

- Nodal Authority → Monuments of National Importance are **designated by** the **Archaeological Survey of India** (ASI).
- What is a National Monument? → '**Ancient Monument**' is defined under the Ancient Monument and Archaeological Sites and Remains Act, 1958.
 - The Act defines **Ancient Monument** as **any structure** or **monument** or any cave, rock-sculpture, an inscription that is of **historical, archaeological interest**. Further, Ancient Monument has to be in existence for not less than 100 years.
- Maintained by → The **Central Government** is **authorised to maintain, protect** and **promote** the Monuments of National Importance.
- Sites → Currently, **3,691 monuments** nationwide are protected by the Archaeological Survey of India (ASI). The **highest number of them** were in **Uttar Pradesh** followed by Karnataka and Tamil Nadu.

3. Bir Chilarai Divas

Why in News?

- 512th Bir Chilarai Divas would be observed all over Assam.

About

- It is a **regional public holiday** in the north-eastern Indian state of Assam.
- To **honour the courageous** and **heroic deeds of Bir Chilarai**, his birth anniversary is being observed as Bir Chilarai Divas every year.
- It falls **on the Poornima** (full moon) of Magha month which usually falls in February in the western calendar.

Bir Chilarai (1510-1571 AD)

- Also known as the **Kite Prince of Assam**.

- He was a **Great General of the Koch Royal Dynasty** of Assam.
- By his bravery and heroism, he played a crucial role in **expanding the great empire** of his elder brother, **Maharaja Nara Narayan**.
- Originally named **Shukladhwaj**, he was the **son of the Maharaja Viswa Singha**, who founded the Koch royal dynasty in 1515 AD.
- He gained the title **Chilarai** which means '**Kite Prince**' as his **military attacks** were **noted for their speed**, like a **chila** (kite).
- He died of **smallpox** on the **bank of the Ganges**.
- From the year **2005**, the government of Assam has been conferring **Bir Chilarai Award**, the **highest honour for bravery to individuals**.

4. Singorgarh Fort

Why in News?

- The President of India Ram Nath Kovind laid the foundation stone for the conservation works of Singorgarh Fort in Madhya Pradesh.

About

- It is located in **Damoh district of Madhya Pradesh**.
- It is an old hill-fort of **Gondwana dynasty** which is spread over hills in a forested area.
- It was a magnificent fort and was **residence of Gond rulers of Central India**.
- In year **1308**, Singorgarh was **ruled by Vyaghradev Ji** who was **ruler of Kumhari** and was under **rulers of Kalinjar**.
- It was Gond ruler **Sangramshahi** who **conquered** the Singorgarh fort in early period of 16th century.

5. Sattras of Assam

Why in News?

- As the campaign trails of political parties in poll-bound Assam are in full swing, one place - the Bartadrava Than or Sattri in Nagaon, Assam - figures prominently.

About

- Sattras are **monastic institutions** created as part of the **16th century Neo-Vaishnavite reformist movement** started by Vaishnavite saint-reformer Srimanta Sankaradeva (1449-1596).
- These Sattras/Thans were established as **centres of religious, social and cultural reforms** in the **16th century** across Assam.
- Sattras promulgate Sankaradeva's unique "**worship through art**" approach with **music (borgeet)**, **dance (xattriya)** and **theatre (bhauna)**.
- Each Sattri has a **naamghar** (worship hall) as its nucleus and is headed by an influential "**Sattradhikar**". Monks, known as **bhakats**, are inducted into Sattras at a young age. They **may** or **may not be celibate**, depending on the kind of Sattri they are inducted into.

👉 **Philosophy of Sankaradeva:**

- Sankardeva propagated a form of Bhakti called **eka-sharana-naam-dhrama**.
 - It **rejects focus on vedic ritualism** and **focuses on devotion** (bhakti) to Krishna in the form of congregational listening and singing his name (instead of idol worship) and deeds (Kirtan and sravan).
 - His dharma was based on the **four components** of **deva** (god), **naam** (prayers), **bhakats** (devotees), and **guru** (teacher).
- He espoused a society **based on equality and fraternity**, **free from caste differences**, orthodox Brahmanical rituals and sacrifices.
- However, due to ideological differences among his disciples, the Sattras got **divided** (after his demise) into **four independent sectarian divisions**, deviating from its basic goal.

6. Declaration Of World Heritage Sites By UNESCO

Why in News?

- On the occasion of International Women's Day, the all-women art exhibition titled as "Akshya Patra" was inaugurated on March 9, 2021 at the Lalit Kala Akademi.

About News

- '**Dholavira: A Harappan City**' has been submitted for **nomination** of World Heritage Site in 2019-2020.
- Nomination dossiers of '**Santiniketan, India**' and '**Sacred Ensemble of Hoysalas**' have been submitted to UNESCO for the year 2021-22 cycle.

👉 World Heritage List

- A World Heritage site is classified as a **natural** or **man-made area** or a **structure** that is of **international importance**, and a space which requires special protection.
- These sites are officially **recognised by the UN and** the United Nations Educational Scientific and Cultural Organisation, also known as **UNESCO**.
- UNESCO believes that the sites classified as World Heritage are **important for humanity**, and they **hold cultural and physical significance**.
- Maintained by → The list is maintained by the **international World Heritage Programme** administered **by the UNESCO World Heritage Committee**, composed of 21 UNESCO member states which are elected by the General Assembly.
- Each World Heritage Site **remains part of the legal territory of the state** wherein the site is located and UNESCO considers it in the interest of the international community to preserve each site.
- Selection criteria → To be selected, a World Heritage Site must be an already **classified landmark**, **unique in some respect as a geographically** and **historically identifiable place** having special cultural or physical significance.

👉 Steps Taken by India

Adopt Heritage Project

- It was launched in **2017** as a **collaborative effort** by the Ministry of Tourism, Ministry of Culture and Archaeological Survey of India (ASI), State/UTs Governments.
- It envisages the **development and maintenance of tourist amenities** at heritage sites and making them tourist-friendly.

HRIDAY Scheme

- The **Ministry of Urban Development**, Government of India, launched the Heritage City Development and Augmentation Yojana (HRIDAY) scheme, with a focus on the **holistic development of heritage cities**.

📌 United Nations Educational, Scientific and Cultural Organization (UNESCO)

- UNESCO was formed in 1945, is a specialized agency of the United Nations (UN) based in Paris.
- It works for achieving peace and security by promoting international collaboration through educational, scientific, and cultural reforms in order to increase universal respect for justice, the rule of law, and human rights along with fundamental freedom proclaimed in the United Nations Charter.
- It has 195 member states and ten associate members. India is a founding member of the Organisation.

7. Konark Sun Temple

Why in News?

- Archaeological Survey of India (ASI) is carrying out the conservation of the Sun Temple at Konark.

About

- It is also known as the Black Pagoda which was built in the middle of the 13th century in black granite during the reign of Narasimhadeva-I the great ruler of the Ganga dynasty.
- The temple is a World Heritage Site is situated in the eastern state of Odisha and is a massive temple dedicated to the Sun God temple
- It was considered as a chariot for the Sun God, the word 'Konark' is a combination of two words 'Kona' and 'Arka'. 'Kona' means 'Corner' and 'Arka' means 'Sun', so when combined it becomes 'Sun of the Corner'.
- There are three images of the Sun God at three different sides of the temple, positioned in the proper direction to catch the rays of the sun at morning, noon and evening.
- The Konark Temple was designed in the form of a gorgeously decorated chariot mounted on 24 wheels, each about 10 feet in diameter, and drawn by 7 mighty horses.
- It is protected under the National Framework of India by the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act (1958) and its Rules (1959).
- It remains a major pilgrimage site for Hindus, who gather here every year for the Chandrabhaga Mela around the month of February.
- Great poet Rabindranath Tagore wrote of Konark: "Here the language of stone surpasses the language of man."

8. Lingaraja Temple

Why in News?

- Ahead of 'Maha Shivratri', Bhubaneswar's Lingaraj Temple got all decked up. Fairy lights adorned temple for auspicious day.

About

- Lingaraja Temple is a Hindu temple dedicated to Shiva and is one of the oldest temples in Bhubaneswar.
- The Lingaraja temple is the largest temple in Bhubaneswar.
- The temple represents the quintessence of the Kalinga architecture.
- The temple is believed to be built by the kings from the Somavamsi dynasty, with later additions from the Ganga rulers.
- Lingaraj is referred to as "Swayambhu" – self-originated Shivling.

- Another important aspect of the temple is that it signifies the **syncretisation of Shaivism and Vaishnavism sects** in Odisha.
- Perhaps the rising cult of **Lord Jagannath** (considered an incarnation of Lord Vishnu) which coincided with the **completion of the Lingaraja Temple had a role to play.**
- The presiding deity in the Temple is known as **Hari-Hara**; **Hari denotes Lord Vishnu** and **Hara meaning Lord Shiva.**
- The temple is **out of bounds for non-Hindus.**
- The other attraction of the temple is the **Bindusagar Lake**, located in the north side of the temple.
- On the western banks of Bindusagar, lies the **garden of Ekamra Van** named after the **Hindu mythological texts** where Bhubaneswar the capital city of Odisha was referred as **Ekamra Van or a forest of a single mango tree.**
- Components of Lingaraj temple →
- The temple is built in the Deula style that has four components namely,
 - **vimana** (structure containing the sanctum),
 - **jagamohana** (assembly hall),
 - **natamandira** (festival hall) and
 - **bhoga-mandapa** (hall of offerings),
- each increasing in the height to its predecessor.

👉 Other Important Monuments in Odisha

- **Konark Sun Temple** (UNESCO World Heritage Site)
- **Jagannath Temple**
- **Tara Tarini Temple**
- **Udaygiri and Khandagiri Caves**

9. Swami Chidbhavananda

Why in News?

- Prime Minister Narendra Modi launched the Kindle version of Swami Chidbhavanandaji's Bhagavad Gita.

About

- He was born on **11th March 1898**, in a **traditional agricultural family** to Perianna Gounder and Nanjammal.
- He lived as a **great teacher** by explaining difficult **spiritual concepts** such as the **path to salvation** through his lucid writings of Ramayana and Mahabharata.
- He was the founder of the **Ramakrishna Ashram at Udhagamandalam.**
- He also founded **Sri Ramakrishna Tapovanam Ashram** at Thirupparaithurai, Tiruchirapalli, Tamil Nadu.
- He has **authored 186 books** and has many literary compositions to his credit.
- However, his **scholarly work on the Gita** is one of the most celebrated ones.
 - The **Tamil version** of the **Gita with his commentaries** was published in **1951, followed by the English in 1965.**
 - Its translations into **Telugu, Oriya, German** and **Japanese** were undertaken by devotees.
 - Its **Kindle version** has been recently launched.

10. Bamiyan Buddhas

Why in News?

- Twenty years after being blasted out of Afghanistan's rugged central highlands, one of the country's famed Buddha statues made a brief virtual return as a three-dimensional projection filled the alcove that hosted the statue for centuries.

About

- The Bamiyan Buddhas were great examples of a confluence of Gupta, Sassanian and Hellenistic artistic styles.
- The Bamiyan Buddhas are said to date back to the 5th century AD and were once the tallest standing Buddhas in the world.
- Salsal and Shamama, as they were called by the locals, rose to heights of 55 and 38 metres respectively.
- The Salsal means "light shines through the universe" and the Shamama is "Queen Mother".

Significance of Bamiyan Valley

- Bamiyan is situated in the high mountains of the Hindu Kush in the central highlands of Afghanistan.
- The valley, which is set along the line of the Bamiyan River, was once integral to the early days of the Silk Roads.
- Bamiyan became a major trade, cultural and religious centre when the Buddhist Kushan Empire spread.
- The Kushans were able to develop a syncretic culture because China, India and Rome sought passage through Bamiyan.

What is 'A Night with Buddha'?

- It started in 2013 as a way of creating a bridge between different cultures and in memory of Afghanistan's pre-Islamic heritage.
- It featured a projection of Salsal, the taller of the two Buddhas, into the niche where it once stood.

11. Sahitya Akademi Award

Why in News?

- Recently, Marathi writer Nanda Khare refused to accept the Sahitya Akademi award for his novel "Udya", published in 2014.

About

- The Sahitya Akademi award established in 1954, is a literary honour.
- It is conferred by Sahitya Akademi which is India's National Academy of Letters.
- The Sahitya Akademi Award prizes the most outstanding books of literary merit published in any of the major Indian languages recognised by the Akademi.
- The Sahitya Akademi award is the second-highest literary honour by the Government of India, after the Jnanpith award.
- Criteria for Choosing Awardee →

- The author must be of **Indian Nationality**.
- Book/work eligible for the award must be an **outstanding contribution to the language and literature** to which it belongs.
- When **equal merit for books of two** or **more are found**, certain criteria like total literary contribution and standing of authors shall be taken into consideration for declaring award.

📌 Sahitya Akademi

- It is an **autonomous organization** under the **Ministry of Culture**, encourages the preservation and promotion of languages, especially the unrecognized and tribal languages.
- The **Sahitya Akademi Library** is one of the **largest multi-lingual libraries** in India, with a rich collection of books on literature and allied subjects.
- It publishes two bi-monthly literary journals: **Indian Literature in English** and **Samkaleen Bharatiya Sahitya in Hindi**.

12. Dandi March

Why in News?

- The Prime Minister has flagged off a commemorative 'Dandi March' (on 12th March) to launch the celebrations of the 75th year of Independence - 'Azadi Ka Amrit Mahotsav'.

About the 1930 Dandi March

- It was a **24-day march** from March 12 to April 5, 1930.
- It was a **tax resistance campaign** against the British salt monopoly.
- The march was based on **Gandhi's principle of non-violence** or **Satyagraha**.
- Why did Gandhi call for the Dandi March? →
 - The **1882 Salt Act** gave the **British a monopoly** in the manufacture and sale of salt.
 - Even though salt was **freely available on the coasts** of India, Indians were **forced to buy** it from the colonizers. Hence, Gandhi decided to inaugurate the civil disobedience using salt.
- What happened at Dandi March? →
 - On March 12, 1930, Gandhiji started the march **from Sabarmati with 78 followers** on a **241-mile march** to the coastal town of Dandi on the Arabian Sea.
 - There, Gandhiji picked up a **small amount of natural salt** lying in a small pit. The act was **symbolic** but hugely covered by the press.
 - After that, Gandhiji planned to stage a satyagraha at the **Dharasana Salt Works**. However, **Gandhiji was arrested** just days before the planned action at Dharasana.
- Impact of the Dandi March → Due to Dandi March, similar acts of civil disobedience took place in other parts of India:
 - In **Bengal, led by Satish Chandra Dasgupta** and in **Bombay led K.F Nariman** walked with volunteers to prepare salt.
 - Further, the illegal manufacture and sale of salt were accompanied by the **boycott of foreign cloth and liquor**.
 - Forest laws were also **flouted in Maharashtra, Karnataka, and the Central Provinces**. Peasants in Gujarat and Bengal refused to pay land and chowkidari taxes.

- **Acts of violence too broke out** in several states. But unlike what happened during the non-cooperation movement, Gandhi **refused to suspend** the civil disobedience movement this time.
- Significance of the Dandi March →
 - The Dandi march was the **most significant** organised movement **against the British Raj** after the non-cooperation movement of the early 1920s.
 - The March was also a **turning point** in the **Indian Independence movement**. It received attention from the national, international media, and world leaders.

👉 About the 2021 Dandi March:

- **81 walkers** will participate in **The 2021 Dandi March**. They will travel through the **386 km Dandi March route** in **memory of 78 companions** of Mahatma Gandhi in the 1930 march from Ahmedabad to Dandi. 2 others joined mid-route.
- The descendants of those who had walked the Salt March (in 1930) will also be **honored**.
- Further, the subsequent journey will see **big events at six places associated with Gandhi**. These include **MK Gandhi's birthplace Porbandar** along with **Rajkot, Vadodara, Bardoli** (Surat), **Mandvi** (Kutch) and **Dandi** (Navsari).

13. Ayya Vaikunda Swamikal

Why in News?

- India's foreign exchange reserves surpass Russia's to become world's fourth largest.

About

- Ayya Vaikunda (1809-1851) was a **great humanist** and **social thinker**.
- He lived in the **Princely Kingdom of Travancore** in the early decades of the 19th Century Kerala.
- He is remembered as the first well known **social reformer in India** who **critiqued the caste discrimination** and **religious hierarchy** and fought against the practice of untouchability.
- His gave an exhortation of **'ONE CASTE, ONE RELIGION, ONE CLAN, ONE WORLD, ONE GOD'**.
- He was **against idol worship** and he did not allow the portraiture to draw his figure.
- His theory and practice like **'samathva samajam', 'sama panthi bhojan', 'thottu namam podunkal'** aimed at cultivating a thought of equality and unity in Indian minds.
- He founded **'samathva samajam'** in 1836 and was considered the **first socio reform movement** in India.
- He called the rule of the British as **'Ven Neechan'** and the rule of the king of Travancore as **'The Neechan of Ananthapuri'**.
- He advised his followers to practice Dharma and the most important form of Dharma was considered **'Annadhanam'**.
- He organized **'Sama Panthi Bhojana'** in each and every place of worship in the name of **'Annadanam'**.

14. Guru Chemancheri Kunhiraman Nair

Why in News?

- Guru Chemancheri Kunhiraman Nair, a recipient of Padma Shri, died at the age of 104.

About

- Chemancheri Kunhiraman Nair, also known as Guru Chemancheri (1916 – 2021) was a noted **Indian Kathakali actor**.
- Kathakali is a **major form of classical Indian dance from Kerala**.
- He also played a significant role in **making Bharatanatyam popular** in **north Kerala**.
- He established an institution named **Bharateeya Natya Kalalayam** at Kannur in 1945. Later, he established another school, **Cheliya Kathakali Vidyalayam**, in 1983, in Cheliya.
- Guru Chemancheri was **awarded with Padma Shri in 2017**.

About Kathakali

- Kathakali is one **among the eight classical dances** of India.
- It is a **blend of dance, music and acting**. The dance involves **dramatisation of stories**, adapted mostly from the Indian epics.
- The roles generally portrayed include **kings, gods and demons**, the **vocalists narrate the legend** and the percussionists play the musical instruments.
- Kathakali involves use of **heavy make-up** and **stunning costumes** (elaborate masks, huge skirts and big head-dresses).
 - **Different facial colours** are used to indicate different mental stages & character, for example green- nobility, black- wickedness and red patches- combining royalty & evil.

15. Bhaona

Why in News?

- The Congress in Assam has tweaked Bhaona for a statement against the Citizenship (Amendment) Act and the National Register of Citizens.

About

- Bhaona is a **dramatic form of entertainment** to **convey spiritualism** in the **Vaishnav mould**. It is a presentation of the **Ankia Naat of Assam**.
- It was created by the **saint Srimanta Sankaradeva** five centuries ago.
- In Bhaona cultural **glimpses of Assam, Bengal Orissa, Mathura and Brindavan** can be seen.
- The **Sutradhaar**, or **narrator begins the story**, first in Sanskrit and then in either Brajboli or Assamese.
- [**Brajboli** or **Brajavali** is a literary language developed by Sankardeva that was limited to theatrical usage.]
- Sankardeva - Initially, **Sankaradeva wrote his prose in Sanskrit** but later used Assamese and Brajavali to develop the following art forms:
 - **Bhaona** - a mythology-based theatrical performance,
 - **Borgeet** - a new form of spiritual music, and
 - **Monastic dances** that evolved into the classical Sattriya (a classical dance form which is a medium for propagation of Vaishnava faith).

16. Anangpal Tomar II

Why in News?

- Recently, a government seminar was conducted in Delhi which highlighted the legacy of the long-forgotten Tomar king Anangpal II.

About

- He belonged to the **Tomar dynasty** that ruled parts of **present-day Delhi** and **Haryana** between the 8th and 12th centuries.
- He was instrumental in **populating Indraprastha** and giving it its **present name, Delhi**.
- Anangpal of the Tomar Rajputs **founded Delhi between 1053 and 1109 AD**.
- Anangpal Tomar II was succeeded by his grandson **Prithviraj Chauhan**.

👉 Tomar Dynasty

- The Delhi Sultanate was **established in 1192 after Prithviraj Chauhan's defeat** in the **Battle of Tarain** (present-day Haryana) by the Ghurid forces.
- In middle of **11th century**, he built a fort called **Lal Kot** (literally Red Fort), in which the **Qutb Minar stands today**, and **founded a town**.
- Tomars and their Delhi link find **mention** in **some modern-day literature** as well.
 - The noted medieval historian Professor K A Nizami's Urdu book, **Ehd-e-Wusta ki Dilli**, **translated in English** as Delhi in Historical Perspectives, looks at Delhi across six centuries (from 1300 to 1800).
- It mentioned that **Delhi** formally **emerged as a city only in the 11th century**, when Tomar Rajputs took over the mountainous Aravalli region.
- It said that the most reliable evidence about the early history of Delhi is inscribed on the **iron pillar of Masjid Quwaatul Islam, adjacent to the Qutab Minar**.
- Basheeruddin Ahmed **in Waqeat-e-Darul Hukumat Dehli** and **Gordon Risley Hearn** in **The Seven Cities of Delhi** refer to an invasion and conquest of Delhi by Chauhan Rajputs in AD 1151.
- It provides that they reached an arrangement that the **Tomar** should **marry a Chauhan princess** so that their **offspring becomes the king of Delhi**.

17. Jaapi, Xorai and Gamosa in Assam

Why in News?

- As the polling date draws closer, decorative Jaapis (field hats), hand-woven Gamosas and bell-metal Xorais are making frequent appearances in Assam.

About Jaapi

- The jaapi is a **conical hat** made of bamboo and **covered with dried tokou** (a palm tree found in rainforests of Upper Assam) **leaves**.
- The first possible recorded use of jaapi dates back to the **Ahom-era buranjis**, or **chronicles**. "Kings and ministers would wear them then."

👉 Gamosa

- The Gamosa, which literally translates to a **cloth to wipe one's body**, is **omnipresent in Assam**, with wide-ranging uses.

- It can be used at home as a **towel** (uka gamosa) or in **public functions** (phulam/floral gamosa) to felicitate dignitaries or celebrities.

Xorai

- It is Made of **bell-metal** and It essentially a **tray with a stand at the bottom**, with or without a cover can be found in every Assamese household.
- They primarily used to **felicitate important people and guests**, these important symbols of **Assamese identity** and **culture** are abundantly seen in political campaigns across the state.

18. Lachit Borphukan

Why in News?

- Recently, the Prime Minister called 17th century Ahom general Lachit Borphukan a symbol of India's "Atma Nirbhar military might".

About Lachit Borphukan

- He was an **army general** in the **army of Ahom Kingdom of Assam**.
- Before being appointed as the supreme commander he served at **various positions for Ahom Kingdom**.
- He **excelled** in the **art Guerrilla Warfare**.
- He is known for his **exemplary leadership** in the **1671 Battle of Saraighat**, where the Ahoms defeated the Mughal forces.
- He was the inspiration behind **strengthening India's naval force** and **revitalising inland water transport** and creating infrastructure associated with it due to his great naval strategies.
- The **Lachit Borphukan gold medal** is awarded **to the best cadet** from the National Defence Academy.
 - The medal was **instituted in 1999** to inspire defence personnel to emulate Borphukan's heroism and sacrifices.
- He **died in 1672**, a year after the battle of Saraighat due to an unknown illness.

Battle of Saraighat

- The battle of Saraighat was fought **on the banks of the Brahmaputra** in **Guwahati** in **1671**.
- It is considered as one of the **greatest naval battles on a river** which resulted in the victory of Ahoms over the Mughals.

19. Shigmotsav Festival

Why in News?

- The Goa government has limited the Shigmotsav (Shigmo festivities) parades to three locations only (Panaji, Ponda and Mapusa), owing to rising cases of Covid-19 in the state.

About

- Shigmotsav festival also known as **Shigmo** is a **spring festival** celebrated in the **state of Goa**.
- The festival is the celebration of a **rich, golden harvest of paddy** by the tribal communities of Goa.
- Communities → Agricultural communities including the **Kunbis**, **Gawdas** and **Velips** celebrate the festival.

- Invocation of Deities → The festival begins with 'Naman'. It means the invocation of the local folk deities on the village stage or the village 'maand'.
- Instruments used → The percussion instruments like the Ghumat, Dhol, Mhadle and Tashe are used by the male folk. This is called the 'romta mell'.
- Folk Dances → This includes Folk dances like Ghode Modni (a dance of equestrian(horse riding) warriors), Gopha and Phugadi, etc.
- During the festival, the Goa government organize float parades. This draw both domestic and international tourists.
- Other Names →
- Shigmo is celebrated all over India but in different names:
 - North India - Holi.
 - Assam and Bengal - Dolyatra.
 - South India - Kamadahan.
 - Maharashtra - Shimga.

20. MICE Roadshow - Meet in India

Why in News?

- Union Minister for Tourism and Culture and Chief Minister of Madhya Pradesh will inaugurate the 'Chhatrasal Convention Centre at Khajuraho developed under Swadesh Darshan Scheme of Ministry of Tourism.

About

- He will also launch the "MICE Roadshow Meet in India" Brand and Roadmap for the Promotion of India as MICE Destination in Khajuraho.
- The acronym "MICE" stands for "Meetings, Incentives, Conferences and Exhibitions", and is essentially a version of business tourism that draws domestic and international tourists to a destination.
- It will provide a tremendous boost to Khajuraho as an iconic tourist destination particularly the MICE potential of Khajuraho.
- The Ministry of Tourism has framed 'Development of Iconic Tourist Destinations Scheme' a Central Sector Scheme for the development of nineteen identified iconic destinations in the country following a holistic approach.

About Khajuraho temples

- Khajuraho Temples are among the most beautiful medieval monuments in the country. These temples were built by the Chandella ruler between AD 900 and 1130.
- They are world-wide known for their erotic sculptures. The first recorded mention of the Khajuraho temples is in the accounts of Abu Rihan al Biruni in AD 1022 and the Arab traveler Ibn Battuta in AD 1335.
- The Khajuraho group of temples were built together but were dedicated to two religions, Hinduism and Jainism, suggesting a tradition of acceptance and respect for diverse religious views among Hindus and Jains in the region.

21. Sabar Tribe (West Bengal)

Why in News?

- With basic survival at stake, the vulnerable Sabar tribe of Lalgurh have little stomach for elections.

About

- It is a **tribal group from West Bengal**.
- This was one among the tribes which were notified by the British in 1871 as "criminals".
- Though they were **denotified after independence**, the stigma remained and they faced trouble whenever crimes were committed in their vicinity.
- They face the major challenge of **hunger, malnutrition** and **liver problems** caused by **excessive consumption of liquor**.
- These are a **Particularly Vulnerable Tribal Group** (PVTG).
 - PVTGs are more vulnerable among tribal groups, with a **declining or stagnant population, low level of literacy, pre-agricultural level of technology** and are economically backward. They generally inhabit remote localities having poor infrastructure and administrative support.
 - In 1973, the **Dhebar Commission** created Primitive Tribal Groups (PTGs) as a **separate category**, which was renamed as PVTGs in 2006.

Miscellaneous

1. E-Daakhil Portal

Why in News?

- E-Daakhil portal for consumer grievance redressal is operational in 15 States/UTs.

About

- What is it? → It is a portal for **e-filing of consumer complaints** with the National Consumer Dispute Redressal Commission (**NCDRC**) and **other consumer commissions**.
- It was launched **by the NCDRC** in September 2020 with Delhi being the **first state to implement it**.
- The fees for filing the complaint can also be **paid online** through the **e-Daakhil portal**.
- The e-Daakhil portal **empowers the consumer** and **their advocates to file the consumer complaints** along with payment of requisite fees online from anywhere for the redressal of their complaints.
- It also facilitates the **consumer commissions to scrutinize the complaints online to accept**, reject or forward the complaint to the concerned commission for further processing.
- To **facilitate rural consumers for e-filing**, it has been decided to integrate the Common Service Centres (**CSC**) with the e-daakhil portal.
 - As many consumers at Gram Panchayat level may either not have access to electronic modes of communication or are unable to use the tools, they may avail the services of CSCs in filing their complaints in the Consumer Commission.

2. khujli ghar

Why in News?

- Some villages in Nagaland are trying to revive a traditional form of punishment that seeks to check crime with an itch in time.

About

- It is a **cramped, triangular cage** made from the logs of an indigenous tree that **irritates the skin**.
- It is a **traditional form of punishment** that seeks to check crime.
- Such itchy cages are referred to as **khujli ghar in Nagamese**. But each Naga community has its **own name**.
- The **Aos**, one of the major tribes of Nagaland, call it **Shi-ki** that means **flesh-house**.
- The cage is usually placed at a **central spot in the village**, usually in **front of the morung**, or **bachelor's dormitory**, for the inmate to be in full public view.
- The cage is made of the **logs of Masang-fung**, a local tree that people avoid because of the **irritation it causes**. It does **not affect the palm** but people who make the cages have to be careful.

3. The Opportunity Index 2021

Why in News?

- Recently, the Opportunity Index 2021 was released by LinkedIn.

About

- The 2021 Opportunity Index **highlights the difference in perception** of available opportunities in the market for men and women in India.
- The 2021 survey had **more than 10,000 respondents** across the Asia Pacific region, from Australia, China, India, Japan, Malaysia, Philippines, and Singapore.
- The research was conducted by **market research firm GfK**.
- The survey included respondents from **18 to 65 year olds**.

👉 Key findings

- **9 in 10 or 89 per cent** of women were **negatively impacted** by the coronavirus pandemic.
- About **85%**, or **four in five working women** in India believe they have **missed out on a raise, promotion, or work offer because of their gender**. This average stands at 60% for the Asia Pacific (APAC) region.
- More women in India have **experienced** the **impact of gender on career development** when compared to the APAC region.

4. Hurun Global Rich List, 2021

Why in News?

- The Nag River Pollution Abatement Project has been approved at a cost of Rs. 2,117.54 crores.

About

- The list is published by the **Hurun Report Inc**, a research platform **based in Shanghai and Mumbai**, which claims to be the world's largest 'rich list' provider.
- It was established in **1999** by **British accountant Rupert Hoogewerf**.
- The List reflects the world economy through the **stories of the world's most successful entrepreneurs**.
- The Hurun Global Rich List 2021 ranked **3228 billionaires** from 2,402 companies and 68 countries.

👉 Key findings

- The world added **607 new billionaires**, or **more than three billionaires in two days**.
- **India** added **55 new billionaires**, or more than one billionaire every week, in 2020.
- Reliance Industries Chairman **Mukesh Ambani**, who emerged as the **richest man in India** with a net worth of \$83 billion, came in at number eight.
- Tesla's **Elon Musk** added **\$151 billion** to become the **richest man in the world** for the first time with a net worth of \$197 billion, followed by Amazon's Jeff Bezos (\$189 billion), the chairman and CEO of LVMH Moët Hennessy.

5. Food Waste Index Report 2021

Why in News?

- The Food Waste Index Report 2021 was recently released by the UNEP.

About

- It presents the most **comprehensive food waste data collection, analysis and modelling to date**, generating a new estimate of global food waste.
- It also publishes a **methodology for countries** to **measure food waste**, at household, food service and retail level, to track national progress towards 2030.
- In contrast to the **Food Loss Index**, the Food Waste Index **measures total food waste** (rather than loss or waste associated with specific commodities).

📁 Highlights of the 2021 report

- The report has revealed that **17 per cent of all food available at consumer levels** was **wasted in 2019**.
- That year, some **690 million people** had to **go hungry**.
- The food waste amounted to a whopping **931 million tonnes** of **food sold to households**, retailers and restaurants.
- Waste at household, foodservice and retail amounted to **79, 26** and **13 kilogram / capita / year respectively**.

📁 United Nations Environment Programme

- The UNEP is a leading global environmental authority established on **5th june 1972**.
- Functions → It sets the **global environmental agenda**, promotes the sustainable development within the United Nations system, and serves as an authoritative advocate for global environment protection.
- Major Reports → **Emission Gap Report, Global Environment Outlook, Frontiers, Invest into Healthy Planet**.
- Major Campaigns → **Beat Pollution, UN75, World Environment Day, Wild for Life**.
- Headquarters → **Nairobi, Kenya**.

6. Global Energy and Environment Leadership Award

Why in News?

- The Prime Minister received the Global Energy and Environment Leadership Award.

About

- Global Energy and Environment Leadership Award was **instituted in 2016**.
- Awarded by → the **Cambridge Energy Research Associates Week** (CERAWeek).
- Purpose → The Global Energy and Environment Leadership award **recognize the commitment of leadership** to the **future of global energy and the environment**.
- Awarded for → **Providing solutions and policies** for energy access, affordability, and environmental stewardship.

📁 Cambridge Energy Research Associates (CERA)

- It is a **consulting company in the United States** that specializes in advising governments and private companies on energy markets, geopolitics, industry trends, and strategy.

📁 CERAWeek

- It was founded in **1983** by **Dr. Daniel Yergin**.

- It is an **annual energy conference**, organized in Houston (USA) in March, since 1983.
- CERAWEEK by **IHS Markit** is the **annual international gathering of energy industry leaders, experts, government officials** and **policymakers**, leaders from the technology, financial and industrial communities - and energy technology innovators.
- CERAWEEK 2021 was convened virtually from **1st-5th March, 2021**.
- Theme → **The New Map: Energy, Climate, and Charting the Future**.

7. MSME Credit Health Index

Why in News?

- The latest MSME Credit Health Index indicates that MSME credit growth has accelerated in the quarter ending September 2020 as compared to the quarter ending in June 2020.

About

- Launch by → The **TransUnion CIBIL** in partnership with the Ministry of Statistics & Programme Implementation (**MoSPI**) has launched MSME Credit Health Index.
- The Index is **published quarterly**.
- Aim → To provide a **measure of the growth and strength of the MSME sector** in India.
- Measurement → The Index measures the credit health of India's MSME industry on two parameters i.e, **growth and strength**. Both the growth and strength indices follow the **principle of higher the better**.

👉 Latest Finding

- The overall growth index inched up to **114 points**, which is a **three-point increase from 111 in June, 2020**.
- The overall Strength Index also improved to **89 from 83 over the same period**.

8. Akshya Patra

Why in News?

- On the occasion of International Women's Day, the all-women art exhibition titled as "Akshya Patra" was inaugurated on March 9, 2021 at the Lalit Kala Akademi.

About Akshya Patra

- Location → This art exhibition is being organised at the **Rabindra Bhavan Galleries** and will conclude on March 20, 2021.
- It will showcase **more than 250 artworks** from **over 12 countries**.
- The **multi-dimensional art show** will exhibit works of senior, young and budding art practitioners.
- Significance →
 - It brings to the **fore contemporary, tribal, international** and **Avante Garde art practices worldwide**, themed around the many faces and benefactions of Mother Nature.
 - It **showcases the work by women** who have been the keystone in the unyielding arch of Indian art and culture.

👉 Lalit Kala Akademi

- Established in August 1954, in pursuance of the **dream for a cultural and national identity**.
- It was given **statutory authority** in 1957, under the Societies Registration Act 1860.
- Headquarter → **New Delhi**.
- It is the principal establishment to **direct its focus on activities** in the **field of visual arts**.
- Objectives →
 - To **encourage and promote study and research** in the fields of creative arts such as painting, sculpture and graphics, etc.
 - To **publish and to promote publication** of literature on art including monographs, journals, etc.

👉 International Women's Day

- It is celebrated annually on **8th March**. It includes: Celebration of women's achievements, raising awareness about women's equality, lobbying for accelerated gender parity etc.
- History →
 - Women's Day was first celebrated back in **1911 by Clara Zetkin**, who was a German. The **roots** of the celebration had been in the **labour movement**.
 - It was only in **1913**, however, that the celebrations were **shifted to 8th March**, and it has remained that way ever since.
 - International Women's Day was celebrated for the **first time by the United Nations** in **1975**.
- The theme for International Women's Day 2021 is '**Choose To Challenge**'

9. Vaccine Passports

Why in News?

- An Agri-voltaic system of 105 KW capacity has been developed by ICAR-Central Arid Zone Research Institute, Jodhpur.

About

- A vaccine passport is an **e-certificate** that **stores and records jabs** and **Covid-19 test status**.
 - It can be kept in a **smartphone app** or in **other digital formats**.
 - Its contents can be **flashed at security checkpoints** when people travel across borders.
- Travellers from **many African countries to the USA** or **India** are **required to submit proof** that they have been vaccinated against diseases such as yellow fever.
- In February 2021, **Israel** became the **first country to introduce a certification system** that allows those who have been vaccinated against Covid-19 to access certain facilities and events.
- Function of Vaccine Passports →
 - Will **digitise vaccination records** across countries.
 - Supposed to **function as proof** that the holder has been vaccinated against Covid-19 and is, therefore, safe.
- Beneficiaries →
 - Tourism and the **hospitality industries**.
 - **International air travel** and the **World economy**.

👉 Existing Similar Provisions

- **IATA Travel Pass** → The International Air Transport Association (a global trade body representing airlines) is developing an **app** called '**IATA Travel Pass**' that will provide airlines and other aviation industry stakeholders with a **common platform to check for the proof of vaccination** and **its validity**.
- **CommonPass** → The **non-profit Commons Project** is testing the 'CommonPass' app, which contains a passenger's vaccination record.
- **Virus passport** → Launched by **China**. Basically, it is a **health certificate programme** for Chinese international travellers. The digital certificate shows a user's **vaccination status and virus test results**.

10. King Bhumibol World Soil Day Award

Why in News?

- Indian Council of Agricultural Research (ICAR) received the prestigious "King Bhumibol World Soil Day - 2020 Award" of FAO.

About

- The international recognition was announced **by the FAO, Rome** on the eve of World Soil Day - 2020 in view of the ICAR's excellent contributions in "**Soil Health Awareness**" on the theme "**Stop soil erosion, save our future**" during the last year.

King Bhumibol World Soil Day Award

- Launched in **2018**, the King Bhumibol World Soil Day Award **acknowledges individuals** or **institutions** that **raise public awareness of soils** by organising successful and influential World Soil Day celebrations.
- The award, **sponsored by the Kingdom of Thailand**, is named after King Bhumibol Adulyadej of Thailand for his **lifelong commitment to raising awareness** of the importance of sustainable soil management and rehabilitation for food security, poverty alleviation and more.
- The **former winners** of the Award include **Practical Action in Bangladesh** in 2018 and the Costa Rican Soil Science Society (AACS) in 2019.

Indian Council of Agricultural Research (ICAR)

- It is an **autonomous organisation** under the **Department of Agricultural Research and Education** (DARE), Ministry of Agriculture and Farmers Welfare.
- Established on → **16th July 1929**.
- Headquartered at → **New Delhi**.
- Functions → ICAR is the organisation responsible **for the coordination, guidance** and **management of agricultural research and education** in India.
- In this capacity, ICAR oversees **one of the largest networks of agricultural research and education institutes** in the world, covering the whole country in the fields of horticulture, soil science, fisheries and animal sciences among others.

11. India's Biggest Floating Solar Power Plant

Why in News?

- NTPC is developing country's biggest floating solar power plant (by generation capacity) in the reservoir of its thermal plant at Ramagundam (in Telangana).

About

- Generation Capacity → **100 megawatts**.
- It is set to be commissioned by **May-June next**.
- It is **part of NTPC Southern Region's target to install 450 MW** of solar capacity.
 - NTPC apart from **Ramagundam floating Solar Power Plant** is all set to commission about an additional **117 MW** floating solar capacity by May this year.
 - The other two projects about to complete are
 - **92 MW** floating unit at **Kayamkulam gas plant in Kerala**
 - **25 MW** unit at **Simhadri power plant in Andhra Pradesh**.
- **Bhadla Solar Park** in the Jodhpur district of Rajasthan is the **world's biggest** solar park in terms of power generation and the second largest in terms of area.
 - But it is **Not Floating**.

12. Global Breast Cancer Initiative

Why in News?

- The World Health Organization (WHO) announced an initiative called the "Global Breast Cancer Initiative".

About

- Aim → The initiative aims to **reduce global breast mortality** by **2.5% by 2040**.
- The initiative will particularly **focus on reducing deaths** in low-income countries. There the progress to tackle the disease is relatively slow.
- Key Features of the Initiative →
 - Guidance to Governments → Under the initiative, **WHO** will **work with other UN agencies**. They will **provide guidance to governments** on how to strengthen systems for diagnosing and treating breast cancer. It is expected to improve capacities to manage other types of cancer.
 - Evidence-based Technical Package → An **evidence-based technical package** will also be provided to countries as part of the initiative. It will **incorporate existing WHO cancer tools and products**.

About Breast Cancer

- Breast cancer is the **most common form** of cancer in women. It is responsible for **one in six cancer deaths** among women and has overtaken lung cancer as the world's most commonly diagnosed cancer.
- Survival Rates → Breast cancer **survives for five years** after **diagnosis exceeds 80%** in most high-income countries. However, it is 66% in India and 40% in South Africa.

13. Mera Ration Mobile App

Why in News?

- In order to facilitate the 'One Nation One Ration Card' system in the country, the Ministry of Consumer Affairs, Food and Public Distribution has launched the 'Mera Ration' mobile app to benefit citizens in identifying the nearest Fair Price Shop (FPS).

About

- It has been developed by the **Department of Food & Public Distribution** and **National Informatics Centre** (NIC).
- Language → The application is currently available in **English and Hindi**.
- Facilities to the Beneficiaries →
 - Can **identify and locate** the **nearest fair price shop**.
 - Can **easily check details** of their foodgrain entitlement, recent transactions and the status of Aadhaar seeding.
 - Can **register their migration details**.
 - An option to **enter suggestions/feedback**.

14. AEG12 Mosquito Protein

Why in News?

- A mosquito protein, called AEG12, strongly inhibits the family of viruses that cause yellow fever, dengue, West Nile, and Zika, and also weakly inhibits coronaviruses, according to scientists at the US National Institutes of Health (NIH) and their collaborators.

About

- It is located on the **microvillar membranes** of the **midgut epithelial cells** of **adult female mosquitoes**.
- It works by **destabilising the viral envelope, breaking its protective covering**. It rips out the lipids (the fat-like portions of the membrane that hold the virus together).
- It does **not affect viruses** that do not have an envelope.
- It also **breaks open red blood cells**, so research is needed to make it target viruses only.

15. Autocratisation Goes Viral Report

Why in News?

- Recently, India has been classified as an “electoral autocracy” in the annual report named Autocratisation Goes Viral of Sweden-based Varieties of Democracy (V-Dem) Institute.

About

- Released by → **V-Dem** (Varieties of Democracy) Institute. It is an **independent research organization** founded in **2014** by Swedish political scientist Staffan Lindberg.
- Objective → The report **summarizes the state of democracies of the world** against the backdrop of developments, over the past decade.
- Data → The report gathered its data **using surveys from country experts** and **then analysed** using a statistical model.

📌 India's Position:

- India was **previously classified** as an **electoral democracy**, however the latest report classified it as **electoral autocracy**.
- India is now as **autocratic as is Pakistan**, and worse than both its neighbours Bangladesh and Nepal.
- India is also **among 25 "autocratizing nations"** along with **Brazil, Turkey**, and **other countries**.

16. World Energy Transitions Outlook report

Why in News?

- The International Renewable Energy Agency (IRENA) released the World Energy Transitions Outlook report.

About Key highlights

- The **COVID-19 crisis** offers an **unexpected opportunity** for countries to decouple their economies from fossil fuels and **accelerate the shift to renewable energy sources**.
- It estimated that **by 2050, 90% of total electricity** needs would be **supplied by renewables**, followed by 6% from natural gas and the remaining from nuclear.

📌 International Renewable Energy Agency (IRENA)

- What is it? → It is an **intergovernmental organisation** mandated to facilitate cooperation, advance knowledge, and promote the adoption and sustainable use of renewable energy.
- It is the first international organisation to **focus exclusively on renewable energy**, addressing needs in both industrialized and developing countries.
- Founded → It was founded in **2009** and its statute **entered into force in July 2010**.
- Members → Total Members of the Agency – **161 Members** (as of 2019).
- India** has become the **77th** Founding Member of IRENA.
- Headquarters → **Abu Dhabi**
- IRENA is an **observer of United Nations**.

17. Dead Sea Scroll

Why in News?

- New piece of Dead Sea Scrolls jigsaw discovered after 60 years.

About

- The Dead Sea Scrolls are **ancient Jewish** and **Hebrew religious manuscripts**.
- Scholarly consensus dates these scrolls from the **last three centuries BCE** and **the first century CE**.
- Fragments are believed to have been **stashed away in the cave** during the **Bar Kochba Revolt**, an armed Jewish uprising against Rome during the reign of **Emperor Hadrian**, between 132 and 136 AD, i.e. 1900 years ago.
- New pieces are found in a site known as **Qumran Caves** also known as **"The Cave of Horror"**.



- The cave was named so for the **40 human skeletons** found there during **excavations** in the **1960s**.
- They also bear a **Greek rendition** of the **Twelve Minor Prophets**.
- The cave is located in a **remote canyon** in the **Judean Desert south of Jerusalem**.

18. Digital Green Certificate

Why in News?

- On March 17, 2021, the European Commission proposed to create a Digital Green Certificate to facilitate the safe and free movement of citizens within the European Union (EU) amid the COVID-19 pandemic.

About

- Digital Green Certificate is a **type of vaccine passport**. It will be available to the citizens **who are Covid-19 vaccinated** or **tested negative** against Covid-19. It is also available to the persons **recovered from Covid-19**.
- Once, the Digital Green Certificate is issued, they can **travel freely** within the European Union(EU) bloc.
- Features → The Digital Green certificate will be in **digital** or **paper format with a QR code**. The certificates will be provided free of charge.
- Issuance of Certificate → The certificate can be **issued by authorities**, including hospitals, testing centres and health authorities.
- Who can use it? → All EU citizens or **third-country nationals** who are **legally staying in the EU**. These persons will be **exempted** from movement restrictions due to COVID-19.

19. PRANIT

Why in News?

- Power Grid Corporation of India Limited (POWERGRID), a central PSU under Ministry of Power has established an e-Tendering Portal-PRANIT.

About

- It will lead to **less paperwork and ease of operation**, making the tendering process more transparent.
- It has been **certified by Standardisation, Testing and Quality Certification Directorate (STQC)**, Ministry of Electronics and Information Technology, Government of India.
- With this, **POWERGRID** is now the **only organization** in India to have an **eProcurement solution** on SAP Supplier Relationship Management (**SRM**), complying with all applicable requirements relating to security and transparency as stipulated by STQC.

20. Gandhi Peace Prize

Why in News?

- The father of the nation of Bangladesh Sheikh Mujibur Rahman and the late Sultan of Oman, Qaboos bin Said Al Said are to be awarded the Gandhi Peace Prize for 2020 and 2019 respectively.

About

- Instituted in the **year 1995** on the occasion of the **125th birth anniversary** of **Mahatma Gandhi** for those involved in social, economic and political transformation through non-violence.

- Rewards → The award carries a **cash prize of Rs 1 crore**, a **citation** and a **Plaque** as well as an exquisite traditional handicraft/handloom item.
- Conferred Upon → The prize can be given to **individuals**, **associations**, **institutions** or **organizations**.
 - It can be **divided between two persons/institutions** who are considered by the Jury to be equally deserving of recognition in a given year.
 - It is open to **all persons regardless** of **nationality**, **creed**, **race** or **sex**.
- Selection Committee → The **jury chaired by the Prime Minister** and **other members** are the Chief Justice of India, the leader of the single largest Opposition party in the Lok Sabha, Lok Sabha Speaker and founder of Sulabh International.

21. Parosmia

Why in News?

- The most common symptoms of Covid-19 are anosmia and ageusia. However, several people are also experiencing parosmia. It is characterized by a change in perception of odours.

About Parosmia

- What is it? → Parosmia is a medical term used to describe a condition in which affected **individuals experience “distortions of the sense of smell”**.
- A person with parosmia is **able to detect certain odours**. But they might experience the smell of certain things as **different** and **often unpleasant**. For example, **coffee may smell like burnt toast**.
- Causes → Parosmia is typically experienced by those people who are **recovering their sense of smell** following a **loss from a virus** or **an injury**.
- Is Parosmia Harmful? → Parosmia is a **temporary condition** and is **not harmful in itself**.
- Anosmia → It is the **partial** or **complete loss** of the **sense of smell**. This loss may be temporary or permanent.
- Ageusia → It is a condition, characterized by a **complete loss of taste function of the tongue**.

22. Freedom Pineapple Campaign

Why in News?

- It has been started by the President of Taiwan to counter China's ban on import of Taiwanese pineapples.

About

- It aims to **attract more consumers to buy** and **consume** the fruit locally as well as globally.
- A social media campaign with the **hashtag “#FreedomPineapple”** has been launched to gather global attention and support.
- **Taiwan exports** almost **10% of pineapples** it grows annually, with most of the exports going to China.

23. Uighurs

Why in News?

- Recently, the European Union, the US, Britain, and Canada imposed sanctions on Chinese officials and entities for human rights abuses against Uighurs and other Muslim minorities in Xinjiang province.

About

- The Uighurs are a predominantly **Muslim minority Turkic ethnic group**, whose origins can be traced to Central and East Asia.
- Their native region is considered to be the **Xinjiang Uighur Autonomous Region** in the People's Republic of China.
- The Uighurs **speaks their own language** and sees themselves as **culturally and ethnically close** to **Central Asian nations**.
- The Uighurs are considered to be one of **the 55 officially recognized ethnic minority** communities in China.
- However, China recognises the community only as a **regional minority** and **rejects** that they are **an indigenous group**.
- Currently, while the largest population of the ethnic community lives in the **Xinjiang region**, which is **tightly controlled by China**.
- A **significant diaspora of Uighurs** resides in the neighbouring **Central Asian countries** such as Uzbekistan, Kyrgyzstan and Kazakhstan.



24. Special Purpose Acquisition Companies

Why in News?

- Earlier this month, the US Securities and Exchange Commission (SEC) issued an investor alert, which was the first warning of sorts, when it came to or special purpose acquisition companies (SPACs).

About

- It is a company with **no commercial operations** and is **formed strictly to raise capital** through an **Initial Public Offering** (IPO) for the purpose of acquiring an existing company.
- These are also known as "**blank check companies**".
- Investors in SPACs can **range from well-known private equity funds** to the **general public**.
- Once the **money is raised** from the public, it is kept in an **escrow account**, which can be accessed while making the acquisition.
- If the acquisition is **not made within two years of the IPO**, the SPAC is **delisted** and the **money is returned to the investors**.

25. Helium

Why in News?

- India imports the majority of helium for its domestic needs. However, the U.S appears to cut off exports of helium from 2021. Hence, the Indian industry stands to lose out heavily.

About

- Helium is a **chemical element** with the symbol **He** and **atomic number 2**.
- It is a **colourless, odourless, tasteless, non-toxic, inert**, first in the noble gas group in the periodic table. Its **boiling point is the lowest** among all the elements.

- Helium is the **second lightest** and **second most abundant element** in the observable universe (hydrogen is the lightest and most abundant).
- The liquified Helium is obtained by **cooling the gas to -270 degrees Celsius**.
 - Applications →
 - It is used as an **inert-gas atmosphere for welding metals** such as aluminium.
 - In **rocket propulsion to pressurize fuel tanks**, especially those for liquid hydrogen, because only helium is still a gas at liquid-hydrogen temperature.
 - In **meteorology** as a **lifting gas** for **instrument-carrying balloons**.
 - In **cryogenics as a coolant** because liquid helium is the coldest substance.
 - In **high-pressure breathing operations mixed with oxygen**, as in **scuba diving** and caisson work, especially because of its low solubility in the bloodstream.
 - In **MRI scanners**, as a **coolant** to give the magnetic coils in the scanner superconductive properties.
 - **Meteorites and rocks** have been analyzed for **helium content** as a **means of dating**.

Department of Atomic Energy

- It came into being in **August 1954** under the **direct charge of the Prime Minister** through a Presidential Order.
- DAE has been engaged in the **development of nuclear power technology, applications of radiation technologies** in the fields of agriculture, medicine, industry and basic research.

26. Bihar Special Armed Police Bill, 2021

Why in News?

- The Bihar Special Armed Police Bill, 2021 was passed recently amid protests by the Opposition.

About

- The Bill is aimed at **boosting security**, and will have limited scope as it is applicable only to certain specified areas.
- Aim of the Bill → It “aims to develop the Bihar Military Police into a **well-trained** and **fully equipped armed police force** with **multi-domain expertise** to cater to the development needs and the larger interest of the state.

👉 Key Provisions:

- Renames the Bihar Military Police as the **Bihar Special Armed Police**, and gives the **force more teeth**, on the lines of the Central Industrial Security Force (CISF), so it can **better secure the commercial and industrial assets of the state**.
- The **mandate** of the force will be the “maintenance of public order, combating extremism, ensuring the better protection and security of specified establishments in such manner as may be notified and perform such other duties, as may be notified.”
- Empowers Special Armed Police officers to **carry out searches** and **arrests without warrant**.
- Courts can take **congnizance of certain offences** by the officers **only after government sanction**.
- Nodal Authority → The command, supervision, and administration of the Special Armed Police shall vest in the **Director-General of Police, Bihar**.
- However, the **general superintendence of the Special Police** shall be exercised by the Government.

Issues and concerns associated:

- The bill gives **absolute powers** to the **police personnel** in some cases.
- Section 15 of the Act says a **court cannot take cognisance** if a special armed police officer is involved in a serious case barring some exceptions.

27. Indo-Korean Friendship Park**Why in News?**

- India's First Indo-Korean Friendship Park was jointly inaugurated by Mr Suh Wook, Minister of National Defence, Republic of Korea and Rajnath Singh, Raksha Mantri, at Delhi Cantonment on 26 March 2021.

About

- It is in **Delhi Cantonment**.
- The park's **significance is not only** because of it being a symbol of **strong India-South Korea friendly relations**, but also as a monument to **India's contributions** as **part of 21 countries** which **participated in Korean war 1950-53**, under the aegis of the United Nations.
- The park has been developed in **joint consultation with Ministry of Defence**, Government of India, Indian Army, Delhi Cantonment Board, Embassy of Korea and Korean War Veterans Association of India.
- One of the pillars in the park encompasses **Nobel Laureate Gurudev Rabindranath Tagore's narration** of Korea as "**The Lamp of the East**" which was published in Korean daily "**Dong-A-Ilbo**" in 1929.

28. Education Finance Watch Report**Why in News?**

- The World Bank and UNESCO released the Education Finance Watch Report (EFW), 2021.

About

- The report is a **collaborative effort** between the **World Bank** and **UNESCO's Global Education Monitoring (GEM) Report**.
- It **summarizes** the available information on **patterns and trends in education financing** around the world.

Key Findings of the Education Finance Watch Report:

- **Global spending on education** has **increased continuously in absolute terms** over the last 10 years. However, the pandemic may interrupt this upward trend.
- **Education Budgets: 2/3rd of low and middle-income countries reduced** their **education budgets** since the start of the Covid-19 pandemic. In comparison, only a third of upper-middle and high-income countries have reduced their budgets.
- **Spending on Child's Education:** Before the COVID-19 pandemic, high-income countries were spending annually the equivalent of \$8,501 for every child's education. It was **\$48 in low-income countries**. The **pandemic** has **further widened this spending gap**.

Global Education Monitoring Report(GEM Report)

- Published by → It is an **annual report published by UNESCO**. The report was formerly known as the **Education for All Global Monitoring Report**.
- Mandate → The report aims to **monitor progress towards Sustainable Development Goal 4** (SDG 4) on education. It also targets education-related goals in the SDG agenda.

29. Jail Radio

Why in News?

- “Tinka Tinka” foundation has launched ‘Jail Radio’ project in Haryana jails in collaboration with the State government.

About

- Jail Radio is an **in-house production run by the inmates**. The programmes are **broadcast from a studio inside** the premises and reach to the inmates through speakers in the barracks.
- The aim is to **bring out the inmates’ creativity**, give them **meaningful engagement**.
- Significance → These inmates would **go back to society one day**. It is, therefore, important that they are given a **meaningful intervention**. Many of these repent and **regret what happened in the past**. They **need healing**.

30. International Ranger Award

Why in News?

- Union Minister for Environment has congratulated Mahinder Giri, range officer of Rajaji Tiger Reserve for being the only ranger from Asia to win the prestigious International Ranger Award.

About

- The award has been announced for **10 professionals** across the world by the International Union for Conservation of Nature (**IUCN**) and World Commission on Protected Areas (**WCPA**).

👉 International Ranger Award

- Agency involved → Developed through a **collaboration between the IUCN WCPA, the International Ranger Federation, Global Wildlife Conservation, and Conservation Allies**.
- Created in → **2020**.
- Aim → aim to **highlight and felicitate the extraordinary work** that **rangers** do in protected and conserved areas worldwide.

Quick revision (True/False)



1	Biotechnology Industry Research Assistance Council(BIRAC) -> is a not-for-profit Public Sector Enterprise set up by the Department of Biotechnology.	
2	E-Daakhil Portal -> is a platform for Effective Enforcement for NO Child Labour that is to eliminate child labour.	
3	Caracal -> its presence is restricted to Rajasthan, Kutch, and parts of Madhya Pradesh.	
4	Mount Etna -> Indonesia's Most Active Volcano.	
5	Channapatna Toys -> Tamil Nadu.	
6	Amazonia-1 -> an Communication satellite.	
7	Asian Infrastructure Investment Bank -> formerly referred to as the BRICS Development Bank. Headquarter: Shanghai, China.	
8	Raman Effect -> is a change in the wavelength of light that occurs when a light beam is deflected by molecules.	
9	Swachhta Saarthi Fellowships -> fellowship recognizes people engaged in tackling the challenge of waste management, scientifically and sustainably.	
10	Land Ports Authority of India -> Non-Statutory body. Under Ministry of Commerce and Industry.	
11	The Opportunity Index 2021 -> released by LinkedIn.	
12	Rashtriya Uchchatar Shiksha Abhiyan (RUSA) -> launched in 2013. central sector scheme.	
13	Himalayan Serow -> IUCN Red List: Endangered.	
14	Manas National Park -> located in the Himalayan foothills in Assam. is a UNESCO World Heritage Site.	
15	Better Than Cash Alliance -> Headquarters - New York, US. India joined the alliance in 2020.	
16	CITES -> known as Washington Convention. legally binding on state parties.	
17	Black-browed Babbler -> is a songbird species which is endemic to Amazon forest.	
18	Similipal Biosphere Reserve -> West Bengal.	
19	Contempt of Court -> is not defined in the Constitution but the word has been mentioned over there.	
20	Exercise Desert Flag-VI -> is an annual multinational large force employment warfare exercise hosted by the UAE Air Force.	
21	Telecom Equipment Export Promotion Council -> It has been set up by the Ministry of External affairs and Ministry of Electronics and Information Technology.	

22	Ease of Living Index, 2020 -> The report was prepared and launched by NITI Aayog.	
23	Red Rice -> grown in the Brahmaputra valley of Assam.	
24	International North South Transport Corridor -> Regions involved - India, Oman, Iran, Turkmenistan, Uzbekistan and Kazakhstan.	
25	Food Waste Index Report 2021 -> released by the UNEP.	
26	Aries Devasthal Spectrograph(ADFOSC) -> developed by Aryabhata Research Institute of Observational Sciences.	
27	Pench Tiger Reserve -> Madhya Pradesh.	
28	Solid Fuel Ducted Ramjet Technology -> will help DRDO with the technological advantage to develop long-range air-to-air missiles.	
29	Whale shark -> found in all the Temperate oceans of the world.	
30	Global Energy and Environment Leadership Award -> Awarded by the Cambridge Energy Research Associates Week (CERAWEEK).	
31	Sattras of Assam -> They are monastic institutions created by Neo-Shaivite reformer Basavanna.	
32	Maitri Setu -> bridge between India and Bangladesh. built over Feni River.	
33	Sanaa -> capital of Saudi Arabia.	
34	No-Confidence Motion -> can be moved both in the Lok Sabha and Rajya Sabha.	
35	Index of Economic Freedom 2021 -> Released by World Economic Forum.	
36	Lalit Kala Akademi -> statutory authority. principal establishment to direct its focus on activities in the field of visual arts.	
37	UNESCO -> formed in 1974, is a specialized agency of the United Nations (UN) based in Austria.	
38	Banks Board Bureau -> make recommendations for appointment of whole-time directors as well as non-executive chairpersons of PSBs.	
39	Unlawful Activities (Prevention) Act -> provision of only organizations could be designated as terrorist organizations.	
40	Air Independent Propulsion -> technology creates energy by combining hydrogen and oxygen, with only water created as a by-product.	
41	Agriculture Voltage Technology -> developed by Central Arid Zone Research Institute in co-operation with Israel.	
42	Quasar -> are very luminous objects in faraway galaxies that emit jets at radio frequencies.	
43	Exercise Dustlik-II -> military exercise between the Indian Army and Russian Army.	
44	Stand Up India Scheme -> Launched in 2016. by the Department of Commerce, Ministry of Commerce and Industry.	
45	INS Karanj -> Scorpene-class Submarine.	

46	Cyber Crime Volunteer Framework -> Launched by Indian Cyber Crime Coordination Centre.	
47	Miyawaki Technique -> Soil erosion control Technique.	
48	AsterX -> USA launched its first military exercise in space.	
49	Science and Engineering Research Board -> statutory body of the Department of Science and Technology.	
50	Lingaraja Temple -> Tamil Nadu.	
51	State Election Commission -> consists of a Chief Election Commissioner and two Election Commissioners.	
52	1930 Dandi March -> In Bengal, led by Satish Chandra Dasgupta and in Bombay led K.F Nariman walked with volunteers to prepare salt.	
53	Ecuador -> Shared boundary with Brazil and Peru.	
54	AT-1 Bonds -> are secured bonds which have fixed maturity date.	
55	Benzene Pollution -> is a colorless, flammable liquid with a sweet odor. Benzene is a widely used industrial chemical.	
56	Index Monitoring Cell -> task is to improve India's ranking in the Ease of doing business Index.	
57	Forex Reserves -> include Foreign-currency assets, Special Drawing Rights (SDRs) and loans from foreign countries.	
58	Archaeological Survey of India -> attached office under the Department of Culture, Ministry of Culture.	
59	Energy Efficiency Enterprise(E3) Certification Programme -> certification will be provided by the Bureau of Energy Efficiency (BEE).	
60	Project REHAB -> Under this Project, bee boxes will be used as a fence to prevent the attack of elephants.	
61	Great Indian Bustard -> IUCN Red List: Endangered species.	
62	Baralacha Pass -> is a mountain pass around the area of the disputed tri-point borders of India, China, and Myanmar.	
66	Khadi and Village Industries Commission -> statutory body. under the Ministry of Micro, Small and Medium Enterprises.	
67	Inter-Parliamentary Union -> established in 1889. HQ: Geneva, Switzerland.	
68	World Air Quality Report, 2020 -> Delhi is the most polluted capital city in the world.	
69	International Renewable Energy Agency -> an observer of United Nations. founded in 2000. India is not a member.	
70	National Cyclone Risk Mitigation Project -> launched by the Ministry of Earth Science with the support of the World Bank.	
71	Amsterdam Declaration -> related to eliminate HIV/AIDS.	
72	World's highest railway bridge -> located over the Indus river in Jammu and Kashmir.	

73	Appropriation Bill -> is a money bill that allows the government to withdraw funds from the Consolidated Fund of India.	
74	Anangpal Tomar II -> belonged to the Tomar dynasty that ruled parts of present-day Delhi and Haryana.	
75	Indian Naval Landing Craft Utility (LCU) L58 -> an amphibious ship which can carry 160 troops, in addition to its crew.	
76	India is the world largest footwear producing country.	
77	Electoral Bonds -> Electoral Bonds shall be valid for 10 year from the date of issue.	
78	Digital Green Certificate -> is a type of vaccine passport. Initiative of ASEAN Countries.	
79	Tiger Reserves -> are declared by the National Wildlife control board via Wild Life (Protection) Amendment Act, 2006.	
80	Lake Baikal -> Situated in central America.	
81	Istanbul Convention -> aims towards preventing and combating violence against women and domestic violence.	
82	World Happiness Report -> Released by United Nations Human Rights Council.	
83	Exercise Pabbi-Antiterror-2021 -> joint anti-terrorism exercise of NATO countries.	
84	Ultimate military strength index -> China has the strongest military force in the world.	
85	PRANIT -> e-Tendering Portal.	
86	Shyamala Gopinath Committee -> to recommend amendments to the criminal law to improve the justice delivery system.	
87	Ken-Betwa Link Project -> spread across the districts of Bihar and Jharkhand.	
88	Parosmia -> is a condition on loss of smell and taste, a well-known symptom of COVID-19.	
89	Suez Canal -> connects the Mediterranean and Persian Gulf.	
90	ICGS Vajra -> Offshore Patrol Vessels.	
91	Shigmotsav Festival -> Assam and Bengal.	
92	Chief Justice of India(CJI) -> Seniority at the apex court is determined by age.	
93	UN Institute for Training & Research (UNITAR) -> is a dedicated training arm of the United Nations system.	
94	Adjournment Sine Die -> suspends the work in a sitting for a specified time, which may be hours, days or weeks.	
95	Central Scrutiny Centre -> initiative of the Ministry of Home Affairs.	
96	Eritrea -> country of the Horn of Africa, located on the Red Sea.	
97	Satkosia Tiger Reserve -> in Odisha.	

98	African Forest Elephants -> listed as endangered under the IUCN Red List.	
99	United Nations Peacekeeping -> created in 1948. also received the Nobel Peace Prize.	
100	'Jail Radio' project -> launched in Kerala.	

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