



CURRENT AFFAIRS AUGUST 2022

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Table of Contents

Page|2

Economic & Social Development

1. EPFO Face authentication scheme for pensioners
2. Conference on Drug Trafficking and National Security
3. First All India District Legal Services Authorities Meet:
4. State University Research Excellence (SERB-SURE) scheme:
5. Craft Village Initiative:
6. India touches Milestone of 75,000 recognised Start-ups:
7. Aurangabad: First to publish Environmental Insights Explorer (EIE) data:
8. Indian Companies in 2022 Fortune 500 list:
9. NITI Aayog Governing Council:
10. RBI proposes for Cross-border inward payments through BBPS:
11. Nallathamby Kalaiselvi: First Woman Chief of CSIR:
12. Extension of PMAY-Urban till 2024:
13. Microsoft in ONDC platform:
14. SMILE-75 Initiative:
15. Microsoft- Indian Government MoU to train Civil servants:
16. RBI Regulatory Framework for Digital Lending:
17. Phase-II of fortified rice scheme:
18. ILO 'Global Employment Trends for Youth 2022' Report:
19. National Intellectual Property Awareness Mission (NIPAM):
20. Paalan 1000 National Campaign:
21. India's 'Panch Pran' target for next 25 years:
22. 5 years of UDAN Scheme:

23. Traditional Knowledge Digital Library (TKDL) database:
24. Mandla: First 'functionally literate' district:
25. NAMASTE Scheme:
26. Grameen Udyami Project- Phase 2
27. PMJAY: Healthcare services to Transgender Persons
28. Bharat Brand: One Nation One Fertiliser
29. Unified Ayushman Bharat PM-JAY Cards
30. 75 tribal districts identified for TB interventions
31. Haridwar: Best Aspirational District

Science and Technology

1. Monkeypox
2. World's most durable Hydrogen Fuel Cell
3. MIT: Ultrasound Adhesives for Imaging Organs
4. CoWIN repurposed for Universal Immunisation Program
5. Negative leap second
6. China: Launch of Reusable Spacecraft
7. India: Target to eliminate Kala-azar by 2023
8. AzaadiSAT: ISRO's Smallest Rocket in Space
9. South Korea's first spacecraft launched to the moon
10. Small Modular Reactors (SMRs)
11. Langya: New zoonotic virus in China
12. PFAs or Forever Chemicals
13. 'Xylitol': New sugar substitute
14. PEN-PLUS strategy

Environment and Ecology

Page|3

1. Cabinet approval of India's updated NDC
2. Wild Life (Protection) Amendment Bill 2021
3. New Ramsar Sites in India
4. Start-up loan for Compostable Plastic
5. 500 cities declared as "Safai Mitra Surakshit Shehar"
6. Air Pollution and Health in Cities Report
7. India's first electric double-decker bus 'Switch EiV 22'
8. 2022 UNESCO Peace Prize awardee
9. Anang Tal Lake
10. 'Arth Ganga': New model for sustainable development of rivers
11. Battery Waste Management Rules, 2022

Polity & Governance

1. Weapons of Mass Destruction and their Delivery Systems (Amendment) Bill
2. Competition (Amendment) Bill 2022
3. 14th Vice President of India
4. Energy Conservation (Amendment) Bill, 2022
5. Bill to rename "Delhi International Arbitration Centre"

International Affairs

1. Chile's New Constitution
2. India-Maldives Relations
3. China's military exercises around Taiwan
4. First Repair of a US Navy Ship in India
5. China's funding CPEC reduced by 56%
6. India- Egypt 75th Anniversary of diplomatic ties
7. Exercise Pitch Black 2022

Geography

1. Water shortage in the Netherlands
2. Bihar Astronomical Observatory in UNESCO list
3. Trans-Himalayan Multi-Dimensional Connectivity Network
4. Japan- IMD partnership on Climate Change
5. 'Golden Joint' of Chenab Railway Bridge
6. Portugal: EU's fastest aging country
7. Longest ever drought in China
8. Integration of Gati Shakti master plan
9. Philippines: Tropical Storm Ma-On
10. Atal Bridge
11. Pakistan floods

Defence & Security

1. EX VINBAX 2022- India Vietnam Bilateral Army Exercise
2. Indian Navy's Maritime Surveillance Mission
3. Indian Navy- ISRO MoU for Satellite based Naval Applications
4. Indian Army 'Skylight' Mega- Exercise
5. Indian Army 'Him Drone-a-thon' Programme
6. Udarashakti: India-Malaysia Air force exercise
7. Anti-personnel mine 'Nipun' and F-INSAS
8. Vertical Launch Short Range surface-to-air missile (VL-SRSAM) test fired
9. SAREX 22 Indian Coast Guard Exercise
10. INS Vikrant: First Indigenously-built Aircraft Carrier

History, Art and Culture

1. Commonwealth Games 2022: India wins 3 Gold Medals
2. Tiranga Utsav Organised by Ministry of Culture
3. Sites Identified for 'National importance' Tag

4. Culture Ministry 'Badhe Chalo' campaign
5. 80th anniversary of Quit India movement
6. Ladakh dPal rNgam Duston Award conferred to Dalai Lama

7. 'Dahi-Handi' - Maharashtra's Official Sport
8. 'Azadi Quest': Mobile games based on freedom struggle

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Economic & Social Development

1. EPFO Face authentication scheme for pensioners:

- Recently, the **Employees' Provident Fund Organisation (EPFO)**, inaugurated a **Face Authentication Scheme for Pensioners**. The scheme will allow more than 73 lakh pensioners to submit digital life certificate, by using the face authentication technology from anywhere.
- This face recognition authentication will aid aged pensioners who face difficulties in getting their **bio-metrics (Finger print & Iris)** captured due to old age for filing the life certificate.

Employees' Provident Fund Organisation (EPFO):

- EPFO is one of the World's largest Social Security Organisations in terms of clientele and the volume of financial transactions undertaken.
- EPFO is a government organization that manages provident fund and pension accounts of member employees and implements the Employees' Provident Fund and Miscellaneous Provisions Act, 1952 which is applicable to whole of India with exemption given only to Jammu & Kashmir.
- The **Employees' Provident Fund and Miscellaneous Provisions Act, 1952** provides for the institution of provident funds for employees in factories and other establishments.
- It is administered by the **Ministry of Labour & Employment, Government of India**.

2. Conference on Drug Trafficking and National Security:

- Recently, the Union home minister inaugurated a "conference on drug trafficking and national security" on July 30, 2022. During the conference, the Narcotics Control Bureau (NCB) will burn and dispose of more than 30,000 kg of drugs across Delhi, Kolkata, Chennai and Guwahati.
- India is one of the major hubs for illicit drug trade. Opiates, cannabis and amphetamine-type stimulants remain the main substances of concern in the region.

Menace of drug business in India:

- India has become a trafficking center for other countries. The cocaine supplied here is not only meant for India; traffickers exploit this route to enter other countries.
- India would not be used as a supply route if there wasn't already a high level of interest in the drug within the country.
- Golden Triangle is the area where the borders of Thailand, Laos, and Myanmar meet at the confluence of the Ruak and Mekong Rivers. According to United Nations Office on Drugs and Crime (UNODC), opium production has gone up in the Golden Triangle by 22%.
- Golden Crescent is the name given to one of Asia's two principal areas of illicit opium production (with the other being the Golden Triangle), located at the crossroads of Central, South, and Western Asia. This space overlaps three

nations, Afghanistan, Iran, and Pakistan, whose mountainous peripheries define the crescent.

- Being closer to the Golden Crescent and Golden Triangle, India has been vulnerable to the trafficking of narcotics and drugs such as heroin, hashish, and synthetic drugs produced in these areas.
- The Golden Crescent, has remained the primary source of trafficked heroin in the country since the early eighties when traffickers started rerouting heroin from this region through India following the Iran-Iraq war.
- Increased production of opium in Afghanistan, greater domestic demand in India, and connivance of state government officials and border guarding forces together contributed towards this increase in heroin trafficking, especially in the Punjab sector.
- Apart from narcotics, India has been experiencing a significant rise in the use of psychotropic substances and medicinal preparations among addicts since late 1990.
- Stringent narcotics and drugs laws, rising price of heroin and easy availability of synthetic drugs have propelled this shift.
- India also manufactures a lot of synthetic drugs and precursor chemicals which are smuggled out of the country.

How it is a threat to national security?

- This two-way illegal movement of narcotics and drugs pose a significant threat to the national security. The breach of the international borders of the country by drug traffickers implies that the same routes could be used for smuggling in weapons as well as terrorists into the country.
- The nexus between drug traffickers, criminal networks and terrorists are another potent threat. Composite seizures of drugs and arms by security forces at the borders points to a close nexus between drug traffickers and anti-national elements.
- The money generated by the illegal sale of narcotics and drugs is used for financing terrorist activities. The Kashmiri, Sikh and Northeast militants have used drug money to finance their 'struggle' against the Indian state.
- Large-scale availability of narcotics and drugs encourages demand for narcotics and drugs by domestic population. Consumption of which produces dysfunctional behaviour thereby creating law and order problem in the society.
- This causes a huge economic drain on the country through loss of production and diversion of resources for caring and rehabilitation of the drug addicts (Demographic dividend turning into burden).

3. First All India District Legal Services Authorities Meet:

- Recently, the first All India District Legal Services Authorities Meet was held. It was held by National Legal Services Authority (NALSA).

NALSA (National Legal Services Authority):

- The NALSA was founded in 1995 under the Legal Services Authorities Act of 1987 to monitor and review the effectiveness of legal aid programs and to develop rules and principles for providing legal services under the Act.

- It also distributes funding and grants to state legal services authorities and non-profit organisations to help them execute legal aid systems and initiatives.
- Article 39A of the Constitution of India provides that State shall secure that the operation of the legal system promotes justice on a basis of equal opportunity, and shall in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disability.
- **Articles 14 and 22(1)** also make it obligatory for the State to ensure equality before law and a legal system which promotes justice on a basis of equal opportunity to all.

Objectives of Legal Services Authorities:

1. Provide free legal aid and advice.
2. Spread legal awareness.
3. Organise lok adalats.
4. Promote settlements of disputes through Alternative Dispute Resolution (ADR) Mechanisms. Various kinds of ADR mechanisms are Arbitration, Conciliation, Judicial settlement including settlement through Lok Adalat, or Mediation.
5. Provide compensation to victims of crime.

4. State University Research Excellence (SERB-SURE) scheme:

- State University Research Excellence (SERB-SURE) is a new innovative scheme of the Science and Engineering Research Board (SERB), a statutory body of the Department of Science and Technology (DST), that can foster collaboration for high-end research at state and private universities and colleges.
- The new scheme will help bring the university system, which was so far mostly limited to teaching, into mainstream research and enable the young faculty there to participate in cutting-edge research.
- The new programme, which would also support data-driven social science research, would be a great stimulus to the latent potential that lies in our universities.

Important Point:

- The Centre spends **0.7 per cent of gross domestic product (GDP)** on research and development. This pales in comparison to China's 2 per cent, Japan's 3.4 per cent and the United States's 2.7 per cent.

5. Craft Village Initiative:

- The craft village is an important initiative introduced by the government to preserve the arts and crafts of our country.
- The government has been linking major tourist destinations with the handicraft clusters and infrastructure supports, as a part of "Linking Textile with Tourism" initiative. With respect to this, 8 craft villages have already been set up for overall development of villages. In these villages craft promotion and tourism are being taken forward.
- Craft villages have been set up in-
 1. Raghurajpur (Odisha)
 2. Tirupati (Andhra Pradesh)
 3. Vadaj (Gujarat)
 4. Naini (Uttar Pradesh)
 5. Anegundi (Karnataka)

6. Mahabalipuram (Tamil Nadu)
 7. Taj Ganj (Uttar Pradesh), and
 8. Amer (Rajasthan)
- The concept of a crafts village was drafted to gather most of the craft specimens and craftsmen at one place. In these villages, one can get up close and personal with the artisans because they create their wares in front of visitor's eyes.
 - Crafts are the significant part of Indian culture. These crafts flourish in the outlying regions of country.
 - Most of the crafts are practiced as a legacy of the family and past. Craftspeople have inherited crafts from their forefathers. This tradition is being followed for centuries.

6. India touches Milestone of 75,000 recognised Start-ups:

- Recently, India has crossed 75 thousand recognised Start Ups. Department for Promotion of Industry and Internal Trade (DPIIT) has recognized more than 75 thousand startups which is a milestone coinciding with 75th year of independence.

Startups:

- The term startup refers to a company in the first stages of operations. Startups are founded by one or more entrepreneurs who want to develop a product or service for which they believe there is demand.
- These companies generally start with high costs and limited revenue, which is why they look for capital from a variety of sources such as venture capitalists.
- The Department for Promotion of Industry and Internal Trade (DPIIT) has recognized startups which are spread across 56 diversified sectors.

Startup-India Scheme:

- Various programs undertaken by the Government of India to promote startups under Startup India initiative has facilitated this growth:
- Startup India Action Plan: It comprises of 19 action items spanning across areas such as Simplification and handholding, Funding support and incentives and Industry-academia partnership and incubation.
- The Action Plan laid the foundation of Government support, schemes and incentives envisaged to create a vibrant startup ecosystem in the country.
- **Startup India Hub:** It is a one of its kind online platforms for all stakeholders of the entrepreneurial ecosystem in India to discover, connect and engage with each other.
- The Online Hub hosts Startups, Investors, Funds, Mentors, Academic Institutions, Incubators, Accelerators, Corporates, Government Bodies and more.
- **Income Tax Exemption for 3 years:** Startups incorporated on or after 1st April 2016 Ministerial Board Certificate are exempted from income-tax for a period of 3 consecutive years out of 10 years since incorporation.
- **Startup India Seed Fund Scheme (SISFS):** It aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization.
- International Market Access to Indian Startups: Startup India has launched bridges with over 15 countries (Brazil, Sweden, Russia, Portugal, UK, Finland, Netherlands, Singapore, Israel, Japan, South Korea, Canada, Croatia, Qatar and UAE) providing a

soft-landing platform for startups from the partner nations and aid in promoting cross collaboration.

7. Aurangabad: First to publish Environmental Insights Explorer (EIE) data:

- According to Aurangabad Smart City Development Council Limited (ASCDCL), Aurangabad has become the first city to publish the “**Environmental Insights Explorer (EIE)**” data from Google. It released the EIE data on August 2, 2022.
- Google introduced the EIE dashboard for Aurangabad, during an event held in New Delhi.
- The EIE data make use of exclusive data sources and modelling capabilities in platforms that are available freely, in a bid to help cities and regions in measuring emission sources, identify strategies and run analyses to reduce emissions. This tool has been developed by Google. It provides climate data and technology and helps cities in creating a sustainable and carbon-free future.

8. Indian Companies in 2022 Fortune 500 list:

- Recently, 9 Indian public and private companies have been added to the Fortune Global 500 list of year 2022. Life Insurance Corporation (LIC) of India has been ranked at 98th position in the list, with revenue worth USD 97,266.7 million. LIC has been added to the list for the first time, after it was listed on Indian stock exchanges in May 2022.
- Walmart, U.S has been ranked one.
- Indian Companies in the list include;
- Indian Oil Corporation Ltd. (IOCL) at 142nd
- Oil and Natural Gas Corporation (ONGC) at 190th
- State Bank of India (SBI) at 236th
- Bharat Petroleum Corporation Ltd (BPCL) at 295th
- Fortune 500 list provides ranking to companies across the world, based on total revenues for respective fiscal years that ends on or before March 31, 2022.

Fortune Global 500:

- The Fortune Global 500, also known as Global 500, is an annual ranking of the top 500 corporations worldwide as measured by revenue. The list is compiled and published annually by Fortune magazine.

9. NITI Aayog Governing Council:

- Recently, the Prime Minister chaired the seventh meeting of the Governing Council (GC) of NITI Aayog.
- The Planning Commission was replaced by a new institution – NITI Aayog on 1st January, 2015 with emphasis on ‘Bottom -Up’ approach to envisage the vision of Maximum Governance, Minimum Government, echoing the spirit of ‘Cooperative Federalism’.
- **It has two Hubs:**
 1. Team India Hub acts as an interface between States and Centre.
 2. Knowledge and Innovation Hub builds the think-tank acumen of NITI Aayog.

NITI Aayog’s Governing Council:

- It is the premier body trusted with developing a shared vision of national priorities and strategies with the active involvement of States and Union Territories.
- It is a platform to discuss inter-sectoral, inter-departmental and federal issues.

It comprises:

1. The Prime Minister of India.
2. Chief Ministers of all the states and union territories with the legislature.
3. Lt Governors of other UTs.
4. Ex-Officio Members, Vice Chairman, NITI Aayog, Full-Time Members, NITI Aayog.
5. Special Invitees.

Page|10

10. RBI proposes for Cross-border inward payments through BBPS:

- Recently, the Reserve Bank of India proposed to allow Bharat Bill Payment System (BBPS) to process cross-border inbound bill payments. This will help the Non-resident Indians (NRIs) who face challenges in paying utility bills in India. If proposal is accepted, it will benefit the NRIs.

Key Points:

- Cross-border inward payments through BBPS will drive the Indian economy.
- It will provide a broader market approach for BBPS and boost forex inflow to India.
- It will further promote adoption of BBPS by global bill payment ecosystems.

Bharat Bill Payment System (BBPS):

- Bharat Bill Payment System is an integrated bill payment system in India offering interoperable and accessible bill payment service to customers through a network of agents of registered member as Agent Institutions, enabling multiple payment modes, and providing instant confirmation of payment.
- BBPS system was conceptualised by RBI. It is owned and operated by National Payments Corporation of India (NPCI) Bharat BillPay Ltd (NBBL).
- NPCI is the specialised division of RBI, under the parent head of Ministry of Finance. It was established in 2008, to operate the retail payments and settlement systems in India.

11. Nallathamby Kalaiselvi: First Woman Chief of CSIR:

- Recently, Dr N Kalaiselvi has become the first woman Director General of the Council of Scientific and Industrial Research (CSIR) The Energy researcher will be the Secretary to the Department of Scientific and Industrial Research. She is the only fourth woman scientist to occupy the position of a Secretary of a scientific department under the central government.

Council of Scientific and Industrial Research (CSIR):

- CSIR was set up as an autonomous body in September 1942. Since then, it has emerged as the largest research and development organisation in country. It is funded by Ministry of Science and Technology.
- It has been registered under Societies Registration Act, 1860. Research and development activities of CSIR are- Ocean sciences, Aerospace engineering, Life sciences, mining, food, petroleum, environmental science and chemicals.

12. Extension of PMAY-Urban till 2024:

- Recently, the Union Cabinet extended the Pradhan Mantri Awas Yojana (Urban) till December, 2024. This scheme was launched for the period of 2015-2022.
- Pradhan Mantri Awas Yojana (Urban) was launched in June 2015 with the aim of providing pucca houses to all eligible beneficiaries in urban areas.
- Original deadline was set as March 2022.
- Now, the scheme has been extended till December 31, 2021 following the request of states and union territories.
- This scheme has been extended because the Union government had identified the problems associated with providing houses to eligible urban dwellers in saturation mode.
- Four Pillars of Pradhan Mantri Awas Yojana (Urban):
 1. Beneficiary Led Construction/Enhancement (BLC)
 2. Affordable Housing in Partnership (AHP)
 3. In-situ Slum Redevelopment (ISSR) and
 4. Credit Linked Subsidy Scheme (CLSS)

13. Microsoft in ONDC platform:

- Recently, Microsoft joined the **Open Network for Digital Commerce (ONDC)** of the government, with the objective of introducing social e-commerce in Indian market. Significance of this move include:
- Recently, the government has launched the pilot phase of **Open Network for Digital Commerce (ONDC)** with an aim to “democratise” the country’s fast growing digital e-commerce space that is currently dominated by the two U.S.-headquartered firms – Amazon and Walmart.
- ONDC is a freely accessible government-backed platform that aims to democratise e-commerce by moving it from a platform-centric model to an open network for buying and selling of goods and services.
- Under ONDC, it is envisaged that a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart).
- Presently, buyers and sellers have to be on the same app for a transaction which happens through the same platform. For example, a buyer needs to go to Amazon, to buy a product from a seller on Amazon.
- It is a not-for-profit organisation that will offer a network to enable local digital commerce stores across industries to be discovered and engaged by any network-enabled applications.

14. SMILE-75 Initiative:

- The Government of India has formulated a comprehensive scheme of SMILE (Support for Marginalised Individuals for Livelihood and Enterprise) to address the persisting problem of destitution and beggary.
- Under the “SMILE-75” Initiative, 75 Municipal Corporations will undertake comprehensive rehabilitation of persons engaged in the act of begging in the spirit of Azadi ka Amrit Mahotsav.

What do we need to know about the SMILE 75-Initiative?

- Municipal Corporations, in collaboration with NGOs and other stakeholders will cover several comprehensive welfare measures for persons who are engaged in the act of begging, with focus extensively on rehabilitation, provision of medical facilities, counselling, awareness, education, skill development, economic linkages and convergence with other Government welfare programmes etc.
- The Ministry of Social Justice & Empowerment has also allocated a total budget of Rs.100 crore for the SMILE project for coming years till 2025-26.
- It seeks to develop a support mechanism for holistic rehabilitation of those engaged in the act of begging.
- Implementing Ministry: The Ministry of Social Justice and Empowerment.

Objectives:

1. To make cities/town and municipal areas begging-free.
 2. To make a strategy for comprehensive rehabilitation of the persons engaged in the act of begging through the coordinated action of various stakeholders.
- According to the Census 2011, the total number of beggars in India is 4,13,670 (including 2,21,673 males and 1,91,997 females) and the number has increased from the last census.
 - West Bengal tops the chart followed by Uttar Pradesh and Bihar at number two and three respectively. Lakshadweep merely has two vagrants according to the 2011 census.
 - Among the union territories, New Delhi had the largest number of beggars 2,187 followed by 121 in Chandigarh.
 - Among the northeastern states, Assam topped the chart with 22,116 beggars, while Mizoram ranked low with 53 beggars.

15. Microsoft- Indian Government MoU to train Civil servants:

- Recently, the Indian Government has inked a Memorandum of Understanding (MoU) with the **Microsoft** to collaboratively launch training programme for civil servants. Under the programme, Microsoft will give training to over 2.5 million civil servants in India for using the Microsoft digital tools.
- MoU was inked **between Microsoft, Ministry of Skill Development & Entrepreneurship (MSDE) and Capacity Building Commission (CBC).**
- It was aimed at training the civil servants in helping underprivileged, by delivering last-mile social welfare services.
- The Capacity Building Commission (CBC) helps in capacity building for several ministries including Defence, Skill Development & Entrepreneurship, Social Justice etc.
- This MoU was inked considering the competence gap among civil servants. They were lacking at digital productivity application skills, which is required while working on Microsoft Word, Excel, and PowerPoint presentation.
- As part of MoU, Microsoft will start an online learning course on Microsoft Office 365 digital productivity suite offerings.
- This programme is aimed at empowering central government employees on significant digital skills and strengthen the vision of Digital India. This initiative will drive more productivity and will also enable ease of doing business by bringing more digital solutions.

16. RBI Regulatory Framework for Digital Lending:

- Recently, the Reserve Bank of India (RBI) has issued detailed guidelines for digital lending according to which digital loans must be credited directly to the bank accounts of borrowers and not through any third party.
- It is the first set of guidelines for digital lending, to crack down on illegal activities by certain players. This follows the recommendation of a Working Group on Digital Lending (WGDL) that had submitted its report recently.

Digital Lending:

- It consists of lending through web platforms or mobile apps, by taking advantage of technology for authentication and credit assessment.
- Banks have launched their own independent digital lending platforms to tap into the digital lending market by leveraging existing capabilities in traditional lending.
- Significance:
 - Financial Inclusion: It helps in meeting the huge unmet credit need, particularly in the microenterprise and low-income consumer segment in India.
 - Reduce Borrowing from Informal Channels: It helps in reducing informal borrowings as it simplifies the process of borrowing.
 - Time Saving: It decreases time spent on working loan applications in-branch. Digital lending platforms have also been known to cut overhead costs by 30-50%.

Challenges:

1. A growing number of unauthorised digital lending platforms and mobile applications as:
2. They charge excessive rates of interest and additional hidden charges.
3. They adopt unacceptable and high-handed recovery methods.
4. They misuse agreements to access data on mobile phones of borrowers.

Who comes under these New Guidelines?

- The central bank's regulatory framework is focused on the digital lending ecosystem of regulated entities and the Lending Service Provider (LSPs) engaged by them to extend various permissible credit facilitation services.
- The banking regulator has categorically specified that the lending business can only be carried out by entities regulated by the RBI or those permitted under the law.
- The central bank has divided the universe of digital lenders into three groups namely:
 - Entities regulated by the RBI and permitted to carry out lending business.
 - Entities authorised to carry out lending according to other statutory/ regulatory provisions but not regulated by the RBI.
 - Entities lending outside the purview of any statutory/ regulatory provision.

17. Phase-II of fortified rice scheme:

- In his address on the 75th Independence Day (15th August 2021), Prime Minister Modi announced the supply of Fortified Rice in every scheme of the Government of India throughout the country by 2024 in a phased manner.
- According to the Union government, it has distributed around 6.83 lakh tonnes of fortified rice as a part of Public Distribution System (PDS) in second phase of "Fortified Rice Scheme".

Key Points:

- Government had set aim in 2021, to distribute fortified rice through government schemes by 2024.

- First phase of the distribution started in October 2021. During this phase, fortified rice was distributed through Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) and Integrated Child Development Services (ICDS) schemes.
- In Phase II, 52% of the districts received the fortified rice. Under PDS, 151 districts from 24 states have received fortified rice.
- In the first phase, about 17.51 lakh tonnes of fortified rice were distributed across states since this scheme was implemented in October 2021.

Production Capacity:

- Besides the distribution, production capacity of mills to mix fortified rice has also enhanced to 60 lakh tonnes as against 13.67 lakh tonnes on August 15, 2021.
- The number of mills with blending infrastructure has also increased from 2690 to 6,000 in a year.
- Annual manufacturing capacity of Fortified Rice Kernel (FRK) has increased from 0.9 lakh tonnes to 3.5 lakh tonnes now.
- State-run Food Corporation of India (FCI) and state agencies started procuring fortified rice in 2020-21. Since then, they have procured 145.93 lakh tonnes of rice, so far.

Key to Addressing Nutrition Gap:

- With a section of the populace having limited access to nutritious food, fortification is key in addressing the nutrition gap.
- In a bid to directly address anaemia and micronutrient deficiency in the country, the Centre recently approved a pilot scheme on “Fortification of Rice & its Distribution under Public Distribution System”.
- The government’s food fortification initiative is already taking shape with several states, including Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu, Chhattisgarh, Uttar Pradesh, Odisha, Telangana, Uttarakhand and Madhya Pradesh, starting the distribution of fortified rice under the pilot programme.
- Fortifying staple foods and condiments with key micronutrients is an effective way of addressing deficiencies.
- Timely adoption of food fortification in social and nutrition security programmes as a part of the fortification initiative will play a crucial role in addressing undernutrition in India.

Need for Rice fortification:

- The country has high levels of malnutrition among women and children.
- According to the Food Ministry, every second woman in the country is anaemic and every third child is stunted.
- India ranks 94 out of 107 countries and is in the ‘serious hunger’ category on the Global Hunger Index (GHI).
- Malnutrition and lack of essential nutrients in poor women and poor children poses major obstacles in their development.

What is food fortification?

- Food fortification is defined as the practice of adding vitamins and minerals to commonly consumed foods during processing to increase their nutritional value.
- It is a proven, safe and cost-effective strategy for improving diets and for the prevention and control of micronutrient deficiencies.
- The Food Safety and Standards Authority of India (FSSAI), defines fortification as “deliberately increasing the content of essential micronutrients in a food so as to

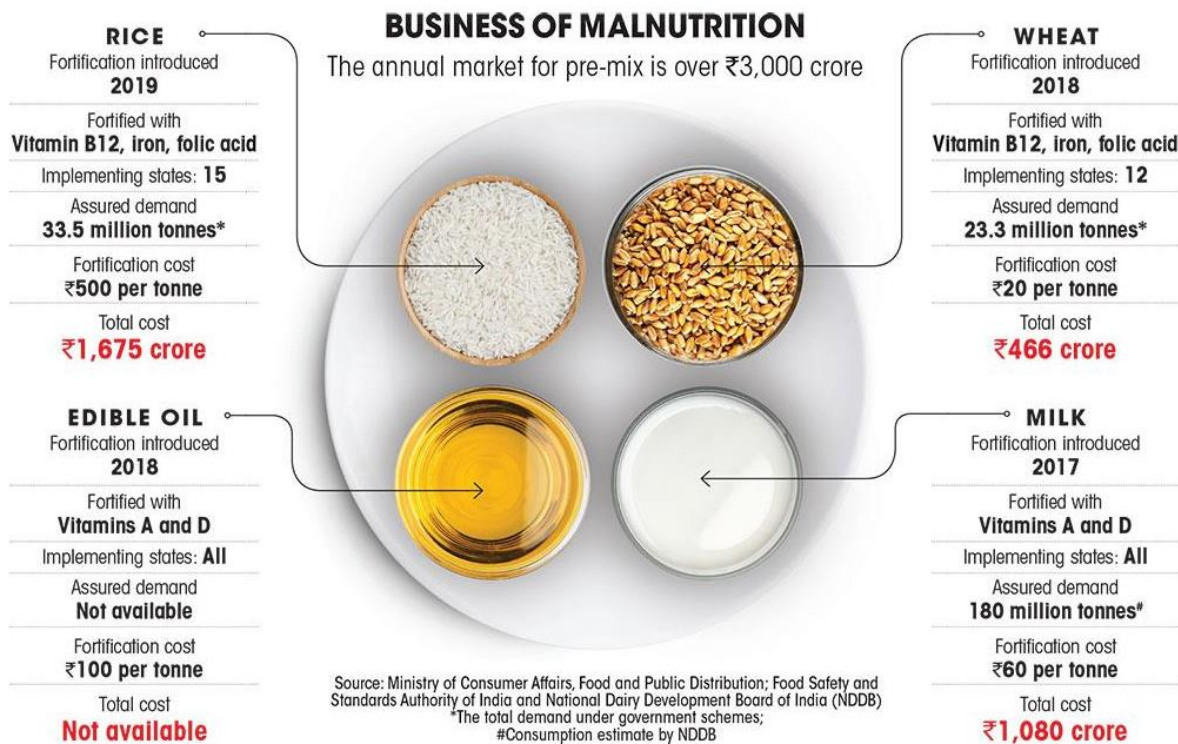
improve the nutritional quality of food and to provide public health benefit with minimal risk to health”.

Fortified rice:

- According to the Food Ministry, fortification of rice is a cost-effective and complementary strategy to increase vitamin and mineral content in diets.
- According to FSSAI norms, 1 kg fortified rice will contain iron (28 mg-42.5 mg), folic acid (75-125 microgram) and Vitamin B-12 (0.75-1.25 microgram).
- In addition, rice may also be fortified with micronutrients, singly or in combination, with zinc (10 mg-15 mg), Vitamin A (500-750 microgram RE), Vitamin B1 (1 mg-1.5 mg), Vitamin B2 (1.25 mg-1.75 mg), Vitamin B3 (12.5 mg-20 mg) and Vitamin B6 (1.5 mg-2.5 mg) per kg.

What are the benefits of Fortification?

- Since the nutrients are added to staple foods that are widely consumed, this is an excellent method to improve the health of a large section of the population, all at once.
- Fortification is a safe method of improving nutrition among people. The addition of micronutrients to food does not pose a health risk to people.
- It does not require any changes in food habits and patterns of people. It is a socio-culturally acceptable way to deliver nutrients to people.
- It does not alter the characteristics of the food – the taste, the feel, the look.
- It can be implemented quickly as well as show results in improvement of health in a relatively short period of time.
- This method is cost-effective especially if advantage is taken of the existing technology and delivery platforms.



18. ILO 'Global Employment Trends for Youth 2022' Report:

- Recently, the International Labour Organisation (ILO) has released a report titled "Global Employment Trends for Youth 2022: Investing in transforming futures for young people".
- International Labour Organization is the only tripartite United Nation (UN) agency. It brings together governments, employers and workers of 187 member States (India is a member), to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- Received the Nobel Peace Prize in 1969.

Establishment history:

- Established in 1919 by the Treaty of Versailles as an affiliated agency of the League of Nations.
- Became the first affiliated specialized agency of the UN in 1946.
- Headquarters: Geneva, Switzerland
- Major Reports:
 1. World of Work Report
 2. World Employment and Social Outlook Trends 2022
 3. World Social Protection Report
 4. Social Dialogue Report
 5. Global Wage Report

Key Findings:

Gender Disparity in EPR:

- Young women exhibited a much lower Employment-to-Population ratio (EPR), showing that young men are almost 1.5 times more likely than young women to be employed.
- In 2022, 27.4 % of young women globally are projected to be in employment, compared to 40.3 % of young men.

Pandemic Impacted Youth Employment:

- Covid-19 Pandemic has worsened the numerous labour market challenges facing those aged between 15 and 24 years, who have experienced a much higher percentage loss in employment than adults since early 2020.
- The total global number of unemployed youths is estimated to reach 73 million in 2022, a slight improvement from 2021 but still six million above the pre-pandemic level of 2019.

Regional Differences:

- The recovery in youth unemployment is projected to diverge between low- and middle-income countries on the one hand and high-income countries on the other.
- High income countries are the only ones expected to achieve youth unemployment rates close to those of 2019 by the end of 2022.
- Meanwhile, in the other country income groups, the rates are projected to remain more than 1% above their pre-crisis values.

Benefits of Green and Blue Economies:

- Young people were well-placed to benefit from the expansion of the so-called green and blue economies, centred around the environment and sustainable ocean resources respectively.
- An additional 8.4 million jobs may be created for young people by 2030 through green and blue investments, notably in clean and renewable energies, sustainable agriculture, recycling and waste management.

Findings Related to India:

Decline in Youth Employment:

- The youth employment participation rate declined by 0.9 % over the first nine months of 2021 relative to its value in 2020, while it increased by 2 % for adults over the same time period.
- The situation is particularly severe for very young people aged 15-20 years.

Low Young Female Employment:

- Indian young women experienced larger relative employment losses than young men in 2021 and 2022.
- In general, the high youth employment losses in India drive up the global average employment losses.
- Young Indian men account for 16% of young men in the global labour market, while the corresponding share for young Indian women is just 5%.

Gap in Online Education:

- School closures lasted 18 months and among the 24-crore school-going children, only 8% of such children in rural areas and 23% in urban areas had adequate access to online education.
- Given the deeply unequal access to online resources in developing countries, children from socio-economically disadvantaged families, which are the large majority, had almost no access to education.

Learning Regression:

- School closures not only prevented new learning, but also led to the phenomenon of “learning regression”, that is, children forgetting what they had learned earlier.
- In India, 92% of children on average lost at least one foundational ability in language and 82% lost at least one foundational ability in mathematics.

Teachers are Paid Less:

- The study found out that teachers in non-state schools are often paid significantly less than those in state schools.
- Teachers in low-fee private schools in India, Kenya, Nigeria and Pakistan are paid between one eighth and one half of what their counterparts in the state sector receive.

Domestic work is Highly Informal:

- Domestic work is a highly informal sector in India, and wages are extremely low and young women and girls are vulnerable to abuse
- Reports of abuse suffered by young domestic workers are common, including verbal and physical abuse, and sexual exploitation.

Key Recommendations:

1. Investment in various sectors must be accompanied by the promotion of decent working conditions for all young workers.
2. Young workers should be ensured that they enjoy fundamental rights and protections including freedom of association, the right to collective bargaining, equal pay for work of equal value, and freedom from violence and harassment at work.
3. Young people should be provided with well-functioning labour markets with decent job opportunities for those already participating in the labour market, along with quality education and training opportunities for those yet to enter it.

19. National Intellectual Property Awareness Mission (NIPAM):

- Recently, the National Intellectual Property Awareness Mission (NIPAM) has achieved target of imparting Intellectual Property (IP) awareness and basic training to 1 million students on 31st July 2022, ahead of the deadline which was 15 August 2022.
- The National Intellectual Property Awareness Mission (NIPAM) was launched on December 8, 2021 by Ministry of Commerce & Industry in association with Intellectual Property Office and Office of Controller General of Patents, Designs and Trademarks (CGPDTM). Under this programme, awareness and training are provided on Intellectual Property (IP). This scheme has met its goal of training one million students on July 31, 2022, before the deadline of August 15, 2022.

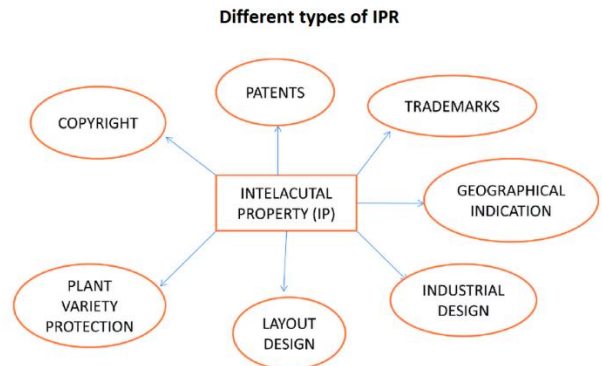
Intellectual Property Rights:

- Intellectual property rights (IPR) are the rights given to persons over the creations of their minds: inventions, literary and artistic works, and symbols, names and images used in commerce. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time.
- These rights are outlined in Article 27 of the Universal Declaration of Human Rights, which provides for the right to benefit from the protection of moral and material interests resulting from authorship of scientific, literary or artistic productions.
- The importance of intellectual property was first recognized in the Paris Convention for the **Protection of Industrial Property** (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO).
- Intellectual property rights are customarily divided into two main areas:
 - I. Copyright and rights related to copyright: The rights of authors of literary and artistic works (such as books and other writings, musical compositions, paintings, sculpture, computer programs and films) are protected by copyright, for a minimum period of 50 years after the death of the author.
 - II. Industrial property: Industrial property can be divided into two main areas:
 - Protection of distinctive signs, in particular trademarks and geographical indications.
 - Trademarks distinguish the goods or services of one undertaking from those of other undertakings.
 - Geographical Indications (GIs) identify a good as originating in a place where a given characteristic of the good is essentially attributable to its geographical origin.
 - The protection of such distinctive signs aims to stimulate and ensure fair competition and to protect consumers, by enabling them to make informed choices between various goods and services.
 - The protection may last indefinitely, provided the sign in question continues to be distinctive.
 - Industrial designs and trade secrets: Other types of industrial property are protected primarily to stimulate innovation, design and the creation of technology. In this category fall inventions (protected by patents), industrial designs and trade secrets.

What is the need of IPR?

- The progress and well-being of humanity rest on its capacity to create and invent new works in the areas of technology and culture.
- **Encourages innovation:** The legal protection of new creations encourages the commitment of additional resources for further innovation.

- **Economic growth:** The promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life.
- **Safeguard the rights of creators:** IPR is required to safeguard creators and other producers of their intellectual commodity, goods and services by granting them certain time-limited rights to control the use made of the manufactured goods.
- It **promotes innovation** and creativity and ensures ease of doing business.
- It facilitates the transfer of technology in the form of foreign direct investment, joint ventures and licensing.



20. Paalan 1000 National Campaign:

- Recently, the Union government has launched a new campaign to reduce child mortality, including an app-the **Paalan 1000 National Campaign** and Parenting App.
- The campaign is centered on the fact that the first 1000 days of a child's life is when a platform is established for its physical, mental, emotional, cognitive and social health.
- Child Mortality is defined as the probability of children's death between birth and 5 years of age. It is expressed per 1,000 live births.
- **Child mortality** or the under-five mortality rate refers to the probability of a child dying between birth and exactly 5 years of age, expressed per 1,000 live births. In 2020, 5.0 million children under 5 years of age died.

21. India's 'Panch Pran' target for next 25 years:

- Recently, the Prime Minister in his Independence Day Speech laid out Panch Pran (Five Vows) to be completed by 2047 when India celebrates 100 years of Independence.
- The first vow is for India to become a Developed Country in the next 25 years.
- The remaining pledges for 2047 are-removing any sign of servility, pride in heritage, unity and fulfilling our duties.

What is a Developed Country?

- A Developed Country is industrialised, has a high quality of life, a developed economy and advanced technological infrastructure relative to less industrialised nations.
- Whereas developing countries are those in the process of industrialisation or are pre-industrial and almost entirely agrarian.
- The most common criteria for evaluating the degree of economic development are:
 1. The Gross Domestic Product (GDP):
 - It is the monetary measure of all goods and services produced in a country in a year.
 - Countries with a high GDP and per capita income (the amount of money earned per person) are considered developed.

Dominate Tertiary and Quaternary Sector:

- The Countries in which the tertiary (companies that provide services such as entertainment, financial, and retailers) and quaternary sectors of industry (knowledge-based activities such as information technology, research, and development, as well as consulting services and education) dominate are described as developed.

Post-Industrial Economies:

Page|20

- The developed countries generally have more advanced post-industrial economies, meaning the service sector provides more wealth than the industrial sector.

Human Development Index:

- Other criteria are the scale of infrastructure, the general standard of living, and the Human Development Index (HDI).
- As the HDI focuses on indices for life expectancy and education and does not take into account factors such as the net wealth per capita or the relative quality of goods in a country.
- This is why even some of the most advanced countries, including the G7 members (Canada, France, Germany, Italy, Japan, the UK, the US, and the European Union) and others, do not do too well on HDI. That's why countries like Switzerland rank high on HDI.

22. 5 years of UDAN Scheme:

- Recently UDAN (UdeDeshkaAamNagrik), a Regional Connectivity Scheme of the Ministry of Civil Aviation has completed 5 years of success since the launch of its first flight by the Prime Minister on 27th April 2017.
- Ude Desh Ka Aam Naagrik (UDAN) was launched as a Regional Connectivity Scheme (RCS) under the Ministry of Civil Aviation in 2016.
- It was formulated based on the review of The National Civil Aviation Policy (NCAP)-2016 and it was planned to remain in force for a period of 10 years.
- Under this Scheme, Regional Connectivity Fund (RCF) was created, which funds the Viability Gap Funding (VGF) requirements of the scheme through a levy on certain domestic flights.
- VGF means a grant one-time or deferred, provided to support infrastructure projects that are economically justified but fall short of financial viability.

Objectives:

1. To develop the regional aviation market.
2. To provide affordable, economically viable and profitable air travel on regional routes to the common man even in small towns.

Key Points:

- The scheme envisages providing connectivity to unserved and underserved airports of the country through the revival of existing air-strips and airports.
- Under-served airports are those which do not have more than one flight a day, while unserved airports are those where there are no operations.
- Financial incentives from the Centre, state governments and airport operators are extended to selected airlines to encourage operations from unserved and under-served airports, and keep airfares affordable.

Achievements So Far:

- There were 74 operational airports in 2014 which has increased to 141 by now.

- 68 underserved/unserved destinations which include 58 Airports, 8 Heliports & 2 Water Aerodromes have been connected under UDAN scheme.
- With 425 new routes initiated, UDAN has provided air connectivity to more than 29 States/ UTs across the country.
- More than one crore passengers have availed the benefits of this scheme as on 4th August 2022.

23. Traditional Knowledge Digital Library (TKDL) database:

- Recently, the Union Cabinet approved the “Widening access of Traditional Knowledge Digital Library database to users, apart from the patent offices”. Widening of Traditional Knowledge Digital database to users is an ambitious step of the government.
- Traditional Knowledge Digital Library was established in 2001. It is a prior art database of Indian traditional knowledge. It was established by Council of Scientific and Industrial Research (CSIR) and Department of Indian Systems of Medicine and Homeopathy (now called Ministry of AYUSH). This library comprises of information regarding existing literature like Ayurveda, Unani, Siddha, Sowa Rigpa and Yoga. The information is available in a digitized format in five international languages like English, French, German, Spanish and Japanese. Till now, access to this database was restricted to 14 Patent Offices across the world to conduct research and examination. Now it has been extended to more users.

Significance of widening access include:

- Widening of Traditional Knowledge Digital Library will drive research & development, and innovation on the basis of India’s valued heritage in diverse fields.
- It will also promote thought and knowledge leadership via Bharatiya Gnana Parampara, under New Education Policy 2020.
- This approval is focused towards integrating and co-opting traditional knowledge with current practices, in a bid to enhancing innovation and trade.
- This database will act as an important source of traditional knowledge information to advance knowledge and technology frontiers.
- This database can be accessed through a paid subscription model, which will be opened for national and international users in a phase-wise manner.

24. Mandla: First ‘functionally literate’ district:

- Tribal-dominated Mandla district of Madhya Pradesh has become the first completely “functionally literate” district of India.
- During 2011 survey, literacy rate in Mandla district was 68%. Another report of 2020 highlights that, more than 2.25 lakh people in this district were not literate, most of them were tribals from forest areas.
- To make people functionally literate, a major campaign was launched on Independence Day 2020, in association with the school education department, anganwadi & social workers, women and child development department, to educate women and senior citizens.
- With this campaign, entire district has turned into functionally literate district, within two years.
- Mandla is the first district of India to reach this mark, where people were able to write their names, read and count.

25. NAMASTE Scheme:

- The **Ministry of Social Justice and Empowerment** (MoSJ&E) is preparing to undertake a nationwide survey to enumerate all Sanitation workers engaged in cleaning of sewers and septic tanks.
- The **NAMASTE** scheme is being undertaken jointly by the Ministry of Housing and Urban Affairs and the MoSJ&E and aims to eradicate unsafe sewer and septic tank cleaning practices.

Objectives:

- Zero fatalities in sanitation work in India.
- All sanitation work is performed by skilled workers.
- No sanitation workers come in direct contact with human faecal matter.
- Sanitation workers are collectivised into Self Help Groups (SHGs) and are empowered to run sanitation enterprises.
- Strengthened supervisory and monitoring systems at National, State and Urban Local Body (ULB) levels to ensure enforcement and monitoring of safe sanitation work.
- Increased awareness among sanitation services seekers (individuals and institutions) to seek services from registered and skilled sanitation workers.

Key Points:

- The enumeration exercise is part of the National Action Plan for Mechanised Sanitation Ecosystem (NAMASTE) Scheme and will be conducted across 500 AMRUT (Atal Mission for Rejuvenation and Urban Transformation) cities.
- It will merge with and replace the Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS), which was started in 2007.
- Programme Monitoring Units (PMUs) for the 500 AMRUT cities will be set up to carry out the exercise.
- Once this exercise is completed across the 500 cities, it will be expanded nationwide, making it easier to bring government benefits like upskilling and loan and capital subsidies to them.

What is the Need for Enumeration Exercise?

- Manual Scavenging has led to at least 351 deaths since 2017.
- It is aimed at streamlining the process of rehabilitating sanitation workers.
- It will make it easier to bring government benefits like upskilling and loan and capital subsidies to them.
- To link listed sanitation workers to the Swachhha Udyami Yojana, through which the workers will be able to own sanitation machines themselves and the government will ensure that at the municipality level, the work keeps coming in.
- Swachhha Udyami Yojana has twin objectives of cleanliness and providing livelihood to Safai Karamcharis and liberated Manual Scavengers to achieve the overall goal of "Swachh Bharat Abhiyan".

26. Grameen Udyami Project- Phase 2:

- Recently, National Skill Development Corporation (NSDC) in partnership with Seva Bharti and Yuva Vikas Society, launched the second phase of the Grameen Udyami Project.
- Under the initiative, the endeavor is to multiskill India's youth and impart functional skills to them for enabling livelihoods.
- It is a unique multiskilling project, funded by NSDC that aims to train 450 tribal students in Madhya Pradesh and Jharkhand.
- The project is being implemented in six states – Maharashtra, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, and Gujarat.

National Skill Development Corporation:

- The National Skill Development Corporation (NSDC) is a non-profit public limited company established on July 31, 2008, under Section 25 of the Companies Act, 1956.
- The Ministry of Finance established NSDC as a Public Private Partnership (PPP) model.
- The Government of India, through the Ministry of Skill Development and Entrepreneurship (MSDE), owns 49% of NSDC, while the private sector owns the remaining 51%.
- The organisation provides funding to develop scalable and successful initiatives for vocational training.

Objectives:

1. Increase in Rural/Local Economy.
2. Enhance employment opportunities.
3. Reduce forced migration due to lack of local opportunities.
4. Conservation of natural resources.

Significance:

- There is a dire need to increase ownership at the tribal level so that there is awareness built around such schemes and initiatives.
- As there is so much potential and ability in the tribal youth, all we need to do is lay down the right avenues for them to use their talent in the right places.
- This initiative will provide economic empowerment to our tribal population.

27. PMJAY: Healthcare services to Transgender Persons:

- The National Health Authority (NHA) and the Department of Social Justice and Empowerment recently signed a Memorandum of Understanding (MoU) for providing holistic health services to transgender persons under Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).
- It will extend all healthcare benefits to transgender persons (holding a transgender certificate issued by the National Portal for transgender persons) across the country.
- Under AB-PMJAY, every eligible person gets a health insurance cover of up to Rs 5 lakh every year.
- Apart from this, special packages are also being prepared for the transgender category, which will also include special packages like gender reassignment surgery (SRS) and treatment for transgenders.

Pradhan Mantri Jan Arogya Yojna (PM-JAY):

- The scheme was launched in September 2018 and recommended by the National Health Policy 2017, to achieve the vision of Universal Health Coverage (UHC).

- It is a Centrally Sponsored Scheme having a central sector component under Ayushman Bharat Mission
- PM-JAY was earlier known as the National Health Protection Scheme (NHPS) before being rechristened.
- It subsumed the then-existing **Rashtriya Swasthya Bima Yojana (RSBY)** which had been launched in 2008.

Eligibility:

- The households included are based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively.
- The coverage mentioned under PM-JAY, therefore, also includes families that were covered in RSBY but are not present in the SECC 2011 database.

Eligibility:

- The households included are based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively.
- The coverage mentioned under PM-JAY, therefore, also includes families that were covered in RSBY but are not present in the SECC 2011 database.

Cover Under PM-JAY:

1. The cover under the scheme includes all expenses incurred on the following components of the treatment.
2. Medical examination, treatment and consultation
3. Pre-hospitalization
4. Medicine and medical consumables
5. Non-intensive and intensive care services
6. Diagnostic and laboratory investigations
7. Medical implantation services (where necessary)
8. Accommodation benefits.
9. Food services
10. Complications arising during treatment
11. Post-hospitalization follow-up care up to 15 day

28. Bharat Brand: One Nation One Fertiliser:

- Recently, to bring about uniformity in fertiliser brands across the country, the Union government has issued an order directing all companies to sell their products under a single brand name of 'Bharat'.
- Following the order, all fertiliser bags, whether containing urea or di-ammonium phosphate (DAP) or muriate of potash (MOP) or NPK will sport the brand name as 'Bharat Urea', 'Bharat DAP', 'Bharat MOP' and 'Bharat NPK' irrespective of the company that manufactures it, whether in the public or the private sector.
- The order also stated that the single brand name and the logo of Pradhan Mantri Bhartiya Janurvarak Pariyojana (PMBJP), the scheme under which the Central government grants subsidy annually to the fertiliser, companies will have to be displayed on the bags.
- The objective of this scheme is to control black advertising by fertilizer companies and bring transparency in the system. Fertilizer manufacturing companies are not allowed to buy bags of old design from 15th September 2022 and they have to eliminate all bags of old design by 12th December 2022.

Benefits of this scheme:

- According to the government, a single brand name will help reduce freight charges by preventing criss-cross movement of fertilizers. It has been seen many times that a fertilizer company based in Uttar Pradesh is selling its product in Maharashtra.
- Due to which the demand of these brands increases without any reason in that area and when there is no supply then people do not like to take a different brand of fertilizer even if they are similar. This created brand-wise demand for fertilizers in specific areas leading to shortage of fertilizers while local manufacturers suffered. So one of the reasons behind the idea of ONOF is to stop these things.
- As we all know that the government gives huge subsidy on fertilizer products which is more than the maximum retail price, so the subsidy scheme on sacks will also be mentioned under this scheme.

29. Unified Ayushman Bharat PM-JAY Cards:

- Recently, the Union government announced a plan to create a unified card that can be used to avail benefits of both the central government-run Ayushman Bharat-PMJAY as well as the health insurance schemes run by state governments individually.

Key Points:

- This step has been taken by the government to reduce the confusion among the citizens so that they know exactly which schemes are applicable for them. According to the Ministry of Health, at present, about 20 schemes are being run by many states.
- Currently, except Delhi, Odisha and West Bengal, all other states and union territories have agreed to co-brand the cards. After this co-branding, their joint name will be changed to 'Ayushman Card'.
- The card will be bilingual in English and the local language.
- Under the new arrangement, eligible beneficiaries of any government insurance scheme will be able to avail this coverage in any of the 25,000 hospitals empaneled under the central scheme. The central government will provide a cover of ₹5 lakh, and beyond that individual states are free to add to the insurance package.
- According to the Health Ministry, about 188.1 million persons have been verified under the scheme till August 17, 2022, out of which updated Ayushman cards have been issued to 141.2 million people.

30. 75 tribal districts identified for TB interventions:

- Recently 75 high burden tribal districts have been selected by the Ministry of Tribal Affairs and the Central TB Division of the Ministry of Health and Family Welfare to become TB free in the coming months.
- The 'Tribal TB Initiative' is a joint initiative of the Ministry of Tribal Affairs and the Central TB Division of the Ministry of Health, supported by USAID as the technical partner and by Piramal Health as the implementation partner.
- Under this initiative, Aashwasan Campaign was launched from Nandurbar district of Maharashtra to detect active cases of TB in 174 tribal districts of India

For 75 such districts, a three-pronged strategy is presented, focusing on the following:

- Generate demand for TB services through community mobilization, increasing awareness of TB symptoms, prevalence and treatment procedures, and continuing

engagement with community influencers involved in the process of reducing stigma and fear associated with TB.

- To improve the delivery of TB services by provision of customized solutions by leveraging PIPs and other sources of funding to bridge the implementation gap by increasing the infrastructure of TB testing or testing and diagnosis.
- Reducing the risk and spread of disease through proactive case-detection campaigns.
- Aashwasan Campaign:
- The campaign has brought together around 2 lakh community influencers, who participated with full dedication to make this campaign a success. These include tribal leaders, tribal doctors, PRI members, self-help groups (SHGs) and youth from tribal areas.
- Under this, door-to-door TB screening was done in 68,019 villages. Based on oral examination of 1,03,07,200 persons, 3,82,811 persons were identified as having TB.
- Of these, 2,79,329 (73 per cent) samples were tested for TB and 9,971 people tested positive for TB were treated as per the protocol of the Government of India.

What is Pradhan Mantri TB Mukh Bharat Abhiyan:

- Recently, to speed up the country's fight against tuberculosis (TB) and achieve the target set by the Prime Minister of eliminating the disease by 2025, President launched the Pradhan Mantri TB Mukh Bharat Abhiyan.
- Major challenges to control TB in India include poor primary health-care infrastructure in rural areas of many states; unregulated private health care leading to widespread irrational use of first-line and second-line anti-TB drugs; poverty; lack of political will; and, above all, corrupt administration.

Tuberculosis:

- **Tuberculosis (TB)** is an infectious disease caused by Mycobacterium tuberculosis.
- It commonly affects the lungs, but can also affect other parts of the body.
- It is a treatable and curable disease.
- **Transmission:** TB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air.
- **Symptoms:** Common symptoms of active lung TB are cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.
- **Vaccine:** Bacille Calmette-Guérin (BCG) is a vaccine for TB disease.

31. Haridwar: Best Aspirational District:

- The NITI Aayog has declared holy city of Haridwar in Uttarakhand as the best aspirational district on five parameters, thereby providing an additional allocation of three crore rupees.

Aspirational District Programme:

- The programme was launched in January 2018 aims to quickly and effectively transform some of most underdeveloped districts of the country.
- This scheme has been implemented along with the central and state schemes. In its successful implementation, there is important cooperation of the 'in-charge' officers of the central, state level and district collectors.
- The competition between these districts is maintained through equated monthly delta rankings, so that they are eager to make it a success.

- The ranking of aspirational districts combines innovative use of data with practical governance, placing the district at the center of inclusive growth.
- As per the norms for planning of aspirational districts, each district should prepare an action plan in consultation with the State and Central officers in charge, after which it should be sent to NITI Aayog for final approval of the Empowered Committee of Secretaries constituted for the programme.
- Parameters for Best Aspirational District

It envisages rapid development of selected districts on basis of composite index based on five parameters:

1. health and nutrition,
2. education,
3. financial inclusion and skill development,
4. agriculture and water resources
5. basic infrastructure

Science and Technology

1. Monkeypox:

- Recently, the Union Government set up a task force to monitor Monkeypox situation in country. It was created after reporting first death related to monkeypox. The Task force will provide guidance to government with respect to expansion of diagnostic facilities and exploration of vaccination for the disease in India.

About Monkeypox:

- It is a viral zoonotic disease (transmission from animals to humans) and is identified as a pox-like disease among monkeys hence it is named Monkeypox. It is endemic to Nigeria.
- It is caused by monkeypox virus, a member of the Orthopoxvirus genus in the family Poxviridae.
- The natural host of the virus remains undefined. But the disease has been reported in many animals.
- Animals known to be sources of Monkeypox virus include monkeys and apes, a variety of rodents (including rats, mice, squirrels and prairie dogs) and rabbits.
- It was first reported in 1958, in monkeys in the Democratic Republic of Congo (DRC) and in humans in 1970, also in the DRC.
- In 2017, Nigeria experienced the largest documented outbreak, 40 years after the last confirmed case.
- Subsequently, the disease has been reported in many West and Central African countries.

Transmission:

- Primary infection is through direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of an infected animal. Eating inadequately cooked meat of infected animals is also a risk factor.

- Human-to-human transmission can result from close contact with infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials.
- Transmission can also occur by inoculation or via the placenta (congenital monkeypox).

Treatment and Vaccine:

Page|28

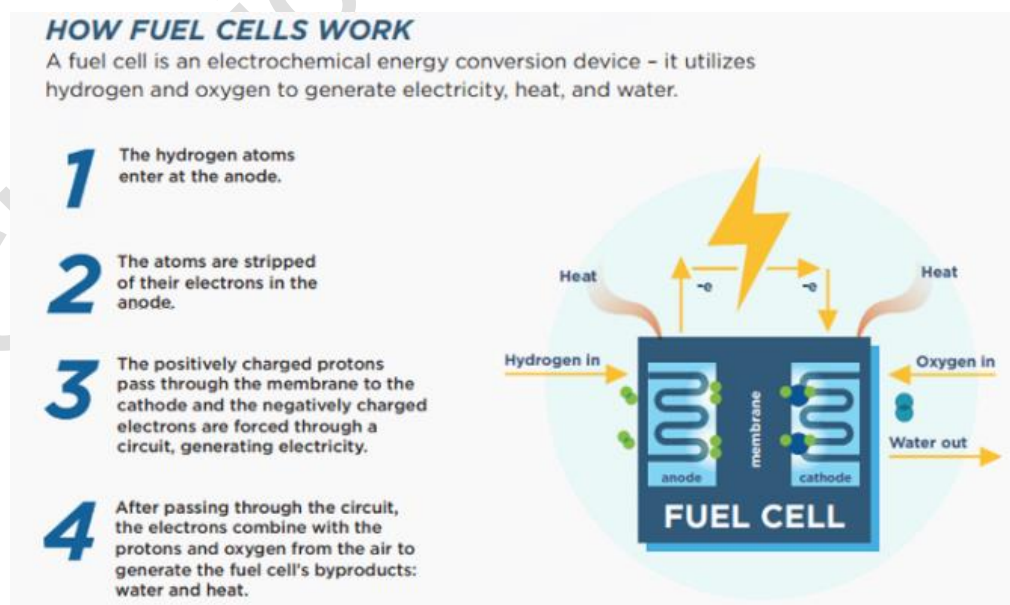
- There is no specific treatment or vaccine available for Monkeypox infection. In the past, the anti-smallpox vaccine was shown to be 85% effective in preventing Monkeypox.
- But the world was declared free of smallpox in 1980 so the vaccine isn't widely available anymore.
- Currently, there is no global system in place to manage the spread of Monkeypox, with each country struggling to contain any outbreak whenever it occurs.

2. World's most durable Hydrogen Fuel Cell:

- Recently, a team of scientists from Hong Kong University of Science and Technology (HKUST) have developed world's most durable Hydrogen Fuel Cell. However, this hydrogen fuel is more cost cost-effective, and make ways for wider application of green energy in chasing carbon-neutral world.

Fuel Cell:

- Fuel cells and batteries convert chemical energy into electrical energy and are very useful forms of galvanic cells.
- A galvanic or voltaic cell is an electrochemical cell that converts chemical energy into electrical energy through the redox reactions that occur within the cell.
- A hydrogen fuel cell is an electrochemical device that converts specifically hydrogen into electrical energy.
- Galvanic cells that are designed to convert the energy of combustion of fuels like hydrogen, methane, methanol, etc. directly into electrical energy are called fuel cells. One of the most successful fuel cells uses the reaction of hydrogen with oxygen to form water.



Pros and Cons of using Hydrogen Fuel Cells (HFCs) in Vehicles	
Pros	Cons
<ul style="list-style-type: none"> Hydrogen is a clean fuel, no emission of carbon monoxide, hydrocarbons and particulate matter is there. 	<ul style="list-style-type: none"> Estimated cost of a vehicle running on Hydrogen Fuel Cells is \$ 50,000 (₹ 36,66,872).
<ul style="list-style-type: none"> Only water is the residue of HFCs which can be used in the desert areas. 	<ul style="list-style-type: none"> A hydrogen based fuel is highly inflammable, the production, transport and storage of the fuel is a possible challenge.
<ul style="list-style-type: none"> The biomass based hydrogen production will lead to the boost in the rural economy. 	<ul style="list-style-type: none"> The investment required in storing and dispensing of the HFC Vehicle is expectedly very high.
<ul style="list-style-type: none"> Vehicles running on HFCs are best suited for heavy duty vehicles as electric vehicles are only limited to lighter vehicles. 	<ul style="list-style-type: none"> As the international market of HFC vehicles is very less, the loss and the chances of facing it are very high.

3. MIT: Ultrasound Adhesives for Imaging Organs:

- Researchers at Massachusetts Institute of Technology (MIT) has developed a postage stamp-sized device. This device can create live, high-resolution images. This device can be affixed to the skin and is capable of transmitting images continuously for 48 hours.
- The current design of Ultrasound Adhesives could eliminate the requirement for technician to hold it in place for a long time.
- During the study, these patches adhered to the skin well. It enabled the researchers to capture images even if the patient was sitting, standing, jogging and biking. Wearable ultrasound imaging equipment have huge potential in clinical diagnosis. However, resolution and imaging duration of newly developed ultrasound patches is currently low, and thus cannot image deep organs.

Important facts about Ultrasound Adhesives:

- Using Ultrasound Adhesives, one can see internal organs with few patches on the body.
- The sticker is around 3 to 4 inches across and 1/10-inch thick.
- It will substitute the bulky, specialized ultrasound equipment used at hospitals and doctor's clinics. On the equipment, technicians apply a gel on skin and then use a wand or probe to send sound waves into the body.
- Sound waves reflect back high-resolution images of blood vessels and organs like lungs, heart, and stomach.
- Some hospitals have affixed the equipment to robotic arms, to provide imaging for extended periods.

- For now, the stickers are needed to be connected to instruments. Researchers are working to find a way to operate them wirelessly.

4. CoWIN repurposed for Universal Immunisation Program:

- CoWIN is currently being repurposed for the universal immunisation program (UIP). It will bring the ease of discovery of vaccination centres/camps and reminders for subsequent vaccinations for preventable diseases for mothers and the newly born.

CoWIN Platform:

- CoWIN (Covid Vaccine Intelligence Work) is the Indian government's web portal to register for COVID-19 vaccination. It displays slots of COVID-19 vaccine available in the nearby areas and can be booked on the website.
- It is a secure and trustworthy proof helped people establish when, where and by whom they had been vaccinated.
- CoWIN is a cloud-based IT solution for planning, implementation, monitoring, and evaluation of Covid-19 vaccination in India.
- This allows the system to monitor the utilisation, wastage, coverage of Covid-19 vaccination at national, state, district and sub-district level.
- CoWIN system tracks on a real time basis the vaccination drive in India.
- The portal also provides vaccination certificates in digital format
- CoWIN is essentially an extension of eVIN (Electronic Vaccine Intelligence Network).

Universal Immunisation Programme:

- Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.
- The Ministry of Health and Family Welfare, Government of India provides several vaccines to infants, children and pregnant women through the Universal Immunisation Programme.

About immunization:

- Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines are substances that stimulate the body's own immune system to protect the person against subsequent infection or disease.

Vaccines provided under UIP:

BCG:

- About-BCG stands for Bacillus Calmette-Guerin vaccine. It is given to infants to protect them from tubercular meningitis and disseminated TB.
- When to give - BCG vaccine is given at birth or as early as possible till 1 year of
- Route and site- BCG is given as intradermal injection in left upper arm.

OPV:

- About-OPV stands for Oral Polio Vaccine. It protects children from poliomyelitis.

- When to give- OPV is given at birth called zero dose and three doses are given at 6, 10 and 14 weeks. A booster dose is given at 16-24 months of age.
- Route and site - OPV is given orally in the form of two drops.

Hepatitis B vaccine:

Page|31

- About - Hepatitis B vaccine protects from Hepatitis B virus infection.
- When to give- Hepatitis B vaccine is given at birth or as early as possible within 24 hours. Subsequently 3 dose are given at 6, 10 and 14 weeks in combination with DPT and Hib in the form of pentavalent vaccine.
- Route and site- Intramuscular injection is given at anterolateral side of mid thigh

Pentavalent Vaccine:

- About-Pentavalent vaccine is a combined vaccine to protect children from five diseases Diphtheria, Tetanus, Pertusis, Haemophilis influenza type b infection and Hepatitis B.
- When to give - Three doses are given at 6, 10 and 14 weeks of age (can be given till one year of age).

Rotavirus Vaccine:

- About -RVV stands for Rotavirus vaccine. It gives protection to infants and children against rotavirus diarrhoea. It is given in select states.
- When to give - Three doses of vaccine are given at 6, 10, 14 weeks of age (can be given at one year of age).
- Route and site-5 drops of liquid vaccine or 2.5 ml (lyophilized vaccine) are given orally.

PCV:

- About- PCV stands for Pneumococcal Conjugate Vaccine. It protects infants and young children against disease caused by the bacterium Streptococcus pneumoniae.

fIPV:

- fIPV stands for Fractional Inactivated Poliomyelitis Vaccine. It is used to boost the protection against poliomyelitis.

Measles/ MR vaccine:

- About-Measles vaccine is used to protect children from measles. In few states Measles and Rubella a combined vaccine is given to protect from Measles and Rubella infection.

JE vaccine:

- About- JE stands for Japanese encephalitis vaccine. It gives protection against Japanese Encephalitis disease. JE vaccine is given in select districts endemic for JE after the campaign.

DPT booster:

- About-DPT is a combined vaccine; it protects children from Diphtheria, Tetanus and Pertussis.
- TT vaccine has been replaced with Td vaccine in UIP to limit the waning immunity against diphtheria in older age groups.

5. Negative Leap Second:

- On July 29, 2022, Planet Earth made rotation on its axis in less than 24 hours. Reports are suggesting that, it is spinning faster. On July 29, it broke its own record for shortest day, by completing the rotation in less than 1.59 milliseconds. As a result of this, day on earth was shorter by 1.59 milliseconds, than usual 24-hour day.

Key Points:

- Earlier, the shortest day on Earth was recorded on July 19, 2020 since the 1960s. In 2020, Earth's rotation was shorter by 1.47 milliseconds, than the usual 24-hour day.
- Earth continued to rotate faster in 2021 as well. However, it did not create any new records.
- But according to Interesting Engineering (IE), which is a community for lovers of engineering, technology & science, noted that a 50-year era of shorter days is likely to become a norm. It has already flagged off.

Causes of faster rotation:

- Why the planet is rotating at a faster speed is not yet known.
- However, as per some scientists less weight on the poles due to melting of glaciers, is the cause of faster spin.
- On the other hand, others suggest that, molten core of earth's interior is moving over time.
- Seismic activity could also be responsible for faster rotation.
- Chandler Wobble is another reason, suggested by some scientists. Chandler Wobble means little change or departure in Earth's axis of rotation.

Negative Leap Seconds:

- As the rotation speed of the Earth is rotating, it could result into "Negative Leap Seconds". This phenomenon happens to maintain the rate on which earth orbits across the Sun in consistent with measurement from atomic clocks. It would have confusing outcomes for computers, smartphones and other communications systems.
- It would also impact IT systems, because a clock usually runs from 23:59:59 to 23:59:60 and restarting at 00:00:00. But time skip could crash programmes and corrupt data. To solve this problem, international timekeepers would require to add negative leap second, which is called as a "drop second".

6. China: Launch of Reusable Spacecraft:

- Recently, China launched a reusable experimental spacecraft into orbit. The spacecraft was launched with its Long March-2F carrier rocket on Friday. China successfully launched a pilot reusable spacecraft with its Long March-2F carrier rocket.

Key Points:

- Spacecraft will operate in orbit for some time and then return to intended landing site in China.
- Technical verification of reusable and in-orbit services will be done as per plan, in a bid to provide technical support to peaceful use of space.
- No launch related images have been released by the China's space authorities.
- Less information is out to public about the spacecraft. Thus, based on previous activities, it is being speculated that vehicle is a spaceplane.
- It is possibly an orbital segment and will operate with a reusable suborbital stage, which was tested in 2021.
- China's Long March 2F launch vehicle usually launch China's Shenzhou crewed missions. It is having a payload capacity of around 8 metric tons to low Earth orbit. The launched spacecraft could be of same size and function to X-37B space plane of US Air Force. Long March 2F and its payload would have been modified, to assist the launch of 'reusable test spacecraft'.


7. India: Target to eliminate Kala-azar by 2023:

- Union Government of India has set the target to eliminate Kala-azar from country by 2023. According to Dr Bharati Pravin Pawar (Minister of State for Health and Family Welfare), out of 633 Kala-azar endemic blocks, 625 blocks have successfully eliminated the kala-azar in 2021. India's target is way ahead than World Health Organisation (WHO)'s target of eliminating the disease by 2030.

Key Points:

- Kala Azar is also called as Leishmaniasis. It is a neglected tropical disease, by which over 100 countries are affected, including India. Neglected tropical diseases are a group of multiple communicable diseases that are prevalent in tropical and subtropical conditions of 149 countries. The disease is caused due to parasite called Leishmania. This parasite is transmitted via bite of sand flies.
- **There are three types of Kala Azar:**
 1. Visceral leishmaniasis: It affects multiple organs and is considered as the most serious form of the disease. It is commonly called as Kala Azar in India.
 2. Cutaneous leishmaniasis: It is the most common type, affecting skin. It results into skin sores.
 3. Mucocutaneous leishmaniasis: It causes skin and mucosal lesions.
 4. Treatment of Kala Azar: Only drug that is used to treat kala azar is miltefosine. However, this drug is losing its effectiveness rapidly, because of parasite's resistance to this drug. A protein called 'P4ATPase-CDC50', helps in intaking the drug by parasite. But other called 'P-glycoprotein', throws this drug out from parasite's body.

WHAT IS KALA-AZAR

<ul style="list-style-type: none"> ▪ A slow progressing indigenous disease ▪ Caused by protozoan parasite of genus <i>Leishmania</i> ▪ In India, <i>Leishmania donovani</i> is the only parasite causing the disease ▪ The parasite primarily infects reticuloendothelial system 	Signs & Symptoms <ul style="list-style-type: none"> ➔ Recurrent fever ➔ Loss of appetite ➔ Weakness ➔ Spleen enlargement ➔ Anaemia
Transmission	
<ul style="list-style-type: none"> ▪ Sandfly of genus <i>Phlebotomus argentipes</i> only known vector of kala-azar in India 	
 <ul style="list-style-type: none"> ▪ Indian kala-azar has a unique epidemiological feature of being anthroponotic ▪ Parasite undergoes morphological change to become flagellate 	<ul style="list-style-type: none"> ▪ Female sandflies pick up parasite while feeding on infected human host ▪ Development and multiplication in the gut of sandflies and move to mouthparts ▪ Healthy human hosts get infection when an infective sandfly vector bites them

8. AzaadiSAT: ISRO's Smallest Rocket in Space:

- Indian Space Research Organisation (ISRO) is set to launch its smallest commercial rocket 'Small Satellite Launch Vehicle (SSLV)' carrying 'AzaadiSAT', on August 7, 2022. It will be launched to unfurl the Tricolour in space, from Satish Dhawan Space Centre in Sriharikota.
- This spacecraft will be launched as, Prime Minister Narendra Modi had announced on August 15, 2018, to unfurl the Tricolour in Space to celebrate India's 75th year of Independence.
- To mark India's celebrations of 'Azaadi Ka Amrit Mahotsav', SSLV will carry a co-passenger satellite called 'AzaadiSAT'.
- It was specifically conceptualised for celebration of 75th Independence Day.

- It will encourage scientific temper and create opportunities for young girls to opt for 'space research' as their career.
- AzadiSAT also comprise of a solid-state PIN diode-based radiation counter, that will measure the ionising radiation in its orbit, as well as a long-range transponder. ISRO will use ground system developed by Space Kidz India, to establish telemetry and communication with AzadiSAT in orbit.

9. South Korea's first spacecraft launched to the moon:

- Recently, South Korea became the seventh country in the world to launch a mission to the Moon as its orbiter hitched a ride on SpaceX Falcon-9. The Korea Pathfinder Lunar Orbiter, nicknamed **Danuri**, lifted off from launch complex 40 at the Cape Canaveral Space Force Station in Cape Canaveral.
- This is the first lunar mission by South Korea, which recently developed a space rocket launch capability. The lunar mission has been jointly developed by **NASA** and the Korea Aerospace Research Institute (KARI).
- **Danuri** features a boxy, solar-powered satellite designed to skim just 62 miles (100 kilometers) above the lunar surface, during which it will collect geologic and other data for at least a year from this low polar orbit.
- The spacecraft is taking a long, roundabout path to the Moon in order to conserve fuel and will arrive at its destination in mid-December. If successful, the spacecraft will join India's **Chandrayaan-2** and Nasa's Lunar Reconnaissance Orbiter (LRO) around Earth's natural satellite as new missions make a beeline for the Moon.



10. Small Modular Reactors (SMRs):

- **Small modular reactors** are advanced nuclear reactors, with the power capacity of 300 MW(e) per unit. This equals to 1/3rd of generating capacity of traditional nuclear power reactors. The nuclear plant is likely to be built in a period of 5 years, under fleet mode. An important aspect of the advanced nuclear reactor is that, it is factory fabricated. It can be operated by any agency. Thus, it would attract larger participation of private sector.
- Currently, **22 reactors are operational in India**, with a total capacity of 6,780 MW. Out of these, 18 reactors are Pressurised Heavy Water Reactors while 4 are Light Water Reactors.
- Share of nuclear power in overall electricity generation in India was **3.1% in 2020-21**. India has planned to enhance the current capacity of 6,780 MW to 22,480 MW by 2031, in line with the net-zero targets.

11. Langya: New zoonotic virus in China:

- Recently, a zoonotic virus 'Langya' was discovered in China, after deadly coronavirus was detected in 2019. It is a type of Henipavirus, and is also called as Langya Henipavirus or LayV. It was detected in Shandong and Henan provinces in China and has infected 35 people so far.

About Langya Virus:

Page|35

- The new virus has transmitted from animal to humans. The virus is predominantly found in shrews. Seropositivity was also detected among domestic animals like goats and dogs. Human to human transmission is not yet confirmed because, 35 patients had no close contact. Also, their exposure history is different.
- Langya Virus is a phylogenetically distinct Henipavirus. Henipaviruses are categorised as biosafety level 4 (BSL4) pathogens. It is responsible for serious illness in animals and humans. Prior to Langya virus, other viruses in Henipavirus category include- Hendra, Cedar, Nipah, Mojiang and Ghanaian bat virus.
- **Langya** virus causes fever. However, deeper investigation of other associated illness is underway. Genome sequencing of Langya is similar to that of Henipaviruses. It is also related to "Mojiang Henipavirus, which was discovered in China.
- Langya virus was first identified while testing patients with fever and recent exposure to animal in eastern China.
- Virus was identified and isolated from throat swab sample the patients.
- Out of 35 patients, 26 were infected with new Langya virus and no other pathogen.
- All the 26 patients had fever. They also reported fatigue, cough, nausea, headache and vomiting.
- Some of the patients also diagnosed for impaired liver function and damaged kidney function.

12. PFAs or Forever Chemicals:

- **PFAs are polyfluoroalkyl substances**, were first developed in the 1940. They are large, complex group of manufactured chemicals that are ingredients in various everyday products. For example nonstick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, firefighting forms and many other products that resist grease, water and oil. They are also called forever chemicals because they remain in the environment for years.
- According to Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey (NHANES) **PFAS is found in the blood of 97% of Americans.**
- Often we have been hearing that rain water is the purest. But according to research from the University of Stockholm, published recently in the journal Environmental Science and Technology, rainwater is no longer potable. The synthetic element PFAS was found in rain water in most parts of the earth.
- PFAS can lead to many health related problems like cancer, infertility and slow growth of children. In this sense, it is better to avoid drinking rain water. By the way, most people now drink only filter and RO water. But in sports, children often get wet in water and drink rain water. It is necessary to make them aware of this.
- Presently, **there is no known method from which we can extract and remove PFAs from the atmosphere.** But there are certain effective methods to remove them from

rainwater. One way is to absorb it from the atmosphere using a filtration system with activated carbon but in this process the activated carbon needs to be replaced regularly as well as the old contaminated material must be destroyed from time to time.

13. 'Xylitol': New sugar substitute:

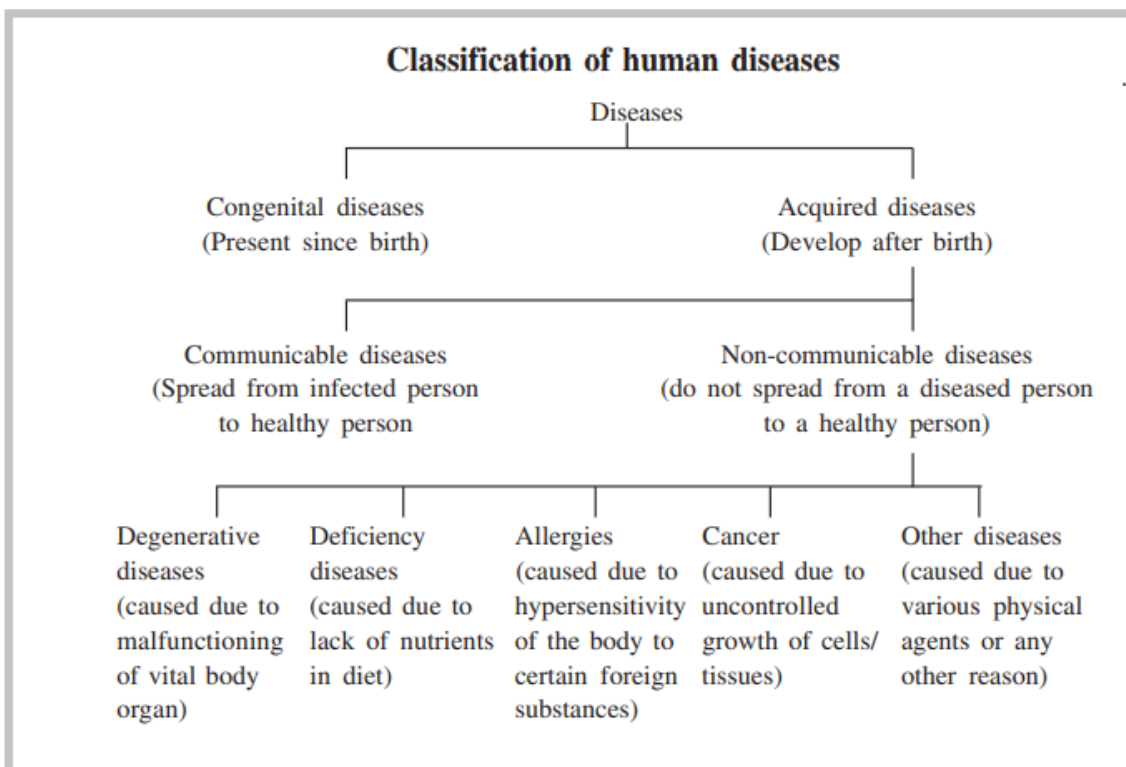
- Recently, researchers at the Indian Institute of Technology (IIT), Guwahati have developed an ultrasound-assisted fermentation method to produce a safe sugar replacement called "Xylitol" from bagasse, which is the residue left after crushing sugarcane.

Key Points:

- Xylitol, a sugar alcohol derived from natural products.
- It has potential antidiabetic and anti-obesogenic effects, is a mild prebiotic and protects teeth from caries.
- It is a colorless or white crystalline solid that is soluble in water.
- Xylitol is manufactured industrially by a chemical reaction in which wood-derived D-xylose, an expensive chemical, is treated with a nickel catalyst at very high temperatures and pressures which makes the process highly energy-consuming.
- Xylitol is a natural sugar substitute safe for diabetics.
- It is not an artificial sweetener but is a natural sugar alcohol sweetener found in the fibres of many fruits and vegetables, and can be extracted from various berries, oats, and mushrooms, as well as fibrous material such as corn husks and sugar cane bagasse. Xylitol is roughly as sweet as sucrose with only two-thirds the food energy.

14. PEN-PLUS strategy:

- Recently Africa adopted a pen-plus strategy at the 72nd session of the Regional Committee of the United Nations World Health Organization (WHO) held in **Lomé, Togo**.
- **PEN-PLUS** is basically a regional strategy to address serious non-communicable diseases at first level referral health facilities.
- This strategy supports capacity building of district hospitals and other first class referral facilities for early diagnosis and management of serious non-communicable diseases, resulting in reduction in mortality.
- The strategy urges countries to establish standardized programs to combat chronic and serious non-communicable diseases to ensure that essential medicines, technologies and diagnostics are available and accessible in district hospitals.



Environment and Ecology

1. Cabinet approval of India's updated NDC:

- Recently, the Union Cabinet gave approval to India's updated **Nationally Determined Contribution (NDC)**. The updated NDC will be transferred to the United Nations Framework Convention on Climate Change (UNFCCC).
- NDCs are '**Nationally Determined Contributions**' and they represent the commitments of each country to reduce greenhouse gas emissions and adapt to.

India's Updated NDC:

- It aims to increase India's contributions in strengthening global response towards climate change, in accordance with the Paris Agreement.
- It will help India to escort in low emissions growth pathways.
- It will also protect the interests of India and safeguard its future development needs, in line with the principles and provisions of the UNFCCC.
- Updated NDC translates the 'Panchamrit' into enhanced climate targets. India had announced Panchamrit at COP26.
- This update is also a step towards achieving long term goal of country to reach net-zero by 2070.
- According to updated NDC, India is committed to reduce Emissions Intensity of its GDP by 45% by 2030 as compared to 2005 level.

- It also seeks to attain a cumulative electric power installed capacity of 50% from non-fossil fuel-based energy resources by 2030.

Background:

- Last time India had submitted its Intended NDC to UNFCCC on October 2, 2015. It had eight goals, of which 3 goals have quantitative targets up to 2030.
- To take cumulative electric power installed capacity from non-fossil sources to 40%.
- To reduce emissions intensity of GDP by 33-35 %, as compared to 2005 levels.
- To create additional carbon sink of 2.5-3 billion tonnes of CO₂ equivalent.
- India had communicated at the COP26 to the United Nations Framework Convention on Climate Change (UNFCCC), to escalate its climate action, by presenting five nectar elements of India's climate actions (Panchamrit), to the world. COP 26 was held in Glasgow, United Kingdom.

2. Wild Life (Protection) Amendment Bill 2021:

- Recently, the Lok Sabha passed the Wild Life (Protection) Amendment Bill, 2021 on August 2, 2022. It was introduced in the Lok Sabha on December 17, 2021. It will amend the Wild Life (Protection) Act, 1972.

Key provisions:

- Wild Life (Protection) Amendment Bill is aimed at implementing "Convention on International Trade in Endangered Species (CITES) of Wild Fauna and Flora". It also seeks to expand the number of species protected by the convention.
- It mandates the central government to formulate an authority to grants export or import licences for trading in specimens. Anyone trading in a scheduled specimen shall inform the appropriate authority about the transaction's specifics.
- Authority can give an identification mark for a specimen, which is prohibited from removing or modifying under the bill.
- People possessing live specimens of scheduled animals have been mandated to obtain a registration certificate from Management Authority.
- Government has been empowered to control the import, trade, and possession of invasive alien species.
- Penalty for violations of provisions of the bill has increased from Rs 25000 (Under 1972 act) to Rs 1,00,000.
- It empowers government to notify a conservation reserve, next to sanctuaries or national parks, in a bid to protect the flora and fauna.
- The Wild Life (Protection) Act, 1972 comprised of 6 schedules for specially protected plants, specially protected animals and one vermin species. Under the new bill, Schedule has been reduced to 4. Schedule for vermin species has been removed. A new schedule has been added for specimens listed under CITES.

3. New Ramsar Sites in India:

- As per the latest announcement from the Union environment ministry, 6 new wetlands from Tamil Nadu, and 1 each from Karnataka, Goa, Madhya Pradesh and Odisha have received Ramsar recognition as "Wetlands of International Importance". With the inclusion of 10, total number of Ramsar Sites stands at 64.

Newly recognised sites are:

1. **Koonthankulam Bird Sanctuary:** It is a man-made wetland, located in Tirunelveli district of Tamil Nadu. It is the largest reserve for migratory water birds and breeding resident in south India. Paddy is also irrigated in the sanctuary, on 190 acres area.
2. **Nanda Lake:** Nanda Lake is the freshwater marshes, located adjacent to one of rivulets of Zuari river in Goa. It helps the locals to store water in off-monsoon season. Stored water is used to cultivate paddy downstream of this lake. It is home to Black-headed ibis, Wire-tailed swallow, Common kingfisher, Brahminy kite and Bronze-winged jacana.
3. **Satkosia gorge:** It expands along Mahanadi River in Odisha. It was set up in 1976 as a wildlife sanctuary. The Deccan Peninsula and the Eastern Ghats meet at Satkosia. Satkosia gorge wetland is known for marshes and evergreen forests.
4. **Gulf of Mannar Biosphere Reserve (GoMBR):** It is located in south-eastern coastline and is famous for rich marine environment.

Significance:

- Ramsar Tag helps develop and maintain an international network of wetlands which are important for the conservation of global biological diversity and for sustaining human life through the maintenance of their ecosystem components, processes and benefits.
- Sites are protected under strict guidelines of the convention.

Criteria: One of the nine criteria must be fulfilled to be the Ramsar Site.

1. Criterion 1: If it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
2. Criterion 2: If it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
3. Criterion 3: If it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
4. Criterion 4: If it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
5. Criterion 5: If it regularly supports 20,000 or more waterbirds.
6. Criterion 6: If it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
7. Criterion 7: If it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.
8. Criterion 8: If it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.
9. Criterion 9: If it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non avian animal species.

4. Start-up loan for Compostable Plastic:

- Taking a significant stride towards controlling plastic pollution, recently, the Union government approved a StartUp loan of Rs 1.15 crores to M/s TGP Bioplastics for commercialising “compostable” plastic on 16 August 2022.

- An MoU has been signed between Technology Development Board, a statutory body under the Department of Science & Technology and M/s TGP Bioplastics Private Limited, Satara, Maharashtra to manufacture & commercialise compostable plastic
- The adverse impacts of littered single-use plastic (SUP) items are a global threat. M/s TGP Bioplastics has come up with an alternative solution of Single Use Plastic (SUP) with the prototype of a compostable plastic material which breaks down as compost in soil without affecting the environment.

Ban on Single Use Plastic:

- In India; manufacturing, importing, stocking, sale, distribution, and use of listed single use plastic items was banned from July 1, 2022 because of their low utility and high littering potential.

5. 500 cities declared as “Safai Mitra Surakshit Shehar”:

- According to Government data, 500 cities across India have declared themselves as ‘Safai Mitra Surakshit Shehar’. All the cities have achieved sufficiency in terms of institutional capacity, equipment norms and manpower as provided by Ministry of Housing & Urban Affairs.
- Swachh Bharat Mission-Urban (SBM-U) has achieved its target of creating Urban India Open Defecation Free (ODF).
- All the cities are now providing safe working conditions for Safai Mitras.
- The “Safai Mitra Surakshit Shehar” declaration is in line with goal of promoting sustainable sanitation practices under Swachh Bharat Mission-Urban.
- Union Ministry of Housing and Urban Affairs launched the Safai Mitra Suraksha Challenge on the occasion of World Toilet Day on November 19, 2020.
- It was launched across 243 cities of India, with the objective of mechanizing all sewer and septic tank cleaning operations.
- The campaign was implemented from November 19, 2020 to August 2021. This challenge was aimed at eliminating hazardous cleaning of sewers and septic tanks. It set the target of mechanizing all sewer and septic tank cleaning by April 30, 2021.
- World Toilet Day:
- November 19 was designated as “World Toilet Day” by United Nations General Assembly in 2013. It is managed by UN-Water in association with governments and partners. The day is aimed at breaking stigma associated with sanitation.

6. Air Pollution and Health in Cities Report:

- Recently, the Health Effects Institute (HEI) released “Air Quality and Health in Cities” on air quality. As per report, biggest cities and urban areas of the world are witnessing worst air quality on the Earth.
- The report includes a comprehensive and detailed analysis of air pollution and global health effects for over 7,000 cities worldwide. It is focused on two harmful pollutants viz., fine particulate matter (PM2.5) and nitrogen dioxide (NO2).

Key findings of the report:

- In 2019, 7239 cities reported 1.7 million deaths due to exposure to PM2.5.

- Greatest health impacts can be seen across cities in Asia, Africa, and Eastern & Central Europe.
- By 2050, around 68% of the world's population is likely to live in urban areas. Due to rapid urbanization, it would be challenging for top cities, especially in low- and middle-income countries, to reduce the health effects of air pollution.
- Exposure to fine particulate or PM2.0 pollution is higher in cities across low- and middle-income countries. On the other hand, exposure to nitrogen dioxide (NO₂) is high in cities across high-income as well.
- Burning of fuels often in older vehicles, industrial facilities, power plants and residential cooking & heating are responsible for NO₂ in environment.
- In 2019, 86% of over 7,000 cities in this report accounts for more NO₂, as opposed to WHO's guideline of 10 µg/m³. It impacts around 2.6 billion people.
- The report also underlines the data gaps across low- and middle-income nations, which is a significant factor of understanding and countering health effects of air pollution.

7. **India's first electric double-decker bus 'Switch EiV 22':**

- Union Minister for Road Transport & Highways, Shri Nitin Gadkari recently launched India's first AC double-decker electric bus named 'Switch EiV 22' developed by Ashok Leyland in Mumbai.
- The 'Switch EiV 22' can ferry nearly twice the number of seated passengers as compared to a single-decker bus, with just 18% increase in kerb weight (without the passengers).
- In India, electric buses in future will have a big leap in mass public transport. It would support the government initiative of reducing fuel import bill. Besides, it will help to curb air pollution as these buses have zero tailpipe emissions and lower noise pollution.
- 35% of pollution in the country is due to diesel and petrol. So it is high time for India to start using alternative fuels like electricity, ethanol, methanol, bio-diesel, bio-CNG, bio-LNG and green hydrogen for automobile sector".

8. **2022 UNESCO Peace Prize awardee:**

- Recently, the Former German Chancellor Angela Merkel has been awarded the 2022 UNESCO Peace Prize for her efforts to welcome refugees.
- Felix Houphouet-Boigny Peace Prize
- UNESCO's Felix Houphouet-Boigny Peace Prize was created in 1989 to honour living individuals and active public or private bodies or institutions that have made significant contribution to peace. The Prize was established by a resolution supported by 120 countries and was adopted by the General Conference of UNESCO at its 25th session.
- In the past, Felix Houphouet-Boigny Peace Prize has been granted to internationally renowned personalities like Nelson Mandela, Yasser Arafat, King Juan Carlos of Spain, former US president Jimmy Carter and Shimon Peres. For the first time, the award goes to a mayor.

What is UNESCO?

- United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency of the United Nations (UN). It seeks to build peace through international cooperation in Education, the Sciences and Culture.

- It is also a member of the United Nations Sustainable Development Group (UNSDG), a coalition of UN agencies and organizations aimed at fulfilling the Sustainable Development Goals (SDGs).
- UNESCO's Headquarters are located in Paris and the Organization has more than 50 field offices around the world.
- It has 193 Members and 11 Associate Members (As of April 2020) and is governed by the General Conference and the Executive Board.
- Three UNESCO member states are not UN members: Cook Islands, Niue, and Palestine.
- While three UN member states (Israel, Liechtenstein, United States) are not UNESCO members.

9. **Anang Tal Lake: Monument of National Importance:**

- Recently, a gazette notification has been issued to declare Anang Tal Lake located near Qutub Minar in Mehrauli in the National Capital Territory of Delhi as a National Monument.
- The mini lake, known as Anang Tal, was created in 1060 AD by Raja Anang Pal Tomar, the founder of Delhi. It lies in area between the flood plain of river and Delhi Ridge. Delhi Ridge is a Northern extension of ancient Aravalli Range.
- Tradition ascribes this tank to a Tomar King, Anang Pal II, the builder of Lal Kot. It is said to have been a place of general resort but now it is dried up and used for cultivation. It is also said that Alauddin Khalji A.D 1296-1316 utilized the water of this tank when he built minar and extended the Qutub-ul-Islam mosque.

Ancient Monument:

- The Ancient Monuments and Archaeological Sites and Remains Act, 1958 defines Ancient Monument as any structure, erection or monument, or any tumulus or place of interment, or any cave, rock-sculpture, inscription or monolith which is of historical, archaeological or artistic interest and which has been in existence for not less than 100 years.

10. **'Arth Ganga': New model for sustainable development of rivers:**

- Recently, Director General of the National Mission for Clean Ganga spoke about the Arth Ganga model during World Water Week 2022
- 'Arth Ganga' implies a sustainable development model with a focus on economic activities related to Ganga.
- PM Modi first introduced the concept during the first National Ganga Council meeting in Kanpur in 2019, where he urged for a shift from Namami Gange to the model of Arth Ganga.

Under Arth Ganga, the government is working on six verticals:

1. The first is Zero Budget Natural Farming, which involves chemical-free farming on 10 km on either side of the river, and the promotion of cow dung as fertilizer through the Gobardhan scheme.
2. The Monetization and Reuse of Sludge & Wastewater is the second, which seeks to reuse treated water for irrigation, industries and revenue generation for Urban Local Bodies (ULBs).

3. Arth Ganga will also involve Livelihood Generation Opportunities, by creating haats where people can sell local products, medicinal plants and ayurveda.
4. The fourth is to increase public participation by increasing synergies between the stakeholders involved with the river.
5. The model also wants to promote the cultural heritage and tourism of Ganga and its surroundings, through boat tourism, adventure sports and by conducting yoga activities.
6. Lastly, the model seeks to promote institutional building by empowering local administration for improved water governance.

11. Battery Waste Management Rules, 2022:

- Recently, the Ministry of Environment, Forest and Climate Change (MOEFCC) notified the Battery Waste Management Rules, 2022 to ensure environmentally sound management of waste batteries.
- These rules will replace the Batteries (Management and Handling) Rules, 2001.

Key Points:

- **Coverage:** The rules cover all types of batteries, including Electric Vehicle batteries, portable batteries, automotive batteries, and industrial batteries.

Extended Producer Responsibility (EPR):

- The rules function based on the concept of Extended Producer Responsibility (EPR) where the producers of batteries are responsible for the collection and recycling/refurbishment of waste batteries and the use of recovered materials from waste into new batteries.
- EPR mandates that all waste batteries be collected and sent for recycling/refurbishment, and it prohibits disposal in landfills and incineration.
- To meet the EPR obligations, producers may engage themselves or authorise any other entity for the collection, recycling, or refurbishment of waste batteries.
- It will enable the setting up of a mechanism and centralized online portal for the exchange of EPR certificates between producers and recyclers/refurbishers to fulfill the obligations of producers.
- **Waste Management:** They promote the setting up of new industries and entrepreneurship in the collection and recycling/refurbishment of waste batteries.
- **New Business Opportunities:** Mandating the minimum percentage of recovery of materials from waste batteries under the rules will bring new technologies and investment in the recycling and refurbishment industry and create new business opportunities.
- **Reduce Dependency on Raw Materials:** Prescribing the use of a certain number of recycled materials in the making of new batteries will reduce the dependency on new raw materials and save natural resources.
- **Online Registration:** Online registration & reporting, auditing, and committee for monitoring the implementation of rules and taking measures required for removal of difficulties.
- **Principle of Polluter Pays:** Environmental compensation will be imposed for non-fulfilment of Extended Producer Responsibility targets, responsibilities and obligations set out in the rules.

- Environmental compensation Fund: The funds collected under environmental compensation shall be utilized in the collection and refurbishing or recycling of uncollected and non-recycled waste batteries.

Polity & Governance

1. Weapons of Mass Destruction and their Delivery Systems (Amendment) Bill:

- The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022 was introduced in Lok Sabha on April 5, 2022.
- The Bill amends the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005.
- The 2005 Act prohibits unlawful activities (such as manufacturing, transport, or transfer) related to weapons of mass destruction, and their means of delivery. Weapons of mass destruction are biological, chemical, or nuclear weapons.

Prohibition on financing certain activities:

- The Bill bars persons from financing any prohibited activity related to weapons of mass destruction and their delivery systems.
- To prevent persons from financing such activities, the central government may freeze, seize or attach their funds, financial assets, or economic resources (whether owned, held, or controlled directly or indirectly).
- It may also prohibit persons from making finances or related services available for the benefit of other persons in relation to any activity which is prohibited.

2. Competition (Amendment) Bill 2022:

- The Competition (Amendment) Bill, 2022 was introduced in Lok Sabha on August 5, 2022. It seeks to amend the Competition Act, 2002. The Act establishes the Competition Commission of India (CCI) for regulating market competition. Key features of the Bill include:
- **Regulation of combinations based on transaction value:** The Act prohibits any person or enterprise from entering into a combination which may cause an appreciable adverse effect on competition. Combinations imply mergers, acquisitions, or amalgamation of enterprises. The prohibition applies to transactions where parties involved have: (i) cumulative assets of more than Rs 1,000 crore, or (ii) cumulative turnover of more than Rs 3,000 crore, subject to certain other conditions. The Bill expands the definition of combinations to include transactions with a value above Rs 2,000 crore.
- **Definition of control for classification of combination:** For classification of combinations, the Act defines control as control over the affairs or management by one or more enterprises over another enterprise or group. The Bill modifies the definition of control as the ability to exercise material influence over the management, affairs, or strategic commercial decisions.

- **Time limit for approval of combinations:** The Act specifies that any combination shall not come into effect until the CCI has passed an order or 210 days have passed from the day when an application for approval was filed, whichever is earlier. The Bill reduces the time limit in the latter case to 150 days.
- **Anti-competitive agreements:** Under the Act, anti-competitive agreements include any agreement related to production, supply, storage, or control of goods or services, which can cause an appreciable adverse effect on competition in India. Any agreement between enterprises or persons, engaged in identical or similar businesses, will have such adverse effect on competition if it meets certain criteria.
- **These include:** (i) directly or indirectly determining purchase or sale prices, (ii) controlling production, supply, markets, or provision of services, or (iii) directly or indirectly leading to collusive bidding.
- The Bill adds that enterprises or persons not engaged in identical or similar businesses shall be presumed to be part of such agreements, if they actively participate in the furtherance of such agreements.
- **Settlement and Commitment in anti-competitive proceedings:** Under the Act, CCI may initiate proceedings against enterprises on grounds of: (i) entering into anti-competitive agreements, or (ii) abuse of dominant position.
- Abuse of dominant position includes: (i) discriminatory conditions in the purchase or sale of goods or services, (ii) restricting production of goods or services, or (iii) indulging in practices leading to the denial of market access.
- The **Bill permits CCI** to close inquiry proceedings if the enterprise offers: (i) settlement (may involve payment), or (ii) commitments (may be structural or behavioural in nature). The manner and implementation of settlement and commitment may be specified by CCI through regulations.
- **Relevant product market:** The Act defines relevant product market as products and services which are considered substitutable by the consumer. The Bill widens this to include the production or supply of products and services considered substitutable by the suppliers.
- **Appointment of Director General:** The Act empowers the central government to appoint a Director General to CCI. The Director General assists in conducting inquiries into contraventions of any provisions of the Act. The Bill amends this to empower the CCI to appoint the Director General, with prior approval of the government.
- **Qualification of members of CCI:** As per the Act, the chairperson and members of CCI should have professional experience of at least 15 years in fields such as: (i) economics, (ii) competition matters, (iii) law, (iv) management, or (v) business. The Bill expands this to include experience in the field of technology.
- **Decriminalisation of certain offences:** The Bill changes the nature of punishment for certain offences from imposition of fine to penalty. These offences include failure to comply with orders of CCI and directions of Director General with regard to anti-competitive agreements and abuse of dominant position.

3. 14th Vice President of India:

- NDA Candidate, Jagdeep Dhankhar has become the 14th Vice President of India, after beating Margaret Alva. He is the second leader from Rajasthan to become Vice President.

Highlights:

- Out of 780 electors, including elected members of Lok Sabha and elected & nominated members of the Rajya Sabha, 725 electors put their votes.
- Total voter turnout reached to 92.94%.
- Jagdeep Dhankar won by 346 votes. 528 out of 725 votes were in his favour. 15 votes were termed invalid.
- On the other hand, Margaret Alva won 182 votes.

Vice President:

- In India, the Vice President is considered as second highest constitutional office. Vice President is elected for a five-year term. However, he can continue to serve the office, until his successor assumes the office. He can resign from office, irrespective of five-year terms, by submitting resignation to the President.
- He can also be removed through a resolution of Rajya Sabha, when passed by a majority of members of Lok Sabha. The Vice President also serves as the Ex-officio Chairperson of the Rajya Sabha.

Eligibility and Election:

- In order to become Vice President, the person must be a citizen of India and should be above 35 years. He should also not hold any office of profit. Vice President is elected by an Electoral College, in accordance with Article 66 of constitution. Electoral College includes- Elected members of Rajya Sabha, Elected member of Lok Sabha and Nominated members of Rajya Sabha.

4. Energy Conservation (Amendment) Bill, 2022:

- The Energy Conservation (Amendment) Bill, 2022 was introduced in Lok Sabha on August 3, 2022. The Bill seeks to amend the Energy Conservation Act, 2001. The Act promotes energy efficiency and conservation. It provides for the regulation of energy consumption by equipment, appliances, buildings, and industries. Key proposals under the Bill are:
- **Obligation to use non-fossil sources of energy:** The Act empowers the central government to specify energy consumption standards. The Bill adds that the government may require the designated consumers to meet a minimum share of energy consumption from non-fossil sources. Different consumption thresholds may be specified for different non-fossil sources and consumer categories.
- **Designated consumers include:** (i) industries such as mining, steel, cement, textile, chemicals, and petrochemicals, (ii) transport sector including Railways, and (iii) commercial buildings, as specified in the schedule. Failure to meet the obligation for use of energy from non-fossil sources will be punishable with a penalty of up to Rs 10 lakh. It will also attract an additional penalty of up to twice the price of oil equivalent of energy consumed above the prescribed norm.
- **Carbon trading:** The Bill empowers the central government to specify a carbon credit trading scheme. Carbon credit implies a tradeable permit to produce a specified amount of carbon emissions. The central government or any authorised agency may issue carbon credit certificates to entities registered under and compliant with the scheme. The entities will be entitled to purchase or sell the certificate. Any other person may also purchase a carbon credit certificate on a voluntary basis.
- **Energy conservation code for buildings:** The Act empowers the central government to specify energy conservation code for buildings. The code prescribes energy

consumption standards in terms of area. The Bill amend this to provide for an 'energy conservation and sustainable building code'. This new code will provide norms for energy efficiency and conservation, use of renewable energy, and other requirements for green buildings.

- **Applicability to residential buildings:** Under the Act, the energy conservation code applies to commercial buildings: (i) erected after the notification of the code, and (ii) having a minimum connected load of 100 kilo watts (kW) or contract load of 120 kilo volt ampere (kVA). Under the Bill, the new energy conservation and sustainable building code will also apply to the office and residential buildings meeting the above criteria. The Bill also empowers the state governments to lower the load thresholds.
- **Standards for vehicles and vessels:** Under the Act, the energy consumption standards may be specified for equipment and appliances which consume, generate, transmit, or supply energy. The Bill expands the scope to include vehicles (as defined under the Motor Vehicles Act, 1988), and vessels (includes ships and boats). The failure to comply with standards will be punishable with a penalty of up to Rs 10 lakh. Non-compliance in case of vessels will attract an additional penalty of up to twice the price of oil equivalent of energy consumed above the prescribed norm. Vehicle manufacturers in violation of fuel consumption norms will be liable to pay a penalty of up to Rs 50,000 per unit of vehicles sold.
- **Regulatory powers of SERCs:** The Act empowers the State Electricity Regulatory Commissions (SERCs) to adjudge penalties under the Act. The Bill adds that SERCs may also make regulations for discharging their functions.

Composition of the governing council of BEE:

- The Act provides for the setting up of the Bureau of Energy Efficiency (BEE). The Bureau has a governing council with members between 20 and 26 in number.
- These include: (i) secretaries of six departments, (ii) representatives of regulatory authorities such as the Central Electricity Authority, and the Bureau of Indian Standards, and (iii) up to four members representing industries and consumers. The Bill instead provides that the number of members will be between 31 and 37.
- It increases the number of secretaries to 12. It also provides for up to seven members representing industries and consumers.

5. Bill to rename "Delhi International Arbitration Centre":

- The New Delhi International Arbitration Centre (Amendment) Bill, 2022 was introduced in Lok Sabha on August 5, 2022.
- The Bill amends the New Delhi International Arbitration Centre Act, 2019. The Act provides for setting up the New Delhi International Arbitration Centre and designates it as an institute of national importance.
- The New Delhi International Arbitration Centre replaced the International Centre for Alternative Dispute Resolution. Key features of the Bill include:
- **Renaming of New Delhi International Arbitration Centre:** The Bill renames the New Delhi International Arbitration Centre as the India International Arbitration Centre.
- **Alternative Dispute Resolution:** The Act requires the Arbitration Centre to strive to facilitate the conduct of international and domestic arbitration and conciliation. The Bill expands this to include conduct of other forms of alternative dispute resolution. The manner of conduct of arbitration and other forms of alternative dispute resolution will be specified by the central government through regulations.

- **Removal of difficulties:** The Act allows the central government to provide for removing any difficulties in implementing the Act up to two years from the date of commencement of the Act. The Bill extends this time period to five years.

Drafting errors: The Bill also corrects several drafting errors in the Act.

International Affairs

1. Chile's New Constitution:

- Chileans are set to vote on a new constitution, that seeks to bring the most sweeping changes in country since the end of dictatorship of Augusto Pinochet military.
- Proposed changes focus on social rights, gender parity and environment. It represents a huge shift from 1980 constitution, which was written during Pinochet's prime.
- Current constitution of Chile focuses on private rights and free market principles.
- Proposed constitution or new text has been written by a 154-member body elected via a popular vote.
- This will be the first time in history of country, that a constitution was drafted democratically.
- Process for the new constitution was started in the aftermath of violent protests against inequality that surfaced in Chile in 2019.

Proposed changes in the constitution of Chile include:

1. The president remains head of the government. However, he would share the power to submit laws involving public spending with legislators. Currently, this power exclusively lies with the president.
2. The president could be re-elected consecutively once. Currently, he can be re-elected non-consecutively.
3. Congress would become an asymmetric body, which currently is a bicameral body with equal power.
4. Direct democracy mechanisms such as popular law initiatives and citizen consultations would be followed in routine.
5. It would provide wider social rights, including housing, health, social security, access to food and work.
6. It dedicates an entire chapter to environment, noting that "nature has rights" and animals are "subjects of special protection."
7. Under proposed constitution, fight against climate change would be a state duty, because it would protect biodiversity, natural spaces and native species.
8. Water has been classified as a "non-appropriable", as opposed to current constitution.



2. India-Maldives Relations:

- Recently, the Prime Minister of India held bilateral talks with the visiting Maldives President.
- The Prime Minister while highlighting the threat of transnational crime, terrorism and drug trafficking in the Indian Ocean said that the coordination between India and Maldives in the field of defence and security is vital for peace and stability.

Outcomes of the Bilateral Talks:

- To counter the threat of transnational crime, terrorism and drug trafficking in the Indian Ocean region, India will give 24 vehicles and one naval boat to the Maldives Security Force and help train the island-nation's security personnel.
- India will also cooperate in building police facilities in 61 islands of Maldives.

Male connectivity project:

- The two leaders also welcomed the launch of the Greater Male Connectivity Project, a USD 500 million project funded by New Delhi.
- Both leaders participated in the virtual "pouring of the first concrete" ceremony of the USD500-million Greater Male Connectivity Project, being built under grant and concessional loan support from India.

Agreements between the two countries:

- The countries signed six agreements to expand cooperation in a range of areas in Maldives, including:
 1. Cybersecurity
 2. Capacity Building
 3. Housing
 4. Disaster Management
- India announced USD100 million financial aid to help the island-nation complete certain infrastructure projects.

India-Maldives Economic Cooperation:

- Tourism is the mainstay of Maldivian economy. The country is now a major tourist destination for some Indians and a job destination for others.
- In August 2021, Afcons, an Indian company, signed a contract for the largest-ever infrastructure project in Maldives which is the Greater Male Connectivity Project (GMCP).
- India is Maldives 2nd largest trading partner - rising up from its 4th position in 2018.
- In 2021, bilateral trade registered a growth of 31% over the previous year - overcoming the pandemic-related challenges.

What are the Challenges in India Maldives Relations?

Political Instability:

- India's major concern has been the impact of political instability in the neighbourhood on its security and development.
- The February 2015 arrest of Maldives' opposition leader Mohamed Nasheed on terrorism charges and the consequent political crisis have posed a real diplomatic test for India's neighbourhood policy.

Radicalisation:

- In the past decade or so, the number of Maldivians drawn towards terrorist groups like the Islamic State (IS) and Pakistan-based jihadist groups has been increasing.

- This gives rise to the possibility of Pakistan based terror groups using remote Maldivian islands as a launch pad for terror attacks against India and Indian interests.

China Angle:

- China's strategic footprint in India's neighbourhood has increased. The Maldives has emerged as an important 'pearl' in China's "String of Pearls" construct in South Asia.
- Given the uncertain dynamics of Sino-Indian relations, China's strategic presence in the Maldives remains a concern.
- The Maldives have started using the China card to bargain with India.

Way Forward:

- Although India continues to be an important partner of the Maldives, India must not grow complacent over its position and must remain attentive to the developments in the Maldives.
- India must play a key role within Indo-Pacific security space to ensure regional security in South Asia and surrounding maritime boundaries.
- The Indo-Pacific security space has been developed as a response to the growth of extra-regional powers (particularly China's) in India's maritime sphere of influence.
- At present, the 'India Out' campaign has support from a limited population but this cannot be taken for granted by the Indian government.
- If the issues raised by the supporters of the 'India Out' are not handled carefully and India does not effectively convince the Maldivians about its intentions behind the projects on the island nation, the campaign may change the domestic political situation in the Maldives and may set ripples in India's currently favourable relationship with the country.

3. China's military exercises around Taiwan:

- Recently, China conducted its largest-ever military exercises around Taiwan, in the aftermath of visit of US House Speaker Nancy Pelosi. Chinese media is tagging the exercise as rehearsal for 'reunification process'. The drill is underway across six zones across Taiwan. China's navy, air force and other departments are taking part in the drill.
- Pelosi's visit is the highest-level visit by American officials to Taiwan, in 25 years. But China had problem with the visit, as it indicates US's support for Taiwan's independence. China is of the view that, Taiwan is a part of its 'One China Policy'. On the other hand, US maintains a strategic ambiguity on the matter.

The Difference between the "Republic of China" and "Taiwan":

- China regards Taiwan as a breakaway province which it has vowed to retake, by force if necessary. But Taiwan's leaders say it is clearly much more than a province, arguing that it is a sovereign state. It has its own constitution, democratically-elected leaders, and about 300,000 active troops in its armed forces.
- While on paper the Republic of China constitution still claims all of China, the reality is that it is unlikely to ever act on the claim
- In the language of international relations language, the ROC is a state, and Taiwan is a nation. Together, they would make up the Westphalian concept of a "nation-state."



Historical Background:

- The policy has its roots to the Chinese civil war. In 1949, The defeated Nationalists retreated to Taiwan and made it their seat of government while the victorious Communists declared the People's Republic of China.

The Taiwan Independence Movement

- The Taiwan independence movement is a political and social movement that aims to establish an officially independent sovereign state and new country on the archipelagic territory of "Formosa and Pescadores", based on a unique "Taiwanese national identity".
- Taiwanese independence is opposed by pro-Chinese unification political parties in Taiwan as well as by the government of the People's Republic of China (PRC), a state that administers the territory of mainland China, which it officially claimed as part of the territory of the ROC.

The Current Picture:

- After decades of hostile intentions and angry rhetoric, relations between China and Taiwan started improving in the 1980s. China put forward a formula, known as "one country, two systems", under which Taiwan would be given significant autonomy if it accepted Chinese reunification. The offer was rejected, but Taiwan did relax rules on visits to and investment in China.

Taiwan on the International Scene:

- Initially, many governments including the US recognised Taiwan but the diplomacy underwent a major shift as China and the United States saw a mutual need to develop relations. The beginning of the 1970s saw countries cutting ties with Taipei in favour of Beijing.
- Throughout the past years, international recognition of the ROC recognition has declined. Taiwan only has a handful of allies recognizing it as ROC, with unofficial relations more prevalent.

- Although Taiwan has been diplomatically isolated from the international community. But even in its isolation, Taiwan has not entirely lost out. It maintains vibrant economic and cultural ties with neighbours and leverages on its emotional relationship with the US to extract concessions.

“One China Principle” versus “One China Policy”:

Page|52

- The “ONE CHINA PRINCIPLE” is advocated by China – that there is only one China, and Taiwan is a part of China. A modified form of the "One China" principle known as the "1992 Consensus". It is also the current policy of the PRC government. Under this "consensus", both governments "agree" that there is only one sovereign state encompassing both mainland China and Taiwan, but disagree about which of the two governments is the legitimate government of this state.
- “One China Policy”, however, is the formulation of solutions on Taiwan framed by the US and governments around the world that do not officially recognize the Republic Of China.

India and Taiwan:

- India has refused to endorse the "one-China" policy since 2010.
- As long as negotiations between the US and China do not see the emergence of a G2, India should probably cautiously welcome it.
- It should simultaneously strengthen its ties with all the major global powers, including the US, Russia, China, and Japan. For India to agree to a one-China policy, China should reaffirm a one-India policy,

4. First Repair of a US Navy Ship in India:

- A US Navy ship named 'Charles Drew' made history on Sunday when it landed in India for repairs and ancillary services at Larsen & Toubro's (L&T) Shipyard in Kattupalli, Chennai. This move added a new facet to the rapidly growing Indo-U.S. strategic cooperation. “This is the first ever repair of a US Navy ship in India.
- This development endorses the ‘Make in India’ & ‘Aatmanirbharta in Defence’ and adding a new dimension to the burgeoning Indo-US strategic partnership, US Navy Ship (USNS).
- Indian defence exports have seen a massive increase in the last four-five years. Exports, which were worth about Rs 1,500 crore in 2015-16, have now grown by 800% to around Rs 13,000 crore. A major destination for Indian exports is the US.

5. China’s funding CPEC reduced by 56%:

- In first half of 2022, China’s funding in Pakistan for China Pakistan Economic Corridor (CPEC) had reduced by around 56% in the first half of 2022. Other countries like Russia, Egypt and Sri Lanka also witnessed a reduction by 100% in BRI engagement as compared to first half of 2021.
- CPEC is a 3,000-km long route of infrastructure projects connecting China’s northwest Xinjiang Uygur Autonomous Region and the Gwadar Port in the western province of **Balochistan** in Pakistan.

- It is a bilateral project between Pakistan and China, intended to promote connectivity across Pakistan with a network of highways, railways, and pipelines accompanied by energy, industrial, and other infrastructure development projects.
- It will pave the way for China to access the Middle East and Africa from Gwadar Port, enabling China to access the Indian Ocean and in return China will support development projects in Pakistan to overcome the latter's energy crises and stabilising its faltering economy.
- This project is not running in accordance with the initial promise, because of lack of transparency, debt problems, poor management, and corruption. Because of these issues, CPEC project is still not finished.
- It is also going through other security challenges because of local opposition and continued attack on project and personnel in Pakistan.
- Furthermore, Pakistan's deteriorating economic situation is also impacting the project.
- As per reports, China recently asked for its military presence in Pakistan in order to look after security of its people and projects in country.
- **Belt and Road Initiative (BRI)** projects of China is facing global criticism as it is not offering transparency on its loans. Furthermore, its faulty design raising questions the value and sustainability of the project.



6. India- Egypt 75th Anniversary of diplomatic ties:

- Recently, Egypt released a postage stamp to commemorate the 75th anniversary of diplomatic relations with India. Diplomatic relations between India and Egypt began when Egypt recognized India's independence on 18 August 1947, three days after India's independence. The two countries became even closer in the 1950s, which resulted in a historic friendship treaty in 1955.

India-Egypt Bilateral Trade:

- Egypt is one of the largest investment destinations for India in the region with the current Indian investment of USD 3.15 billion.
- In addition, there are 50 Indian companies operating in Egypt, making a total investment of \$3.15 billion and creating 38,000 jobs. They are in the clothing, agriculture, chemical, energy, automotive and retail sectors.

- India-Egypt bilateral trade reached a historic record high of USD 7.26 billion in FY 2021-22, an increase of 75% over FY 2020-21.
- Currently under the **5th India-Egypt Joint Business Council meeting**, both sides have set an annual bilateral trade target of USD 12 billion to be achieved within 5 years.



India-Egypt Defence Cooperation:

- The defence cooperation between India and Egypt flourished in 1960s. Since then, the cooperation has grown. The high points of India-Egypt defence relations is that the Egyptian pilots are trained by the Indian Air Force.
- India and Egypt manufactured the Helan-300 jet fighter jointly.
- In 1998, the Indian Air Chief visited Egypt. This gave a lot of impetus to the enhance the cooperation. The idea of Joint Defence Committee was framed during this visit. Later, in 2006, the Indo-Egypt Joint Defence Committee was established. Since then, the committee has met six times. The sixth meeting was held in Delhi in 2016. During the meeting, several defence ties were finalised.
- The military delegations from both sides visit the respective countries for exchange of professional know-how and also for joint training.
- The Indian Naval Ships and Indian Air Force Aircrafts also regularly visit Egypt for joint training.
- India and Egypt also organize bilateral military exercise Exercise Desert Warrior. The exercise was conducted to enhance mutual understanding between the Indian Air Force and the Egyptian Air Force.

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7. Exercise Pitch Black 2022:

- **Exercise Pitch Black** is scheduled to be organised between 19 Aug 22 to 08 Sep 22. This is a biennial, multi-national exercise hosted by the Royal Australian Air Force (RAAF).
- It is conducted on Royal Australian Air Force's Bradshaw Field Training Area and Delamere Air Weapons Range – one of the largest training airspaces in the world. Usually the drills are out of RAAF's Base Darwin and Base Tindal, this year Base Amberley will also be used.
- In the 1980s, this first started in Australia's Northern Territories between different RAAF units. Australia has been inviting international partners since then to practice new doctrines, combat and most importantly interoperability.
- In **2018**, India participated in the exercise for the first time. Around 131 aircraft were involved and more than 4,000 personnel participated in the exercise. This also included Canada, France, Australia, Germany, Netherlands, Indonesia, Thailand, US, Malaysia.

Geography

1. Water shortage in the Netherlands:

- According to a newly published book, unconventional water sources can help beat global water scarcity.
- The book was compiled by experts at the United Nations University's Institute for Water, Environment and Health (UNU-INWEH), UNU Institute for Integrated Management of Material Fluxes and of Resources and the UN Food and Agriculture Organisation.
- Conventional water sources which rely on snowfall, rainfall and rivers – are not enough to meet growing freshwater demand in water-scarce areas.



What is the Current State of Water Scarcity?

World:

- Only 3% of the world's water is freshwater, and two-thirds of that is tucked away in frozen glaciers or otherwise unavailable for our use.
- As many as 87 countries are projected to become water-scarce by 2050.
- One in four people on Earth face shortages of water for drinking, sanitation, agriculture and economic development.
- Water scarcity is expected to intensify in regions like the Middle East and North Africa region, which has 6% of the global population but only 1% of the world's freshwater resources.

India:

About:

- Although India has 16% of the world's population, the country possesses only 4% of the world's freshwater resources.
- In recent times, the water crisis in India has become very critical, affecting millions of people across India.
- As many as 256 of 700 districts in India have reported 'critical' or 'overexploited' groundwater levels according to the most recent Central Ground Water Board data (from 2017).
- Three-fourths of India's rural families lack access to piped, drinkable water and must rely on unsafe sources.
- India has become the world's largest extractor of groundwater, accounting for 25% of the total. Some 70% of our water sources are contaminated and our major rivers are dying because of pollution.

2. Bihar Astronomical Observatory in UNESCO list:

- Recently, the 106-year-old astronomical observatory established at Langat Singh College in Muzaffarpur district of Bihar has been included in UNESCO's endangered heritage list.

Key Points:

Page|56

- This observatory is the first of its kind in eastern India. It was established in 1916 to impart astronomical knowledge to the students on the said college campus.
- Principal of Langat Singh College O. P. A planetarium was also set up at the college in 1946, Roy said. After 1970 the position of the observatory as well as the constellation began to decline gradually and most of the machines installed there have either been lost or turned into junk.
- After being included in UNESCO's list of endangered heritage observatories, hopes of reviving and preserving it have now been raised.
- As per college records, Prof. Romesh Chandra Sen had consulted J Mitchell (an astronomer and principal of Wesleyan College, Bankura in West Bengal) in February 1914, taking the initiative to set up an astronomical observatory in the college. In 1915, a telescope, astronomical clock, chronograph and other instruments were obtained from England and in 1916 the Astronomical Observatory started working.

3. Trans-Himalayan Multi-Dimensional Connectivity Network:

- China has said that the Bangladesh-China-India-Myanmar (BCIM) Corridor will not be a part of the Belt & Road Initiative.
- India's decision to skip the **Belt and Road Forum** (BRF) may have led to the exclusion of the Bangladesh- China- India- Myanmar (BCIM) Economic corridor from the list of projects covered by the China-led Belt and Road Initiative (BRI) umbrella.
- Citing sovereignty concerns, India, for the second time, has not officially participated in the BRF, as China Pakistan Economic Corridor (CPEC) – a flagship of the BRI – passes through Pakistan occupied Kashmir (PoK).
- In the official communique of BRF, South Asia is covered by three major undertakings – the China-Myanmar Economic Corridor (CMEC), the Nepal-China Trans-Himalayan Multidimensional Connectivity Network and the China Pakistan Economic Corridor (CPEC).

Bangladesh-China-India-Myanmar (BCIM) Corridor:

- The 2800 km BCIM corridor proposes to link Kunming in China's Yunnan province with Kolkata, passing through nodes such as Mandalay in Myanmar and Dhaka in Bangladesh before heading to Kolkata.

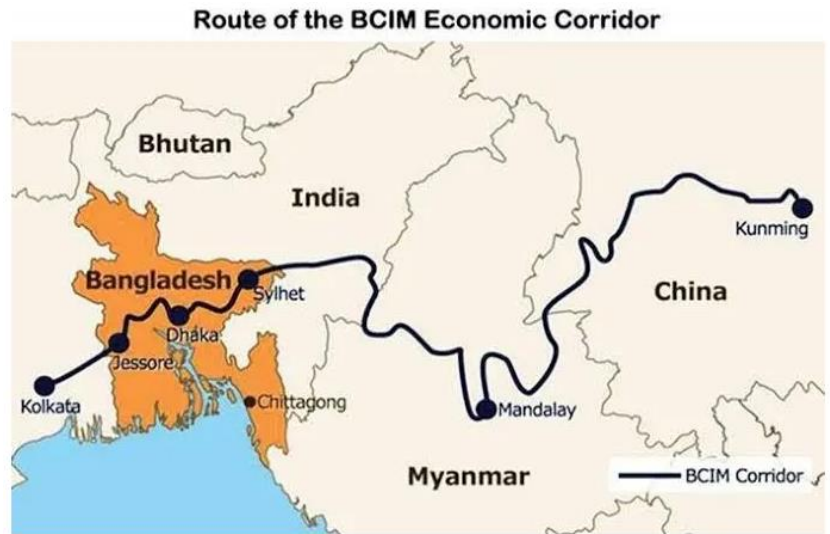
China-Myanmar Economic Corridor (CMEC):

- The 1,700-km corridor provides China another node to access the Indian Ocean.
- The CMEC will run from Yunnan Province of China to Mandalay in Central Myanmar.
- From there it will head towards Yangon, before terminating at the Kyaukpyu Special Economic Zone (SEZ) on the Bay of Bengal.
- The CMEC will reduce Beijing's trade and energy reliance on the Malacca straits – the narrow passage that links the Indian Ocean with the Pacific.

- China is worried that US Naval domination over the Malacca straits can threaten one of China's major economic lifeline.

Nepal-China Trans-Himalayan Multi-dimensional Connectivity Network:

- The Nepal-China Trans-Himalayan connectivity network starting from Chengdu, from where it is linked to Tibet by the Sichuan-Tibet Highway and Railway.
- China has visualized that that railway can eventually be connected with the Indian railway network, linking China and India across the Himalayas.



China Pakistan Economic Corridor (CPEC):

- The CPEC is a bilateral project between Pakistan and China, intended to promote connectivity across Pakistan with a network of highways, railways, and pipelines accompanied by energy, industrial, and other infrastructure development projects.
- CPEC links the Western part of China to the Gwadar Port in Balochistan, Pakistan running some 3000 km from Xinjiang to Balochistan via Khunjerab Pass in the Northern Parts of Pakistan.

4. Japan- IMD partnership on Climate Change:

- The friendship between India and Japan has a long history rooted in spiritual affinity and strong cultural and civilizational ties. Indian culture, filtered through Buddhism, has had a great impact on Japanese culture, and this is the source of the Japanese people's sense of closeness to India.
- Bilateral ties have been singularly free of any kind of dispute – ideological or territorial. India -Japan peace treaty was one of the first peace treaties Japan signed after World War II.
- Even though India and Japan have exchanged defense ideas for almost two decades and declared a shared interest in keeping the Indo-Pacific open and free, as partners in the Quadrilateral Security Dialogue along with the US and Australia, their bilateral cooperation is still lacking. US-China interference in the Indo-Pacific prevented both sides from implementing their desired strategic objectives.

What is the State of India's Relations with Japan?

- **Defense Ties:** India-Japan Defence and Security partnership has evolved over the years from bilateral and multilateral exercises including Dharma Guardian and Malabar

respectively. And welcoming the participation of Japan for the first time in exercise MILAN.

- Tri-Service Exchanges between Japan and India have been institutionalized completing the triad. Coast Guards have had regular annual exchanges since 2006. Including, Japan and India Vision 2025 Special Strategic and Global Partnership - working together for peace and prosperity of the indo-pacific region and the world.
- **Economic Ties:** A test of the reliability of Japan as a friend was witnessed in 1991 when Japan was among the few countries that bailed India out of the balance of payment crisis.
- In recent years, the economic relationship between Japan and India has steadily expanded and deepened. The volume of trade between the two countries has increased. Japan was the 12th largest trading partner for India in 2020.
- Also, direct investment from Japan to India has increased, and Japan was the 4th largest investor in India in FY2020.
- **Health-Care:** In view of the similarities and synergies between the goals and objectives of India's AYUSHMAN Bharat Programme and Japan's AHWIN, both sides had been consulting with each other to identify projects to build the narrative of AHWIN for AYUSHMAN Bharat.
- **Investment and ODA:** India has been the largest recipient of the Japanese Official Development Assistance (ODA) Loan for the past decades. Delhi Metro is one of the most successful examples of Japanese cooperation through the utilization of ODA.
- **India's Western Dedicated Freight Corridor (DFC)** project is funded by a soft loan provided by Japan International Cooperation Agency under Special terms for economic partnership (STEP).
- Besides, Japan and India had committed to build a High-Speed Railways in India by introducing Japan's Shinkansen System.
- India Japan Nuclear Deal 2016 will help India build the six nuclear reactors in southern India, increasing nuclear energy capacity ten-fold by 2032.

What are the Roadblock to Strengthen India-Japan Ties?

- **Rising China's Dominance:** China does not shy away from making efforts to block the rise of India and Japan, including by stepping up military pressure on them and opposing their UN Security Council's permanent membership.
- **Influence of China-America Rivalry:** The intensification of Chinese-American rivalry contributes to disturbance of regional security in the Indo-Pacific.
- The region is militarised and an arms race is taking place, military exercises and manoeuvres are systematically occurring in disputed waters that ultimately affects peace and prosperity for the region, especially for countries like India and Japan.
- **Domestic Issues in Japan:** Japan is in the midst of a massive domestic debate over the revision of its national security and defence strategies, which has resulted in the assimilation of Japan's former Prime Minister Shinzo Abe.

5. 'Golden Joint' of Chenab Railway Bridge:

- Recently, Indian Railways completed the arch closure of the iconic Chenab Bridge in Jammu & Kashmir.

About Chenab Bridge:

- It is the world's highest railway bridge and is part of the Udhampur-Srinagar-Baramulla rail link project (USBRL).
- The Project was declared as a Project of National Importance in March 2002.
- This bridge is 1,315-metre long and is the highest railway bridge in the world being 359 metres above the river bed level.
- The completion of the steel arch is a major leap towards the completion of the 111 km long winding stretch from Katra to Banihal.
- It is arguably the biggest civil-engineering challenge faced by any railway project in India in recent history.



Unique Features of this Bridge:

- Bridge designed to withstand high wind speed up to 266 Km/Hour.
- Bridge designed for blast load in consultation with DRDO for the first time in India.
- Bridge designed to bear earthquake forces of highest intensity zone-V in India.
- First time on Indian Railways, Phased Array Ultrasonic Testing machine used for testing of welds.
- First time on Indian Railways, National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited lab established at site for weld testing.
- Extensive health monitoring and warning systems planned through state of art instrumentation.

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 Bara-lacha 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.

Some of the important projects/dams on Chenab:

- Ratle Hydro Electric Project
- Salal Dam- hydroelectric power project near Reasi
- Dul Hasti Hydroelectric Plant- power project in Kishtwar District

- Pakal Dul Dam (under construction)- on a tributary Marusadar River in Kishtwar District.

6. Portugal: EU's fastest aging country:

Page|60

- Portugal currently registers 182 elderly (aged 65 years and above) for every 100 young people (aged up to 14 years), becoming the fastest aging country in the European Union (EU), according to a study published by the Contemporary Portugal Database Pordata.
- In the past three decades, the elderly population tripled in the country, according to the study, based on data from the Portuguese National Statistics Institute (INE) and published by Publico newspaper on Sunday.
- In 1990, Portugal registered 66 elderly for every 100 young people, Xinhua news agency reported.
- Portugal recorded an annual aging rate of 3.6 per cent, higher than all EU countries, the study noted.
- According to Jorge Malheiros, researcher at the Center for Geographical Studies of the Institute of Geography and Spatial Planning at the University of Lisbon, the accelerated growth of the aging rate in Portugal is the result of the departure of young people from the country and the entry of foreigners who are already retired.

7. Longest ever drought in China:

- China is facing its biggest drought ever. Drought has dried up rivers and affected power generation at hydroelectric power plants. There is darkness in small and big cities due to no electricity.

Important Points:

- After 64 years, China faced the longest summer and as a result, the Yangtze, the longest river in Asia, which is the largest river in China, has dried up. The drying up of the Yangtze has caused water shortages in the dam and affected hydroelectric power, leaving large cities or small towns facing power crisis.
- In view of this, the Chinese government last week suspended or limited the supply of electricity to thousands of factories in Sichuan. Following which companies such as Toyota, Foxconn and Tesla have temporarily suspended operations at some of their plants set up in China.
- Drought has affected at least 2.46 million people and 2.2m hectares of agricultural land in China's Sichuan, Hebei, Hunan, Jiangxi, Anhui and Chongqing prefectures. At the same time, according to China's Ministry of Emergency Management, more than 780,000 people are in need of direct government assistance due to the drought.
- Due to this drought after so many years, China has suffered a direct economic loss of 2.73 billion yuan in July alone, affecting 5.5 million people.

Yangtze River:

- It is the longest river in Asia and third-longest in world. This river is also the longest worldwide to flow entirely within one country. It originates from Jari Hill in Tanggula Mountains in Tibetan Plateau and flows for 6,300 km in east direction to drain into East China Sea. It is considered as sixth-largest river by discharge volume in world. The river drains one-fifth of China's land area.

8. Integration of Gati Shakti master plan with geospatial maps:

- Madhya Pradesh Chief Minister Shivraj Singh Chouhan virtually attended the launch of 'Pradhan Mantri Gati Shakti National Master Plan' organized at Pragati Maidan, Delhi.

Page|61

Key Points:

- It is noteworthy that Prime Minister Narendra Modi launched the 'PM Gati Shakti National Master Plan' for multi-modal connectivity.
- On this occasion, Chief Minister Shivraj Singh Chouhan said that Madhya Pradesh will prepare with full force for this great campaign of development. He decided to immediately link Madhya Pradesh with the PM Gati Shakti National Master Plan.
- Along with this, the Chief Minister also inaugurated the state level 'Conference on Multi Infrastructure Connectivity' at Minto Hall.
- Gati Shakti is a digital platform which will bring together 16 ministries including rail and road for integrated planning and coordinated implementation of infrastructure connectivity projects. Basically Gati Shakti will have 200 types of databases, in which the physical facilities, district administration offices, rail, road and gas lines, health and police along with facilities like water bodies, reserve parks and forests will be mapped by GIS system.
- Through this various central ministries and state governments will be able to benefit from better logistics schemes and connectivity.

9. Philippines: Tropical Storm Ma-On:

- Recently, a tropical storm hit the northern Philippines, injuring at least three people and displacing thousands. Authorities then closed schools and government offices in several provinces, including the capital, where flooding and landslides were likely.
- Tropical Storm 'Ma-on' weakened slightly after passing through the mountainous northern provinces after reaching the city of Maconakon in Isabella, according to meteorologists. The strongest impact of the storm was felt in the northern tip of the Luzon region.

Tropical cyclone:

- It is a rapidly rotating storm system. It is characterized by low-pressure center, strong winds, closed low-level atmospheric circulation and spiral arrangement of thunderstorms producing heavy rain.
- Based on location and strength, tropical cyclone is referred by different names like hurricane typhoon, tropical storm, tropical depression, cyclonic storm or cyclone. Hurricane is a tropical cyclone occurring in Atlantic Ocean and north-eastern Pacific Ocean. Typhoon occurs in north-western Pacific Ocean.

10. Atal Bridge:

- Recently, Prime Minister Narendra Modi inaugurated the iconic 'Atal Bridge' over the Sabarmati River in Ahmedabad city of Gujarat. Its name was declared as Atal Bridge on 25 December on the birth anniversary of former Prime Minister Atal Bihari Vajpayee.

Key facts about Atal Bridge:

- This bridge is built on the banks of the Sabarmati Riverfront on Sabarmati River which flows through the city of Ahmedabad.
- Equipped with attractive design and LED lights, this bridge is about 300 meters long and 14 meters wide.
- 2,600 metric tons of steel pipe has been used in the construction of this bridge and the railing is made of glass and steel.
- The bridge will provide connectivity to various public developments on the East and West Bank, from multi-level car parking and plazas, to the proposed arts, cultural and exhibition center between the Flower Park on the East Coast and the West Bank's Event Ground.
- Apart from pedestrians, cyclists can also use this bridge to cross the river.
- The total cost of construction of this bridge is Rs 74.29 lakh crore.

Sabarmati River-front:

- The Sabarmati Riverfront has been developed on the banks of the Sabarmati River in the city of Ahmedabad, Gujarat. Under this project both the banks of the river have been developed. It was proposed to be developed in 1960 but its work started in 2005. After its completion in 2012, it was opened to the general public.
- India will be extending humanitarian assistance to Pakistan to deal with the Devastating Flood that occurred because of Pakistan's Monster Monsoon.
- The climate crisis is the prime reason for the devastating scale of flooding in Pakistan, which has killed more than 1,000 people and affected 30 million.

11. Pakistan floods:

- Recently, Pakistan experienced the worst monsoon floods in a decade, which has killed more than 1,100 people, caused more than USD 10 billion in damages and submerged nearly a third of the country. Also, the United Nations issued a USD 160 million flash appeal to help Pakistan deal with the floods.

Key Points:

- According to Pakistan's National Disaster Management Authority, more than 33 million people have been affected by this year's floods. It can be said that one in seven Pakistanis have been affected by this flood. This year's floods can be compared to the 2010 floods. It was the worst flood ever in which more than 2,000 people died.
- The Swat Valley in Pakistan's northern Khyber Pakhtunkhwa province, where millions of people live, has been largely cut off from the rest of the country by damaged infrastructure and flood waters. Due to which the local residents are facing shortage of food and medicine.
- Intermittent rains for weeks have flooded millions of acres of rich agricultural land, but now the Indus is threatening to break its banks as water streams flow north through tributaries.

How has been the Bilateral Trade between India and Pakistan?

- In 2021, Pakistan allowed the import of cotton and sugar from India, partially reversing a two-year old decision to suspend all trade with India.

- The decision to cancel trade was taken by the Pakistan government in August, 2019, days after the Indian government amended Article 370 and reorganised Jammu and Kashmir.
- Over the years, India has had a trade surplus with Pakistan, with much less imports than exports and trade has always been linked to politics.
- India's exports to Pakistan fell around 16% to USD 1.82 billion in 2016-17 as compared to 2015-16 after relations deteriorated in the aftermath of the Uri terror attack and the Indian Army's surgical strikes on militant launchpads in Pakistan-occupied Kashmir in 2016.
- Despite continuing tensions, trade between the two countries grew marginally in subsequent years.



What caused the Severe Flood in Pakistan?

Extremely Wet monsoon:

- The current flood is a direct result of an extremely wet monsoon season this year.
- The same southwest monsoon that brings the bulk of India's annual rainfall causes rain in Pakistan as well.
- The monsoon season in Pakistan, however, is a little shorter than in India. That is because the rain-bearing monsoon winds take time to travel northward from India into Pakistan.
- There's been a 400% increase in average rainfall in areas like Baluchistan and Sindh, which led to extreme flooding.

Extreme Heat:

- In May 2022, Pakistan consistently saw temperatures above 45 degrees Celsius (113 Fahrenheit).
- Warmer air holds more moisture – about 7% more per degree Celsius (4% per degree Fahrenheit) – and that eventually comes down, in this case in torrents.
- Instead of just swollen rivers flooding from extra rain, Pakistan is hit with another source of flash flooding.
- The extreme heat accelerates the long-term glacier melting then water speeds down from the Himalayas to Pakistan in a dangerous phenomenon called glacial lake outburst floods.

ENSO:

- The El Niño–Southern Oscillation (ENSO) appears to be in its La Niña phase.

- “La Niña is behaving very strongly in some metrics and is a significant factor for enhancing monsoonal rains.

Defence & Security

Page|64

1. EX VINBAX 2022- India Vietnam Bilateral Army Exercise:

- The 3rd edition of Vietnam-India Bilateral Army Exercise “Ex VINBAX 2022” is being conducted in India.
- India and Vietnam share a Comprehensive Strategic Partnership and defence cooperation is a key pillar of this partnership. Vietnam is an important partner in India’s Act East policy and the Indo-Pacific vision.

What is Ex VINBAX?

- It is a field training exercise with enhanced scope from previous editions of bilateral exercise.
- A **Humanitarian Assistance & Disaster Relief (HADR) Demonstration and equipment** display will showcase India’s capacity to undertake rescue and relief operations during natural and manmade disasters utilising indigenous solutions.
- It aims to strengthen mutual confidence, interoperability and enable sharing of best practices between the Indian Army and Vietnam People’s Army.
- It will provide an opportunity to the troops of both the Contingents to learn about the social and cultural heritage of each other.

Theme:

- Employment and deployment of an Engineer Company and a Medical Team as part of United Nations Contingent for Peacekeeping Operations.

2. Indian Navy’s Maritime Surveillance Mission:

- **An all-women crew of the Indian Navy** has completed a maritime reconnaissance and surveillance mission in the North Arabian Sea onboard a Dornier 228 aircraft, the Navy said on Thursday.
- **INAS 314** is a frontline Naval Air Squadron based at Porbandar in Gujarat and operates the state-of-the-art Dornier 228 maritime reconnaissance aircraft.
- An all-women crew of the Indian Navy has completed a maritime reconnaissance and surveillance mission in the North Arabian Sea onboard a Dornier 228 aircraft, the Navy said on Thursday.

3. Indian Navy- ISRO MoU for Satellite based Naval Applications:

- Recently, Memorandum of understanding (MoU) has been signed between the **Indian Space Research Organisation (ISRO)** and the Indian Navy on data sharing and cooperation on Satellite-based Naval Applications in Oceanology and Meteorology.
- It will enhance collaboration and would initiate a common platform of mutual cooperation.

- The scientific advancements by Space Applications Centre would be synergized with the Indian Naval efforts to keep the nation's defence in step with rapid development in the field of Satellite Data retrieval and applications.

Cooperation would include various dimensions:

Page|65

- Sharing of non-confidential observational data.
- Operational exploitation of Space Applications Centre (SAC)-generated weather products and provisioning of Subject Matter Experts (SME) for the processing of satellite data towards the development of new tools.
- Providing Calibration and validation of ocean models.

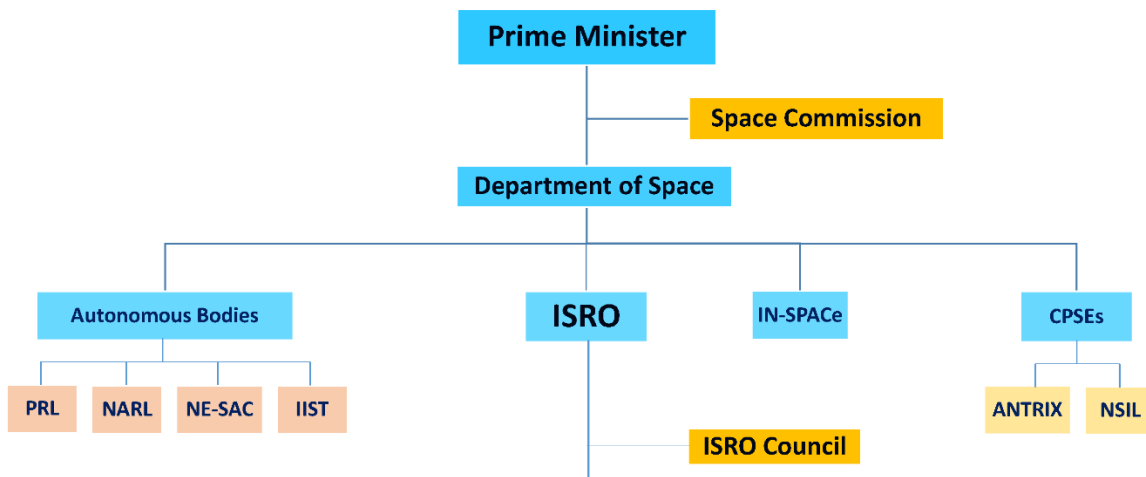
What is Space Applications Centre?

- Space Applications Centre is a major research and development centre of the **Indian Space Research Organisation (ISRO)**.
- It is situated in Ahmedabad and performs multi-disciplinary activities.
- The core competence of the Centre lies in the development of space-borne and air-borne instruments/payloads and their applications for national development and societal benefits.
- These applications are in diverse areas and primarily meet the communication, navigation, and remote sensing needs of the country.

Achievements:

- The Centre also contributed significantly to scientific and planetary missions of ISRO like Chandrayaan-1, Mars Orbiter Mission, etc.
- The communication transponders developed at this Centre for Indian National Satellite (INSAT) and Geo Synchronous Satellite (GSAT) series of satellites are used by the government and private sector for VSAT, DTH, Internet, broadcasting, telephones, etc.

Organisation Structure - ISRO



4. Indian Army 'Skylight' Mega- Exercise:

- The Indian Army conducted the first of its kind large-scale exercise to boost its space domain capabilities. The aim of the exercise, codenamed skylight, was to test operational readiness of satellite communication assets and training of personnel manning these.
- This was a pan-India exercise covering the islands of Andaman and Lakshadweep to the high reaches of the northern borders where all satellite communication assets of the Indian Army were activated from July 25-29.
- Various technical and operational scenarios in the space domain were played up, sources in the defence establishment told India Today. Different agencies responsible for space and ground segments and ISRO took part in the exercise.
- “Over 280 platforms were checked in the field formations. Capabilities and training of personnel could be validated in a scenario where terrestrial media failed,” said an official privy to the details.
- The Indian Army uses the services of a number of ISRO satellites that connect hundreds of communication terminals of various types. These include static terminals, transportable vehicle mounted terminals, man-portable and small form factor man-pack terminals.
- The Indian Army has been using satellite communication networks in some of the remote border areas. While the Navy and Air Force have a satellite of their own, the Army is looking to have one by 2025.

5. Indian Army ‘Him Drone-a-thon’ Programme:

- The Indian Army in collaboration with the Drone Federation of India has launched the ‘Him Drone-a-thon’ programme on 08 August 22. This initiative in line with Atmanirbharta in defence manufacturing is aimed to catalyse and provide focused opportunities to the Indian drone ecosystem to develop path-breaking drone capabilities for meeting requirements of frontline troops.
- The Indian Army’s support to the indigenous drone ecosystem is based on the principle that ‘good available indigenously’ is better than the ‘best available globally’. However, gradual enhancement in technology demanded by defence forces is likely to incentivise manufacture of better and more capable drone products.
- The ‘Him Drone-a-thon’ programme is pan India sustained connect between all stake holders including industry, academia, software developers and drone product manufacturers. It will be conducted in stages with quantifiable parameters (like altitude, weight, range, endurance etc) being progressively enhanced based on demonstrated capabilities. Broad activities planned include interactions & ideation between users, development agencies, academia etc, seeking of industry responses, visits by development agencies to operational locations to understand the ground perspective & requirements, handholding of development agencies for internal development & on-ground trials and actual conduct & evaluation of drone products.

As a start point, development in the following categories are included:

1. Logistics/ Load carrying Drone in High Altitude Areas.
2. Autonomous Surveillance/ Search & Rescue Drone.
3. Micro/ Nano Drones for Fighting in Built Up Areas.

6. Udarashakti: India-Malaysia Air force exercise:

- Recently, a contingent of the Indian Air Force left for **Malaysia** to participate in a bilateral exercise named '**Udarashakti**'.
- While Harimau Shakti is Joint military exercises which are held annually between the two countries.
- The Indian Air Force is participating in the air exercise with Su-30 MKI and C-17 aircraft while Malaysian Air Force will be flying Su 30 MKM aircraft.
- The four days of exercise will witness the conduct of various aerial combat drills between the two Air Forces.

Background:

- The first bilateral Air Force exercise that staged frontline Sukhoi-30 combat aircraft was conducted in 2018.
- From 2008 to 2010, the Indian Air Force Training Team was deployed in Malaysia to give training to Malaysian pilots on the SU-30SKM aircraft.
- What is the Significance of the Exercise?
- Exercises will strengthen long-standing friendships and enhance defense cooperation between both armies. As a result, regional security will be strengthened.
- IAF will have an opportunity to share and learn best practices with the Royal Malaysian Air Force through this exercise. It is also likely that they will discuss mutual combat capabilities.

7. Anti-personnel mine 'Nipun' and F-INSAS:

- Recently, the Ministry of Defense has handed over several new defence systems, including the **F-INSAS**, the Nipun mines, the Landing Craft Assault (LCA), to the Indian Army as a part of Army's Modernization Plans.
- F-INSAS stands for Future Infantry Soldier as a System.
- It is a programme for infantry modernisation, which is aimed at increasing the operational capability of the soldier.
- Under the project, soldiers are being equipped with modern systems that are lightweight, all-weather-all-terrain, cost-effective and low maintenance.
- They have been indigenously designed by the Indian entities, including the DRDO (Defense Research and Development Organisation) and the ordnance factories ecosystem.



Items Under F-INSAS System:

- AK-203 assault rifle:
- It is a Russian-origin gas-operated, magazine-fed, select-fire assault rifle.
- It has a range of 300 metre.
- Multi-Mode Hand Grenade:
- It can be used in defensive and offensive modes.

- In defensive mode, the grenades are to be hurled when the thrower is in a shelter or has a cover.
- In the offensive mode, the grenades do not fragment and the adversary is harmed by the blast or is stunned.

Page|68 Ballistic Helmets and Ballistic Goggles:

- It provides soldiers with ballistic helmets and ballistic goggles for protection against small projectiles and fragments, along with a bullet-proof vest.
- The helmet and the bullet-proof jacket are capable of protecting the soldier against 9 mm bullets and ammunition fired from AK-47 rifles.

Nipun mines:

- Nipun mines are indigenously designed and developed anti-personnel mines, termed by the DRDO as 'soft target blast munition'.
- Anti-personnel mines are meant to be used against humans as against anti-tank mines that are aimed at heavy vehicles.
- Russia's PFM-1 and PFM-1S are commonly referred to as 'Butterfly mines' or 'Green Parrots'. Butterfly mine is a very sensitive anti-personnel landmine.
- These mines are meant to act as the first line of defence against infiltrators and enemy infantry.
- They are smaller in size and can be deployed in large numbers.
- They provide protection to the troops on the borders and are more potent and effective than the existing anti-personnel mines in their arsenal.

What is the Landing Craft Assault?

- The Landing Craft Assault (LCA) is meant to serve as a replacement for the boats with limited capabilities currently in use in the Pangong Tso lake.
- It has better launch, speed and capacity to operate across water obstacles in eastern Ladakh.
- Similar vessels are already in operation in the Indian Navy.

What are the other Defence Systems?

- Solar Photovoltaic Energy Project: One of the most challenging terrain and operational sectors of the country is the Siachen Glacier.
- The complete power requirement in the area to operate various equipment was met only through captive generator supply. A solar photo-voltaic plant has been installed to improve the overall energy requirements and also obviate dependence on fossil fuels.
- The Ministry of Defence also handed over to the Army a thermal imaging sight for T-90 tanks; hand held thermal imager; and frequency-hopping radio relay for tactical communication across much longer ranges.
- Further, Downlink Equipment with Recording Facility to help helicopters in surveillance missions was also handed over.
- Using this system, reconnaissance data is recorded and can be accessed only when the helicopter returns to the base.

- Some other defence systems included, Infantry Protected Mobility Vehicles; Quick Reaction Fighting Vehicles and Mini Remotely Piloted Aerial System surveillance, detection and reconnaissance at the infantry battalion and mechanised units level.

8. Vertical Launch Short Range surface-to-air missile (VL-SRSAM) test fired:

Page|69

- Recently, Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) was successfully flight-tested by Defence Research & Development Organisation (DRDO) and the Indian Navy from an Indian Naval Ship at Integrated Test Range (ITR), Chandipur off the coast of Odisha.

About:

- VL-SRSAM has been designed and developed jointly by three facilities of the Defence Research and Development Organisation for deployment of Indian Naval warships.
- The missile has the capability of neutralizing various aerial threats at close ranges including sea-skimming targets.
- Sea skimming is a technique many anti-ship missiles and some fighter or strike aircraft use to avoid radar and infrared detection.

Design:

- The missile has been designed to strike high-speed airborne targets at the range of 40 to 50 km and at an altitude of around 15 km.
- Its design is based on Astra missile which is a Beyond Visual Range Air to Air missile.
- Astra ("weapon") is India's first air-to-air all weather beyond-visual-range active radar homing air-to-air missile, developed by the Defence Research and Development Organization.
- A Beyond-Visual-Range missile (BVR) is an air-to-air missile that is capable of engaging at ranges of 20 nautical miles or beyond.

Features:

- **Cruciform wings:** They are four small wings arranged like a cross on four sides and give the projective a stable aerodynamic posture.
- **Thrust Vectoring:** It is the ability to change the direction of the thrust from its engine, control the angular velocity and the attitude of the missile.
- Thrust is the force which moves an aircraft through the air.
- **Canisterised system:** The inside environment is controlled, thus making its transport and storage easier and improving the shelf life of weapons.

Naval Warfare:

- It is a combat in and on the sea, the ocean, or any other battle-space involving a major body of water such as a large lake or wide river.

Defence Mechanism:

- **Chaffs:** It is a countermeasure technology used worldwide to protect naval ships from enemy's radar and Radio Frequency (RF) missile seekers.
- **Missiles to counter Anti-Ship missiles:** These systems have to have a swift detection mechanism and quick response to warships.

9. SAREX 22 Indian Coast Guard Exercise:

- The objective of this exercise is to avoid accidents at sea and save lives by conducting rescue operations. During this, 24 observers from 16 countries participated in the exercise organized under the theme 'Capacity Building towards Maritime Security'.
- This was the 10th exercise conducted by the Coast Guard. During this exercise, new technology like remote controlled lifebuoys were demonstrated over the Bay of Bengal.

Page|70 Indian Coast Guard:

- It is an armed force, search and rescue agency that protects maritime interests of India. It is a Maritime Law Enforcement Agency. It was established in 1978 by coast Guard Act, 1978. It operates under Ministry of Defence.

The following are the missions of Indian Coast Guard-

1. To protect artificial Islands
 2. To protect marine ecology and environment
 3. To protect fishermen and mariners at sea
- The responsibilities of the Indian Coast Guard are offshore security coordination, national maritime search and rescue, coastal security.

10. INS Vikrant: First Indigenously-built Aircraft Carrier:

- From the first indigenous warship INS Ajay in 1960, to the first indigenous frigate INS Nilgiri in 1968, the commissioning of the first indigenously designed and built aircraft carrier, INS Vikrant, is a significant punctuation in India's pursuit of self-reliance (Aatmanirbhar Bharat).
- At 45,000 tonnes, Vikrant is the largest naval ship to be designed and built in India, and with this accomplishment, the country joins the band of nations that have demonstrated such capability with major countries like United States (US), the United Kingdom (UK), France, Russia, Italy, and China.
- While the absorption of indigenisation has matured, a large gap still exists in the development of critical technologies, Hi-Tech components, weapons and advanced manufacturing processes.
- It is imperative to identify relevant demand-side functional domains and technologies to channel indigenous efforts towards attaining sustainable self-reliance in cutting-edge defence technologies.

What is the Significance of INS Vikrant in India's Maritime Security?

- Vikrant (which means courageous) is named after India's first aircraft carrier, bought from the UK and commissioned in 1961.
- The first INS Vikrant was a major symbol of national pride and played an important role in several military operations including the 1971 Indo-Pak War before being decommissioned in 1997. Now India's first homemade aircraft carrier will carry the name of her illustrious predecessor.
- After its induction, the warship will be a key component of the Indian Navy's push to establish itself as a blue water force, one with the ability to project its power on distant seas.

- It is especially important amid India's bid to be a net security provider in the Indian Ocean region where it faces China, whose navy is focused on aircraft carriers and has already inducted two vessels.
- With the commissioning of INS Vikrant, India will have two operational aircraft carriers (the other one is INS Vikramaditya) , which will bolster the maritime security of the nation.

History, Art and Culture

1. Commonwealth Games 2022: India wins 3 Gold Medals:

- India's sportspersons showcased a terrific performance at the recently concluded Birmingham Commonwealth Games (CWG) 2022, winning a total of 61 medals that included 22 gold, 16 silver and 23 bronze.
- India got the **fourth position** in the medals tally, despite shooting, India's most successful sport at the CWG, not being a part this time.
- One great aspect of India's great showing at the CWG 2022 was the incredible performance by the female athletes. Of the total 22 gold medals won by India, eight were won exclusively by women.

2. Tiranga Utsav Organised by Ministry of Culture:

- The Ministry of Culture organized "Tiranga Utsav" on August 2, 2022 to celebrate the contributions of Pingali Venkayya to the country.
- **Tiranga Utsav** was an evening filled with cultural and musical performances. It was organised in New Delhi, on the occasion 146th Birth Anniversary of Pingali Venkayya.

Key Points of the event include:

- The Tiranga Utsav marked the presence of Union Home Affairs Minister Amit Shah as the chief guest.
- On the occasion, Amit Shah released the commemorative Postal Stamp to honour Pingali Venkayya.
- 'Amar Chitra Katha' was also released in his memory.
- Amit Shah also felicitated the family members of Pingali Venkayya at the event.
- The Tiranga Anthem was also released.

Pingali Venkayya:

- Pingali Venkayya was an Indian freedom fighter and a follower of Mahatma Gandhi.
- He designed a flag, based on which Indian National Flag was designed later. He belonged to a Telugu brahmin family and was born at Bhatlapenumarru, near Machilipatnam (in present day Andhra



Pradesh). He completed high schooling in Madras and graduation in Cambridge University. He was posthumously awarded the Bharat Ratna in 2011.

National Flag by Pingali Venkayya:

- Members of Indian Independence movement had used several national flags before India's independence in 1947. National Flag was designed by Pingali Venkayya, which he presented to Mahatma Gandhi on April 1, 1912 when he visited to Vijayawada city.
- In 1921, Mahatma Gandhi approved the design at Indian National Congress meeting in Vijayawada. The Flag had two stripes viz., green and red along with a Gandhian charkha at the centre.
- Later, he added white strip on the top following Mahatma Gandhi's suggestion. This became the original Tricolour and became a symbol of non-violent freedom movement of Mahatma Gandhi.

3. Sites Identified for 'National importance' Tag:

- Recently, 20 heritage sites have been identified for National importance tag. These sites also include 2 ancient mounds at Rakhigarhi in Haryana and age-old Anangtal in Delhi in the last 3 years.

Other identified sites include:

- Rock painting at Chintakunta in Andhra Pradesh
- Rock art site Murgi at Rdanag in Leh
- Kaleshwar Mahadev Temple at Kalesar (Manyala Panchayat) in Himachal Pradesh.
- Seven mounds (RGR 1-RGR 7) dispersed across Rakhi Khas village and Rakhi Shahpur village in Hisar, Haryana. These mounds are part of Rakhigarhi archaeological site of Harappan era. RGR 7 is a cemetery site, which was a well-organised city.
- The Rakhigarhi site is among the "five iconic sites" that was declared by central government in the Union budget 2020-21.
- Besides these sites, 55 monuments sites in Assam have been declared protected under Ancient Monuments and Archaeological Sites and Remains Act, 1958. 3 monuments in Mizoram have identified to be declared the monuments of national importance in last five years. The Archaeological Survey of India (ASI) has given Rs 15 crore for 2022-23, to protect and preserve the centrally-protected monuments in Tamil Nadu.
- During 2017-18 to 2021-22, 13 state and 50 societies, autonomous bodies, trusts & local bodies have been provided financial assistance to establish and develop museums in accordance with Museum Grant Scheme.

4. Culture Ministry 'Badhe Chalo' campaign:

- Ministry of Culture has launched the 'Badhe Chalo Campaign', with the aim of connecting with youth of India and infuse a deep sense of patriotism among them. It seeks to 'create youth centric activation' for sizeable outreach of Azadi Ka Amrit Mahotsav. Campaign has been designed to involve the youth of India, by encouraging them to come forward celebrate 75 years of India's independence.

Azadi Ka Amrit Mahotsav:

- Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of independence and the glorious history of its people, culture and achievements.

- This Mahotsav is dedicated to the people of India who have not only been instrumental in bringing India thus far in its evolutionary journey but also hold within them the power and potential to enable Prime Minister Narendra Modi's vision of activating India 2.0, fuelled by the spirit of Aatmanirbhar Bharat.
- The official journey of Azadi Ka Amrit Mahotsav commenced on 12th March 2021 which started a 75-week countdown to our 75th anniversary of independence and will end post a year on 15th August 2023. Following are the five themes of Azadi Ka Amrit Mahotsav.

Badhe Chalo Campaign:

- The campaign aims to connect and bring the youth and people from all parts of India to one platform. Badhe Chalo Campaign will feature flash dances, where dancers will perform on "Youth Anthem". This anthem has been written and composed on the theme of 'Badhe Chalo'.
- The Anthem encourages people to come forward and hoist Tiranga in their homes. This activation will feature Flash Dances that are happening across 75 cities, at prime location across India.
- Ministry also aims to proliferate the message and spirit of Amrit Mahotsav, through these flash dances.
- Badhe Chalo Campaign is being held from August 5-August 10, 2022, across 10 cities every day. Grand Finale of the campaign will be held at Talkatora Stadium in New Delhi, on August 12, 2022.

5. 80th anniversary of Quit India movement:

- India has completed 80 years on 'Quit India Movement' on August 8, 2022. This movement is also known as August Kranti. The Quit India Movement is an important milestone in India's history of freedom struggle. Mahatma Gandhi had called to people of India to "Do or Die for Independence" on August 8, 1942.
- On 8th August 1942, Mahatma Gandhi gave a clarion call to end the British rule and launched the Quit India Movement at the session of the All-India Congress Committee in Mumbai.
- Gandhiji gave the call "Do or Die" in his speech delivered at the Gowalia Tank Maidan, now popularly known as August Kranti Maidan.
- Aruna Asaf Ali popularly known as the 'Grand Old Lady' of the Independence Movement is known for hoisting the Indian flag at the Gowalia Tank Maidan in Mumbai during the Quit India Movement.
- The slogan 'Quit India' was coined by Yusuf Meherally, a socialist and trade unionist who also served as Mayor of Mumbai.
- Meherally had also coined the slogan "Simon Go Back".

6. Ladakh dPal rNgam Duston Award conferred to Dalai Lama:

- Recently, the highest civilian honour of Ladakh "dPal rNgam Duston" was recently conferred to Tibetan spiritual leader Dalai Lama. He was honoured for his contribution towards humanity.
- It was the 6th dPal rNgam Duston Award.

- The award was conferred to Dalai Lama by Ladakh Autonomous Hill Development Council (LAHDC), Leh.
- Dalai Lama is currently on a visit to Ladakh, since July 15, 2022. On the occasion, he stressed upon maintaining communal harmony in this region.
- Tenzin Gyatso is the current and 14th Dalai Lama, who is also known as Gyalwa Rinpoche to the Tibetan people. He is the highest spiritual leader and former head of Tibet.
- He is considered as a living Bodhisattva.
- Bodhisattva is a compassionate one on his way to enlightenment. **Bodhisattva** delays achieving his own salvation to help all sentient beings on their path to it.

7. 'Dahi-Handi' - Maharashtra's Official Sport:

- Recently, Dahi Handi has now been given the status of a game in Maharashtra. It will be considered as a type of adventure sports.
- Dahi Handi is celebrated on the occasion of Janmashtami, the birth of lord Krishna. The Dahi Handi (earthen pots filled with yogurt) is part of the Janmashtami festival where young participants called 'Govindas', dressed in colorful clothes, make a human pyramid to reach the pot hung mid-air, and break it.



- The tradition of Dahi Handi, which started in Mumbai in 1907, is believed to have been going on for the last 104 years in Ghansoli village near Navi Mumbai. Dahi Handi was first started here in 1907 on the occasion of Krishna Janmashtami.

8. 'Azadi Quest': Mobile games based on freedom struggle:

- The Government of India has launched a new series of mobile games to highlight the story of India's freedom struggle.
- 'Azadi Quest' is a series of online educational mobile games developed in association with Zynga India.
- The games have been developed in partnership with Zynga India, as part of the Azaadi Ka Amrit Mahotsav celebrations, marking 75 years of independence.
- The first two games in the series will highlight key milestones and heroes of the freedom struggle, interwoven with a fun game.

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