CURRENT AFFAIRS WEEKLY

WEEK: 1 AUGUST 2023

MAINS

GS- I
- ATLANTIC MERIDIONAL OVERTURNING CIRCULATION (AMOC)

GS- II
- PSYCHIATRIC CASES IN PARAMILITARY ROSE UP BY 38% IN 2 YEARS: MHA
- CHILD TRAFFICKING INCREASED IN INDIA: STUDY
- ENSURE 5% QUOTA TO SPECIALLY-ABLED CANDIDATES IN EDUCATIONAL INSTITUTES: DELHI HC
- SC ASKS CENTRE, SIX STATES TO RESPOND TO PLEA ON LYNCHINGS
- UNITED NAGA COUNCIL SEEKS NRC IN MANIPUR
- PRESIDENT RETAINS POWER TO SCRAP ARTICLE 370: SUPREME COURT
- SIKKIM ANNOUNCED 1-YEAR MATERNITY LEAVE
- DRAFT NATIONAL DEEP TECH STARTUP POLICY

GS- III
- GOVT ASKED PHARMA COMPANIES TO ADOPT WHO STANDARDS
- RESOURCE EFFICIENCY CIRCULAR ECONOMY INDUSTRY COALITION (RECEIC)
- EXTENSION OF PLI SCHEME TO CHEMICALS INDUSTRY
- ECOSYSTEM OF HYBRID EVS
- UNDISPOSED TOXIC WASTE AT BHOPAL DISASTER SITE
- ROOM TEMPERATURE SUPERCONDUCTIVITY
- RULES GOVERNING SPACE JUNK

PRELIMS

ART & CULTURE
- Geographical Indication (GI) Tags in 2023

INTERNATIONAL RELATIONS
- Stapled visa and its applicability
- UN Commission for Social Development (CSocD)

POLITY & GOVERNANCE
- Akhil Bharatiya Shiksha Samagam and ULLAS Initiative
- RCS-UDAN Scheme on ground level
- The Vivad Se Vishwas II (Contractual Disputes) scheme

ECONOMY
- 'STAR series' numbering system in Banknotes
- Indian firms can now directly list on IFSC exchanges

ENVIRONMENT
- Government Panel provides anti-air pollution measures

NEWS IN SHORT

- INDIAai
- Govt to identify process to determine Waqf properties
- ST status for Paharis and Paddaris
- AudioCraft AI tool
- Safety of Polypill for cardiovascular diseases in India
- World Hepatitis Day 2023
- BPaL regimen trial
- Alpha-gal syndrome
- International Tiger Day
- Western Tragopan (Tragopan-melanocephalus)
- Seagrass
- Iberian wolf
- Dhala structure
- Cocos Island
- Kuril islands

SPECIALS

- The Bill Track (Monsoon Session)

— Disclaimer—

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

CURRENT AFFAIRS WEEKLY

CONTENTS

WEEK - 1 (AUGUST, 2023)

Section A [MAINS]

- Atlantic Meridional Overturning Circulation (AMOC)
- Psychiatric cases in paramilitary rose up by 38% in 2 years: MHA
- Child Trafficking increased in India: Study
- Ensure 5% quota to specially-abled candidates in educational institutes: Delhi HC
- SC asks Centre, six States to respond to plea on lynchings
- United Naga Council seeks NRC in Manipur
- President retains power to scrap Article 370: Supreme Court
- Sikkim announced 1-year maternity leave
- Draft National Deep Tech Startup Policy
- Govt asked Pharma companies to adopt WHO standards
- Resource Efficiency Circular Economy Industry Coalition (RECEIC)
- Extension of PLI scheme to chemicals industry
- Ecosystem of hybrid EVs
- Undisposed toxic waste at Bhopal disaster site
- Room temperature superconductivity
- Rules governing space junk

ATLANTIC MERIDIONAL OVERTURNING CIRCULATION (AMOC)

Context: According to a new findings published in *Nature Communications*, the Atlantic meridional overturning circulation (AMOC), could collapse within next few decades— driving European weather to even greater extremes.

Similar report

According to the latest report from the **International Panel on Climate Change (IPCC)**, the AMOC is **"very likely to weaken over the 21st century"** due to climate change.

◈ **What is Atlantic Meridional Ove** within the Atlantic Ocean.

◈ This circulation brings **warmth to various parts of the globe** and also carries nutrients necessary to sustain ocean life.

◈ The circulation process begins as warm water near the surface moves **toward the poles** (such as the Gulf Stream in the North Atlantic), where it cools and **forms sea ice**. As this ice forms**, salt is left behind** in the ocean water.

◈ Due to the large amount of salt in the water, it becomes **denser, sinks down**, and is carried southwards in the depths below.

◈ Eventually, the water gets pulled back up towards the surface and **warms up in a process** called **upwelling,** completing the cycle.

How Europe's Climate depends on AMOC?
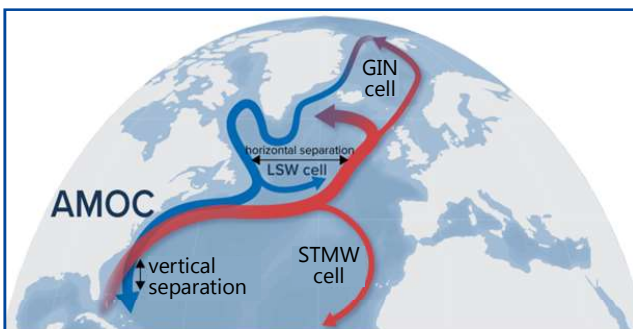
◈ The AMOC amounts to a system of currents in the Atlantic that bring warm water northwards where it then cools and sinks.

◈ It is a key reason why **Europe's climate** has been stable for thousands of years.

◈ AMOC is also only one part of the wider **Gulf Stream system,** much of which is driven by winds that will continue to blow even if the AMOC collapses.

◈ **Northern Europe** will experience successive severe winters as subsequently attributed to a brief slowdown of the AMOC.

◈ At the same time heat had built up in the tropics, fuelling an unusually active June-November hurricane season in 2010.

How ocean temperatures are linked to weather?

◈ Over recent years Europe has witnessed some particularly unusual weather, in both winter and summer.

◈ At the same time, peculiar patterns (unusual and strange) of **sea surface temperatures** have appeared across the **North Atlantic.**

◈ Across great swathes of the ocean from the tropics to the Arctic, temperatures have persisted 1°C-2°C above or below normal levels, for months or even years on end.

◈ These patterns appear to exert a **strong influence on the atmosphere**, even influencing the path and **strength of the jet stream**.

Causes of the decline in AMOC:

◈ **Global Warming:** The study's authors attribute the potential AMOC collapse to global warming, which accelerates the melting of Greenland ice.

➤ The influx of freshwater from melting ice weakens or disrupts the AMOC's **normal sinking of salty water,** possibly leading to its collapse.

◈ **Indian Ocean Influence:** A 2019 study suggested that the Indian Ocean may also be helping the slowing down of AMOC.

➤ As the Indian Ocean warms faster, it generates **additional precipitation**.

➤ With so much precipitation in the Indian Ocean, there will be **less precipitation in the Atlantic Ocean**, leading to **higher salinity in the waters** of the tropical portion of the Atlantic.

➤ This saltier water in the Atlantic, as it comes **north via AMOC**, will get **cold much quicker than usual and sink faster.**

Concerns associated:

◈ **Saline species and sustenance**: This change reduces the water's saltiness, making it **less dense and harder to sink**.

◈ **Effects on Agriculture**: If enough water stops sinking, then the AMOC will weaken. Depending on how much the AMOC weakens, it can change regional weather patterns, such as rainfall, and affect where and how well crops can grow.

PSYCHIATRIC CASES IN PARAMILITARY ROSE UP BY 38% IN 2 YEARS: MHA

Context: The Ministry of Home Affairs (MHA) informed the Rajya Sabha that the total number of psychiatric patients in the Central Armed Police Forces (CAPFs) has increased by almost 38 per cent in reported psychiatric cases.

About:

◈ Around **3,864 cases** were reported in **CAPFs in 2021.**

◈ There were a total of **1,470 psychiatric patients** in CRPF in **2020, 1,506 in 2021 and 1,882 in 2022.**

What are the reasons for the prevalence of Mental Health issues in the Paramilitary Forces?

◈ **Tightly Structured Hierarchy**:

  ➤ Uniformed forces are tightly structured with a command-and-control hierarchy system.

  ➤ A senior officer is the reporting authority for his immediate junior and this junior has to fulfill their tasks with manpower under his/her command.

  ➤ The hierarchy is rarely breached and the system ensures discipline, clarity of roles and accountability.

  ➤ However, it tends to become inhuman, especially to those who cannot communicate their personal issues in an appropriate forum.

◈ **Unadressed stress**

  ➤ Uniformed forces showing signs of mental stress are not given enough attention.

  ➤ Those who express the problem are termed as weak and are seen as shying away from the rigours of life.

◈ **Less Recognition for their Achievements:**

  ➤ The constabulary accounts for around 85% of state police and CAPFs.

  ➤ These personnel perform their duties as directed by their seniors.

  ➤ They mostly remain in the background of the organisation with less recognition for their achievements and more frequent persecution for failure.

◈ **Tend towards Alcoholism:**

  ➤ To cope with the difficulty of the types of setups, personnel often resort to alcoholism and drug abuse.

  ➤ In the latter cases, defaulters are punished as per the law and suitable departmental action is also taken.

What can be the impact of the Rising Mental Health issues among the forces?

◈ **Discourage Younger Generation:** Despite the good image that the armed forces have, and the fact that it is a very respectable job, rising mental health issues among the forces can discourage the younger generations from joining.

◈ **Demoralize the Forces**: Increasing mental health issues among the forces can discourage them and negatively impact their daily operations.

◈ **Rising cases of Suicides:** Suicides, fratricides and untoward incidents are causing more Army personnel to lose their lives than any enemy or terrorist activities, according to the findings of a study by **United Service Institution of India (USI).**

Government Initiatives:

◈ Provision of better quality of facilities such as clothing, food, married accommodation, travel facilities, schooling, recreation etc. and periodic welfare meeting.

◈ Conduct of **yoga and meditation** as a tool for stress management.

◈ Training and deployment of **psychological counsellors**.

◈ Institutionalization of projects '**MILAP' and 'SAHYOG'** by Army in Northern & Eastern Command to reduce stress among troops.

◈ A '**MansikSahayata Helpline'** has been established by Army & Air Force to take professional counselling.

◈ Mental Health Awareness is provided during pre-induction training.

◈ Formation of **Military Psychiatry Treatment Centre at INHSAsvini** and establishment of Mental Health Centres in **Mumbai, Visakhapatnam, Kochi, Port Blair, Goa and Karwar.**

CHILD TRAFFICKING INCREASED IN INDIA: STUDY

Context: To mark the "World Day against Trafficking in Persons" on July 30, a report, titled 'Child Trafficking in India: Insights from Situational Data Analysis and the Need for Tech-driven Intervention Strategies' has been released.

◈ The Report has been published by **Games24x7 and the Kailash Satyarthi Children's Foundation (KSCF).**

Highlights of the Report:

◈ **Based on Number of Trafficked children**:

➤ **Jaipur** has emerged as the **most prominent destination** for trafficked children in the country in the last six years.

➤ Jaipur has emerged to be one of the prominent destinations for trafficked children with the maximum number **1,115 children rescued** from this district, accounting for **about 9 per cent of the total rescued children**.

◈ **Rajasthan saw a surge in average trafficked children**: The number rose to 99 in **post-COVID years** (2021-22) against 48 in pre-Covid years (2016-20). Overall, there has been a "**significant increase" in** the number of trafficked children before and after the pandemic.

◈ **Based on Average per year Trafficked children**:

➤ **Uttar Pradesh** saw the maximum number of children trafficked on an '**average per year – 267'** in the **pre-COVID phase (2016-19)** and **1,214 in post-COVID phase (2021-22),** or an increase of over **350 per cent** with the year 2021 reporting 2,055 cases**.**

➤ UP was followed by **Bihar and Andhra Pradesh,** together making up the **top three states** from where the **maximum numbers of children** were trafficked on an **average per year**.

➤ **Karnataka** showed a staggering increase in the number of children trafficked on an average per year, from six cases before COVID to 110 after it — **an 18-fold increase.**

About Human Trafficking:

◈ According to the UNODC, Human Trafficking is "**the recruitment, transportation, transfer, harbouring or receipt of people through force, fraud or deception, to exploit them for profit**."

◈ Human trafficking involves **recruitment, transportation, transfer, harbouring, or receipt of persons, by means of the threat or use of force or other forms of coercion, for exploitation.**

Constitutional Provisions:

● **Article 23**: **prohibits human trafficking and beggar** (forced labour without payment).

● **Article 24**: **forbids the employment of children** below the **age of 14 years** in dangerous jobs like factories and mines.

Child Trafficking in India:

◈ According to the **NCRB Report of 2021,** 2877 children were trafficked in India.

◈ Approximately **eight children were trafficked daily**, and the reports account for only those cases that **Anti-Human Trafficking Units** have registered; the unregistered traffic figure is enormous compared to this.

◈ The report also shows that trafficking increased in India by **28 per cent in 2021 compared to 2020 and 44 per cent of these victims are children.**

Laws related to prohibiting Human Traffic:

◈ **Immoral Traffic Prevention Act, 1986:** The purpose of this Act is to give effect to **the Trafficking Convention and to prohibit immoral human trafficking.**

➤ It constitutes authorities at **the centre and state level to combat trafficking**. However, it does not elaborate on the role, function, and composition of these authorities.

◈ **Criminal Law (Amendment) Act 2013:** It has come into force wherein **Section 370 of the Indian Penal Code** has been substituted with **Section 370 and 370A IPC** which provide for comprehensive measures to counter the menace of human trafficking.

◈ **Protection of Children from Sexual offences (POCSO) Act, 2012**, is a special law to protect children from sexual abuse and exploitation.

What are the causes of increasing Child Trafficking in India?

◈ **Root-cause issues:** Increase in Child trafficking in India is due to the root causes being- **poverty, a lack of education, and the need to financially support their family.**

◈ **Demand for bonded labours:** Due to the need for inexpensive labour in industries, many youngsters were trafficked and forced to serve as bonded labourers for reduced pay.

◈ **Economic disparities:** Demand for trafficking from low-income to high-income areas is fuelled by economic disparities both within and between nations.

◈ **High level of illiteracy:** Because **illiteracy prevents children, especially girls,** from knowing their legal rights, it has a substantial impact on human trafficking. Inadequate educational opportunities induce illiteracy. They are unable to act against exploiters as a result.

◈ **Booming sex industry:** Expanding the commercial **sex industry** in the country as well as abroad is another demanding reason.

◈ **Lack of political will** on the part of the government to create a strong system for law enforcement to use to combat trafficking.

Way forward:

◈ More community-based interaction and awareness are needed.

◈ Steps like **community-based rehabilitation** and revisiting the existing laws to deal with loopholes can be taken. Poverty-driven child labor needs to be addressed by cultivating more work for the families so that the children can be sent to school.

◈ To help all nations protect victims and **prosecute perpetrators**, there is a need to boost **technical aid and deepen collaboration.**

◈ To combat the threat of human trafficking, it is vital to improve the capability of both the police and NGOs.

ENSURE 5% QUOTA TO SPECIALLY–ABLED CANDIDATES IN EDUCATIONAL INSTITUTES: DELHI HC

Context: **The Delhi High Court (HC) has asked the Delhi Government to ensure that the mandate of the Rights of Persons with Disabilities Act, 2016 (RPwD) must be followed by allotting 5% reservation for disabled candidates in all educational institutions.**

◈ Now, the universities are providing **3% quota to the candidates** instead of the **mandated 5%.**

About the Order:

◈ The universities, as well as the **State Government**, are directed to ensure that in all educational institutions, the statutory provisions governing the field under the **RPWD Act** are followed and **5 per cent reservation** is provided to specially-abled persons.

◈ The order came on a **public interest litigation (PIL)** plea by **non-governmental organization** Justice for All, which alleged that the university was not providing **5% reservation** following the provisions of the Act.

What are the major issues faced by them?

◈ **Health:** A large number of disabilities are preventable, including those arising from medical issues during birth, maternal conditions, malnutrition, as well as accidents and injuries.

➤ Healthcare facilities and poorly trained health-workers in rehabilitation centres is another concern.

◈ **Education:** There are various issues such as availability **special schools, access to schools, trained teachers, and availability of educational materials for the disabled.**

➤ Further, reservation for the disabled in higher educational institutions has not been fulfilled in many instances.

◈ **Employment:** Even though many disabled adults are capable of productive work, disabled adults have far lower employment rates than the general population.

➤ The situation is even worse in the private sector, where much less disabled are employed.

◈ **Accessibility**: Physical accessibility in buildings, transportation, access to services etc still remains a major challenge.

◈ **Discrimination/Social Exclusion:** Negative attitudes held by the families of the disabled, and often the disabled themselves, hinder disabled persons from taking an active part in the family, community or workforce.

◈ **Inadequate data and statistics**: The lack of rigorous and comparable data and statics further hinders inclusion of persons with disabilities.

The major issues with collection of data and measuring disability are:

◈ **Difficult to define disability**

◈ **Coverage**: Different purposes require different disability data

◈ Reluctance in reporting disability as disability is considered to be a stigma in many places/societies

◈ Poor implementation of policies and schemes hinders the inclusion of disabled persons.

◈ Though various acts and schemes have been laid down with an aim to empower the disabled, their enforcement face many challenges.

Present data (Inaccuracy in numbers):

- **Census 2011:** Out of the total population of 121 crore, **about 2.68 Cr persons are 'Disabled' (2.21% of the total population).**

- **National Sample Survey Report 2018:** It showed 2.3% for rural and 2% for urban.

- **NFHS-5:** The question of disability was included for the first time in NFHS-5 (2019-2021) and it was observed that the disability prevalence was only 1% for rural areas and 0.9% for urban areas.

Globally, 15% of the world's population has a disability, as per the 2011 World Report on Disability from the **World Health Organization**.

What is the issue with NHFS data for PwD?

◈ The difference between the estimates can be traced to the different approaches of the surveys.

◈ **NFHS-5:** The NFHS 5 focuses on the **'de jure' definition of disability**, focusing on counting only people with benchmark disabilities under **five broad categories**.

◈ **Census 2011:** In contrast, Census 2011 had a **broader definition of disability focusing on self-identification.**

◈ NSSO **2018:** While the **76th round of NSS (2018),** which was about counting those with disabilities, covered all disabilities under the **Rights of Persons with Disabilities Act, 2016 including rare disabilities.**

Programmes and initiatives for PwD in India:

- Accessible India Campaign (Sugamya Bharat Abhiyan)

- National Fellowship for Students with Disabilities (RGMF)

- DeenDayal Disabled Rehabilitation Scheme

- Assistance to Disabled Persons for Purchase / fitting of Aids and Appliances (ADIP)

What are Constitutional Provisions related to Disability?

◈ **Article 41 of the Directive Principles of State Policy (DPSP)** states that State shall make effective provision for securing **right to work**, **to education and to public assistance** in cases of **unemployment, old age, sickness and disablement,** within the limits of its economic capacity and development.

◈ The subject of '**relief of the disabled and unemployable**' is specified in the **state list of the Seventh schedule of the constitution.**

The Rights of Persons with Disabilities Act 2016:

◈ **Definition:**
  ➤ Disability has been defined based on an **evolving and dynamic concept**.
  ➤ **Benchmark disability** refers to having at least **40% disability** of any type recognized under the Act.

◈ **Types:**
  ➤ The **types of disabilities** have been increased from **7 to 21.**
  ➤ The Act added **mental illness, autism, spectrum disorder, cerebral palsy, muscular dystrophy, chronic neurological conditions, speech and language disability**, **thalassemia**, **haemophilia, sickle cell disease**, multiple disabilities including deaf blindness, acid attack victims and **Parkinson's disease**.
  ➤ In addition, the Government has been authorized to notify any other category of specified disability.

◈ **Reservation:**
  ➤ It **increased the reservation** for people suffering from disabilities **from 3% to 4% in government jobs and from 3% to 5% in higher education institutes.**

◈ **Education:**
  ➤ Every child with benchmark disability between the age group **of 6 and 18 years** shall have the **right to free education**.
  ➤ **Government funded educational institutions** as well as the government recognized institutions will have to provide inclusive education.

◈ **Accessibility:**
  ➤ Stress has been given to ensure accessibility in public buildings in a prescribed time frame along with the **Accessible India Campaign.**

◈ **Regulatory Body:**
  ➤ The **Chief Commissioner for Persons with Disabilities** and the **State Commissioners** will act as regulatory bodies and **Grievance Redressal agencies**, monitoring implementation of the Act.

◈ **Special Fund:**
  ➤ A separate **National and State Fund** will be created to provide financial support to the persons with disabilities.

Types of Disabilities:

As per the **Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act, 1995** - A person with disability can be defined as one with **one or more of disabilities** falling under any of the below mentioned categories :

- **Blindness:-** A condition where a person suffers from any of the following conditions namely:-

  ➤ **Total absence of sight; or** Visual acuity **not exceeding 6/60 or 20/200 (Snellen)** in the better eye with correcting lenses; or

  ➤ **Limitation of the field of vision** subtending an angle of **20 degree or worse;**

  ➤ **Low vision**: A person with impairment of visual functioning even after treatment of standard refractive correction but who uses or is potentially capable of using vision for the planning or execution of a task with appropriate assistive device;

- **Cerebral Palsy**:- A group of non-progressive conditions of a person characterized by abnormal motor control posture resulting from brain insult or injuries occurring in the pre-natal, peri-natal or infant period of development;

- **Locomotor disability**:- Disability of the bones, joints or muscles leading to substantial restriction of the movement of the limbs or nay form of cerebral palsy;

- **Leprosy-cured**:- "Leprosy-cured person" means person who has been cured of leprosy but is suffering from-

- **Loss of sensation** in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;

- **Manifest deformity and paresis** but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;

- **Extreme physical deformity** as well as advanced age which prevents him from undertaking and gainful occupation and the expression "**Leprosy Cured"** shall be construed accordingly;

- **Mental retardation**:- Conditions of arrested or incomplete development of mind of a person which is specially characterized by sub normality of intelligence;

- **Mental illness**:- Any mental disorder other than Mental retardation

- **Hearing Impairment**:- Loss of sixty decibels or more in the better ear in the conversational range of frequencies

Government Interventions:

❖ **Accessible India Campaign: Creation of Accessible Environment for PwDs:** A nation-wide flagship campaign for achieving universal accessibility that will enable persons with disabilities to gain access for equal opportunity.

  ➤ The campaign targets at enhancing the accessibility of built environment, transport system and Information & communication ecosystem.

❖ **National Fellowship for Students with Disabilities (RGMF):** The scheme aims to increase opportunities to students with disabilities for pursuing higher education.

❖ **DeenDayal Disabled Rehabilitation Scheme:** Under the scheme financial assistance is provided to NGOs for providing various services to Persons with Disabilities, like special schools, vocational training centres, community based rehabilitation, pre-school and **early intervention etc.**

❖ **Assistance to Disabled Persons for Purchase / fitting of Aids and Appliances (ADIP):** The Scheme aims at helping the disabled persons by bringing suitable, durable, scientifically-manufactured, modern, standard aids and appliances within their reach.

SC ASKS CENTRE, SIX STATES TO RESPOND TO PLEA ON LYNCHINGS

Context: The Supreme Court asked the Centre and at least six States to respond to a plea about lynchings and mob violence refusing to stop.

What is Mob Lynching?

❖ **It is** a form of violence in which a mob, under the pretext of administering justice without trial, executes a presumed offender, often after inflicting torture and corporal mutilation.

❖ The term *lynch law* refers to a self-constituted court that imposes sentence on a person without due process of law.

CASE STUDIES

- **Dadri Lynching case** was held in Bisra Village, Uttar Pradesh in 2015. The person was lynched due to regional and communal differences. The person's name was Mohammad Akhlaq. He was accused of slaughtering a cow for storing its meat for consumption. When this came into the knowledge of the Hindu community of the village, they lynched both the father and son. The fact of the matter is that this case is considered as one of the first cases which were religious-based and in the name of the cow the person was lynched.

- **Alwar, Rajasthan:** Another instance happened in the Alwar District of Rajasthan in 2017. The issue pertinent in this case was that some people belonging to the Muslim community were accused of cattle smuggling and slaughtering of calves. The police department of Alwar filed a case against Khan for smuggling but he was permitted by the government to do so.

- **Delhi:** In 2017, a lynching case happened in Delhi. It was based on the caste system prevailing that people belonging to lower case or backward classes of people need to suffer. In this case, a rickshaw driver stopped some of the college students as they were urinating on the public wall due to intoxication. The students who were intoxicated became furious and lynched the rickshaw driver.

- **Palghar mob Lynching case:** It is pertinent to note that, on 16th April, 2020 a driver and two Sadhus were lynched by an angry mob. All the victims belonged to a village called Gadchinchale located in the Palghar district of Maharashtra. This unfortunate incident was fuelled by a rumour which was circulated on WhatsApp, wherein it was stated that there have been thieves operating in the village amidst the coronavirus lockdown.

Lynching laws in India:

❖ There is no national law made on mob lynching. Mob lynching is not defined in IPC, CRPC, and nor defined in the constitution.

❖ Though there are certain provisions in the IPC, for example-

  ➤ **Section 223 (a) of the Code of Criminal Procedure (CrPC), 1973** states that persons or a mob involved in the same offence in the same act can be tried together.

  ➤ **Sections 302** (murder)

  ➤ **Section 304** (culpable homicide not amounting to murder)

  ➤ **Section 307** (attempt to murder)

IMPACT OF MOB LYNCHING	REQUIRED MEASURES
• **Threat to law:** This act of people taking the law into their hands poses a serious threat to the Rule of Law and principles of Natural Justice. • **Threat to minority** groups in the country. • **Suppressing basic rights of minorities** • **It normalise such heinous crimes.** • **Economic loss** • **Health impacts:** Lynching incidents are an issue of public health. In the short-term, lynching leads to death and injury for the victims whereas in the long-term it can lead to psychological and physiological effects on present and future generations.	• **Strong measures:** States must take strong measures, including appointing nodal officers at district level, to curb such instances of violence in the name of cow protection. • **Proactive measures:** States should be far more vigilant and proactive in flagging rumours using social media and other platforms. Some states are doing it, others need to emulate these examples. • **More campaigns and awareness among people** • **Control on the spread of fake news**

UNITED NAGA COUNCIL SEEKS NRC IN MANIPUR

Context: The United Naga Council, an apex body of Nagas in Manipur, has asked the State government to immediately start the exercise to update the National Register of Citizens (NRC) in the State.

About the Naga council's ask:

❖ According to the council, in the wake of the **increasing influx of illegal immigrants**, the NRC is the only feasible mechanism to curb the **unwarranted population invasion in Manipur**.

❖ Manipur is inhabited by **three major communities** — the Meiteis, the Nagas and the Kuki-Zomis.

The **Meitei and Naga** communities are **considered indigenous**, while most of the **Kuki-Zomi people** are said to have **settled from Myanmar**.

◈ The State is affected from **Narco-terrorism** which can be addressed by **stopping illegal migration**.

The National Register of Citizens (NRC):

◈ **National Register of Citizens, 1951** is a register prepared after the **conduct of the Census of 1951** in respect of each village, showing the **houses or holdings in a serial order** and indicating against each house or holding the **number and names of persons staying therein.**

◈ The NRC was published only **once in 1951** and since then, it has **not been updated until recently.**

NRC and updating exercises in India:

◈ Nagaland attempted a similar exercise called **RIIN (Register of Indigenous Inhabitants of Nagaland)** in June 2019 to primarily sift the **indigenous Nagas from the non-indigenous Nagas.**

◈ More recently, the **Manipur Assembly** has resolved to implement the **National Register of Citizens (NRC)** and establish a **State Population Commission (SPC).**

> It has been **updated in Assam** only for now and the government plans to update it nationally as well.

What an updated National Register of Citizens (NRC) will do?

◈ **Tracking migration:** An updated NRC is likely to put an end to speculations about the actual number of illegal migrants in Assam in particular and the country in general.

◈ **Verified data:** It will provide a verified dataset to carry out meaningful debates and implement calibrated policy measures.

◈ **Deterrence:** Publication of an updated NRC is expected to deter future migrants from Bangladesh from entering Assam illegally.

◈ **Putting an end to suspicion:** Inclusion of actual names in the NRC will provide respite to all those Bengali speaking people in Assam who have been, hitherto, suspected as being Bangladeshis.

Challenges associated:

◈ **Flawed Process** - People who found themselves on the first list that was released on January 1, 2018, didn't find their names in the second. Even the family of a former President of India did not find mention on the list.

◈ **The parallel processes of NRC**, the voters list of the Election Commission, and the Foreigners' Tribunals with the help of the Assam Border Police, have led to utter chaos, as none of these agencies are sharing information with each other.

◈ Since such 'non citizens' can resort to **judicial relief to substantiate their citizenship claim**, it can lead to overburdening of judiciary which already reels under large number of pending cases.

➤ There is uncertainty about the future of those left out from the list.

◈ **Another option is instituting work permits**, which would give them limited legal rights to work but ensure they have no political voice. However, it is not clear what will be the fate of children of such individuals.

◈ With no end to uncertainty, NRC seems to be a process without an end.

PRESIDENT RETAINS POWER TO SCRAP ARTICLE 370: SUPREME COURT

Context: Recently, the Supreme Court (SC) raised the question whether the President's power to declare 'inoperative' Article 370 of the Constitution, will not continue to hold the field after the dissolution of the erstwhile State's Constituent Assembly on January 26, 1957.

What are the Powers of President under Article 370?

◈ **Clause (3) of Article 370** gave the **President Power to notify** the Article '**inoperative' or 'modify it'.**

◈ But a proviso had made it "necessary" that such a move would have to be recommended by the **Jammu and Kashmir (J&K) Constituent Assembly.**

Supreme Courts' views on Clause (3):

◈ According to the apex court, a Constituent Assembly is not **a permanent body** like the Parliament and the Supreme Court.

◈ The **J&K Constituent Assembly** was constituted for a specific purpose — to **draft the Constitution of J&K.**

> "**Functus officio**" is a Latin term meaning having performed his or her office. With regard to **an officer or official body**, it means without further authority or legal competence because the duties and functions of the original commission have been **fully accomplished.**

◈ It became **functus officio** once the J&K Constitution was framed.

◈ This proviso making the Constituent Assembly's 'recommendation' necessary before abrogation has no application.

◈ If the proviso ceased to operate, surely the **substantive part of Clause 3** in **Article 370** will remain.

Constitutional Provisions in support of the SC's argument:

◈ Article 370 was mentioned in the Constitution only **as a "temporary" provision**.

◈ However, it became permanently engrafted into the Constitution **after 1957** with the **dissolution of the Constituent Assembly.**

◈ Article mentions a **Constituent Assembly for J&K.** However, the Constituent Assembly was not convened until December 1951.

◈ It was then left to the people of J&K, through their Constituent Assembly, to decide if **Article 370** ought to be abrogated at all.

◈ Article 370 was called '**temporary**' because the Constitution always wanted the J&K people to decide their future.

◈ Article 370 could have been abrogated **only by a vote of confidence** in the Constituent Assembly.

What are the Legislative Powers of the President?

There are four legislative powers of President, as per the Constitution:

◈ He can send messages to either House of the Parliament.

◈ He **summons and prorogues** the Houses.

◈ He can dissolve the Lok Sabha and order fresh elections.

◈ He nominates **12 members** to the Rajya Sabha.

SIKKIM ANNOUNCED 1–YEAR MATERNITY LEAVE

Context: **Recently, the Sikkim government has announced a decision to provide 12-month maternity leave and one-month paternity leave to its employees.**

What are the present rules for maternity leave in States?

◈ **Maternity leave** is a period of time when a woman takes a break from work following the birth of a child. In India, maternity leave allows a woman employee to take time off work when her child is born.

◈ **Maternity Benefit Act of 1961:** Under the Maternity Benefit Act of 1961, female employees were only entitled to 12 weeks of maternity leave.

➤ The act is applicable to all establishments **employing 10 or more**.

◈ **Maternity Benefits Act of 2017:** The Maternity Benefits Act of 2017 increased the period to 26 weeks. Furthermore, noncompliance with the laws and regulations carries a penalty.

Important Government Interventions for Maternity benefits

● **Janani Suraksha Yojana** under the **National Health Mission** to link cash assistance to institutional deliveries.

● **Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)** provides a fixed day for assured, comprehensive and quality antenatal care free of cost to pregnant women on 9th of every month.

● **Pradhan Mantri Matru Vandana Yojana**

● **PoshanAbhiyan**

● **LaQshya Guidelines**

◈ **DPSP:** The Directive Principle of State Policy (DPSP) states that "the State shall make provision for securing just and humane conditions of work and for maternity relief."

◈ **Employees' State Insurance Act, 1948 (ESIA) and the Central Civil Services Rules, 1972:** Under the following scheme all non-season factories which run on power with the capacity of more than 10 employees are covered.

◈ **International convention:** Members of **International Labour Organization (ILO)** adopted a resolution in an **international convention on economic and social rights** in 2004 adopted a resolution providing equal opportunity for women.

➤ At this conference, a resolution was passed to give **14 weeks of maternity leave** to women.

➤ India is a member of the ILO.

Key-details of Sikkim's Policy:

◈ Himalayan state – **Sikkim** – has the **lowest population in India**, around 6.32 lakh.

◈ Thus, in order to **boost the population of indigenous communities in Sikkim**, the state government, through a notification, decided to provide **advance and additional increments** to its employees having **two or three children** with retrospective effect from 1 January, 2023.

◈ The notification mentioned **Department of Personnel** of the state government employees possessing **Sikkim Subject Certificate/Certificate**

of Identification shall get one advanced increment for having **two surviving children**.

About Sikkim:

◈ Sikkim became the **22nd State of India** included in the **Constitution (36th Amendment) Act 1975.** Located in the **eastern Himalayas**. It is one of the **smallest states in India.**

◈ **Population composition:**

➤ Roughly **three-fourths of Sikkim's residents** are **Nepalese in origin;** most speak a **Nepali (Gorkhali**) dialect and are **Hindu in religion and culture**.

➤ About **one-fifth of the population** consists of **Scheduled Tribes** (an official category embracing indigenous peoples who fall outside the predominant Indian social hierarchy).

➤ The most prominent of these tribal groups are the **Bhutia, the Lepcha, and the Limbu**; they all speak **Tibeto-Burman languages** and practice **Mahayana Buddhism** as well as the indigenous religion.

➤ There is a notable **Christian minority in Sikkim**, as well as a **tiny community of Muslims**.

➤ A small fraction of Sikkim's people belong to the **Scheduled Castes** (an official term designating those peoples who traditionally have occupied a low position within the **Indian caste system**).

Significance of the policy:

◈ The scheme will help in **conservation of Indigenous Tribal population.**

Major Tribes

● **Bhutia:** The Bhutia are a community of Sikkimese people living in the state of Sikkim in north-eastern India, who speak Drenjongke or Sikkimese, a Tibetic language fairly mutually intelligible with standard Tibetan.

➤ In 2001, the Bhutia **numbered around 60,300**. Bhutia here refers to people of Tibetic ancestry.

● **Lepcha:** Lepcha is a tribe of Himalayan range live at the North-East corner of India. They largely reside at **Meghalaya, Arunachal Pradesh, Bhutan, Sikkim and Darjeeling**. They have also migrated in other North-Eastern States for economic reason.

● **Limbu:** The Limbu are of **Mongolian stock** and speak a language belonging to the **Kiranti group of Tibeto-Burman languages.** It has its own alphabet (the Kirat-Sirijonga script), believed to have been invented in the **9th century.**

◈ **Furthermore, it would lead to the conservation of culture and ethnicity:** Sikkim's cultural life,

though showing strong **Tibetan influences**, retains a character derived from the various tribes of **Sikkim and their pre-Buddhist customs**.

◈ Many monasteries are repositories of wall paintings, **thang-kas (religious paintings mounted on brocade), bronze images, and other artworks**

DRAFT NATIONAL DEEP TECH STARTUP POLICY

Context: The Principal Scientific Adviser to the Government of India has put out a draft National Deep Tech Startup Policy (NDTSP) for public comment.

Highlights of the draft:

◈ **Objective**: The policy seeks to "ensure India's position in the global deep tech value chain," in areas such as **semiconductors**, **Artificial Intelligence (AI)** and **space tech.**

◈ The policy also includes **resource-intensive policy** approaches to attract global talent, such as offering networking opportunities to international **deep tech startups and experts interested** in relocating and contributing to the local ecosystem.

◈ The policy seeks to **bolster research and development** in deep tech start-ups, which work on fundamental and technical problems, unlike firms that monetize technology with distinguished business models.

◈ The policy also seeks to find approaches to provide financing to **deep tech start-ups at critical moments**, such as before they go to market with their products or ideas.

◈ The policy seeks to simplify the **intellectual property regime** for such start-ups, ease regulatory requirements, and proposes a slew of measures to promote these firms.

What is Deep Tech?

◈ **Deep tech or deep technology** refers to a class of **startup businesses** that develop new offerings based

on **tangible engineering innovation or scientific discoveries** and **advances.**

◈ Usually, such startups operate on, but are not limited to, **agriculture, life sciences, chemistry, aerospace and green energy.**

◈ Deep tech fields like **Artificial Intelligence, advanced materials, blockchain, biotechnology, robotics, drones, photonics, and quantum computing** are moving more and more quickly from early research to market applications.

State of India's Deep Tech Startups:

◈ India had over **3,000 deep-tech start-ups,** dabbling in new-age technologies like **Artificial Intelligence, Machine Learning (ML), Internet of Things, Big Data, quantum computing, robotics, etc**., at the end of 2021.

◈ **According to NASSCOM**, deep-tech start-ups in India raised **USD 2.7 billion** in venture funding in 2021, and now account for **over 12% of the country's** overall startup ecosystem.

◈ In the last decade India's deep tech ecosystem has grown **53%** and is at par with that in developed markets like **the US, China, Israel, and Europe**.

◈ Bengaluru accounts for **25-30% of India's deep-tech start-ups**, followed by **Delhi-NCR (15-20%)** and **Mumbai (10-12%).**

◈ **Deep-tech start-ups** are making their presence felt across sectors like **drone delivery** and **cold chain management to climate action and clean energy.**

Present challenges:

◈ **Scale and Time Challenge**: To build actual business applications and transfer them from the lab to the market, it takes concerted R&D.

◈ **Marketing:** Failure to collect adequate market intelligence, improper use of that **information, and insufficient data** on overseas markets are all marketing issues.

◈ **Lack of Capital:** Because DeepTech firms require more capital than ordinary tech startups, one of the most significant barriers to commercialization is funding.

   ▶ Furthermore, because deep technology involves previously unknown mechanics and algorithms, investors are hesitant to support such **early-stage systems** because they lack the knowledge to assess the new technologies' potential worth.

◈ **Cultural and Industrial Challenges:** Biotech firms in Asia, for example, face numerous obstacles from the government as a result of stringent laws, as this technology raises issues about biosafety, food safety, and ethics.

Government Interventions:

◈ **The Atal New India Challenge:** It has been launched under the **Atal Innovation Mission (AIM)** of the **NITI Aayog,** with an objective to serve as a platform for the promotion of Innovation Hubs, Grand Challenges, startup businesses, and other self-employment activities, particularly in technology-driven areas.

◈ **NASSCOM's Deep Tech Club (DTC) 2.0:** This scheme is aimed at scaling the impact to over **1,000 firms** that are leveraging technologies such as **AI, ML, Internet of Things, robotics, and blockchain.**

Way forward:

◈ The policy calls for a more **multi-pronged approach** to protect Indian interests.

◈ The **need of the hour** is a coordinated, comprehensive push to optimally engage with international partners and multilateral institutions to push the **Indian Deep Tech Ecosystem.**

GOVT ASKED PHARMA COMPANIES TO ADOPT WHO STANDARDS

Context: To overcome the deaths allegedly linked to "contaminated" India-manufactured drugs, the government has set a deadline for mandatory implementation of the Good Manufacturing Practices (GMP), and bringing them on par with World Health Organisation (WHO) standards.

Key-highlights

◈ According to **Health Ministry**, the Companies with a turnover of over **Rs.250 crore** will have to implement the **revised GMP** within **six months**, while **medium and small-scale enterprises** with turnover of less than Rs 250 crore will have to implement it **within a year.**

◈ **Need:** In India, only **2,000 of the 10,500 manufacturing units** were found to be compliant with the global WHO-GMP standards.

◈ The **GMP-WHO rule combination for Indian Pharmaceuticals** will lead **to at least 11 specific changes** in the manufacturing process on the ground, including introduction of a **pharmaceutical quality system, quality risk management, product quality review, and validation of equipment.**

◈ The companies will also have to introduce a **GMP-related computerized system**.

◈ These computer programmes will be designed to automatically record all the steps followed and checks done, which will ensure all the processes are followed.

◈ The companies will also have to carry out **stability studies** as per the climate conditions which includes that, they will have to **keep the drugs in a stability chamber**, set the proper **temperature and humidity**, and carry out an **accelerated stability test** as well.

Accelerated stability test:

● Accelerated stability testing increases the **rate of chemical degradation** and **physical change of a drug** by using **exaggerated storage conditions** as part of the formal stability testing program.

◈ **Significance of the Step:**

  ➤ It will ensure that all the **manufacturing units are at par with global standards**, reducing the need for repeated inspections by different regulators.

  ➤ It will also make **India a quality pharmaceutical hub,** and ensure that our citizens receive export-quality medicines too.

What is Good Manufacturing Practices (GMP)?

◈ Good manufacturing practice (GMP) is a system for **ensuring that products are consistently produced and controlled according to quality standards.**

◈ Most countries will **only accept import** and **sale of medicines** that have been manufactured to internationally recognized GMP.

◈ Governments seeking to promote their countries' export of pharmaceuticals can do so by making GMP mandatory for all pharmaceutical production and by training their inspectors in GMP requirements.

WHO's GMP guidelines:

◈ WHO's Good manufacturing practice (GMP) is that part of a **quality management system** to ensure that products are consistently produced and controlled to the quality standards appropriate to their intended use and as required by the marketing authorization.

◈ GMP is aimed primarily at diminishing the risks inherent in any pharmaceutical production; which may broadly be categorized into **two groups**:

  ➤ cross-contamination/mix (ups and

  ➤ False labelling.

◈ Manufacturers must not place patients at risk due to inadequate safety, quality or efficacy.

◈ For this reason, risk assessment has come to play an important role in WHO quality assurance guidelines.

India's GMP rules:

◈ India follows the guidelines by the **International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH).**

  ➤ ICH is an **international non-profit association** that brings regulatory authorities and pharmaceutical industry together to harmonize scientific and technical aspects of drug registration.

  ➤ ICH brings together the medicines regulatory authorities and pharmaceutical industry around the world.

  ➤ ICH was founded in **1990** which brings together the regulatory and pharma industry authorities. Together they create the ICH guidelines.

Recent Development

● The World Health Organization (WHO) and the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) collaborate to enhance the registry and sharing of regulatory information on medical products worldwide.

RESOURCE EFFICIENCY CIRCULAR ECONOMY COALITION (RECEIC)

Context: Recently, the Union Minister for Environment, Forest &Climate change (MoEFCC), has launched Resource Efficiency Circular Economy Industry Coalition on the sidelines of 4th G-20 Environment and Climate Sustainability Working Group and Environment and Climate Ministers' meeting in Chennai.

What is Circular Economy?

◈ Circular economy is an **economic model** that aims to **minimize waste and maximize resource efficiency** by keeping **products, materials, and resources in use** for as long as possible.

◈ It is a departure from the traditional linear economy, which follows a "take-make-dispose" pattern.

◈ In a circular economy, resources are kept in circulation through strategies such as recycling, reuse, remanufacturing, and sharing, creating a closed-loop system.

About Resource Efficiency Circular Industry Economy coalition (RECEIC):

◈ It is a first-of-its kind initiative for creating a **global coalition** to encourage resource efficiency and circular economy by **uniting nations, industries, and experts.**

◈ As many **as 39 multinational corporations (MNCs)** from sectors such **as steel, FMCG, electronics** came together to pledge to adopt **resource efficiency and circular economy principles.**

◈ **Aim:** To address environmental challenges rising from waste, including **plastics, microplastics, e-waste, and chemical waste**.

◈ The launch of RECEIC, involved signing of the **foundational charter** and **unveiling of the logo** which was attended by Ministers of seven countries such as **Mauritius, Denmark, Italy, Canada, UAE, France, and the European Union.**

Need for such initiative:

◈ Around **23 percent** of forests in India are **highly fire-prone** only 3.5 percent of **India's tree cover loss** is due to **forest fires** due to conservation. So, waste management and Industrial involvement for conservation is important.

◈ Also, India has committed to **restore 26 million hectares of forest land** and create **2.5 to 3 billion tonnes** of additional carbon sinks and 22 percent of its area under **Area Based Conservation** and to easily reach the target of the **Kunming Montreal Global Biodiversity Framework**.

◈ The Deep Ocean Mission aimed at exploring deep ocean resources and climate change advisory services, Coastal marine Spatial Planning and Mangrove Initiative for Shoreline Habitats and Tangible Incomes is also a mandate for India to revive the circular economy.

Significance:

◈ This initiative is poised to become a momentous achievement during the **G20 India Presidency**, representing a collective stride towards fostering on-the-ground efforts in resource efficiency and advancing the principles of circular economy.

BENEFITS OF CIRCULAR ECONOMY		
Environmental Benefits	**Economic Benefits**	**Social Benefits**
• Reduced Resource Extraction and Pollution • Preservation of Biodiversity • Mitigation of Climate Change	• Cost Savings and Increased Efficiency • Job Creation and Local Economic Development • Enhanced Business Resilience and Competitiveness	• Access to Affordable and Quality Goods • Improved Working Conditions and Labor Rights • Community Engagement and Empowerment

Government recent initiative to promote circular economy and sustainable growth:

The Union Budget 2023-24 has put the focus on sustainable development and a circular economy:

◈ **GOBARdhan**: The scheme aims to promote a circular economy by setting up 500 "waste-to-wealth" plants across the country, including 200 compressed biogas (CBG) plants and 300 community-based plants. The goal is to convert waste into valuable resources, reducing the country's carbon footprint and promoting sustainability.

◈ **Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI):** MISHTI aims to preserve and restore the mangrove ecosystem and provide livelihood opportunities for local communities.

◈ **Promoting Conservation Values** (**Amrit Dharohar**): It aims to promote the conservation of wetlands in the country.

◈ **Plastic Waste Management (Second Amendment) Rules, 2022:** They mandate to increase in the thickness of plastic carry bags to over 120 microns, and the phase-out of some single-use plastic products.

Similar Interventions:

• The **OECD** "**Resource Efficiency and Circular Economy" (RE-CIRCLE)** project provides policy guidance on resource efficiency and the transition to a circular economy.

• It aims to identify and quantify the impact of resource-efficient, circular economy policies to guide a range of stakeholders in OECD member countries and emerging market economies through quantitative and qualitative analysis.

• The project is embedded in on-going work by the OECD on resource efficiency and the transition to a circular economy.

EXTENSION OF PLI SCHEME TO CHEMICALS INDUSTRY

Context: The Finance Ministry has mentioned that the government is going to introduce a production-linked incentive (PLI) scheme for investments in the chemicals and petrochemicals sectors.

Key-highlights of the Information:

◈ As per the ministry, industries in India are urged to reduce its **reliance on imports of chemicals** that can be made in India.

◈ They also emphasized the need to step up their **adoption of newer technologies**, with sustainability and circularity, for any benefits to accrue from potential partnerships with global player.

What is Production-linked incentive (PLI)?

◈ Production Linked Incentive (PLI) is a scheme that aims to give companies incentives on incremental sales from **products manufactured in domestic units**.

◈ The scheme invites **foreign companies** to set up units in India, however, it also aims to encourage local companies to set up or expand **existing manufacturing units** and also to generate more employment and cut down the **country's reliance on imports** from other countries.

PLI schemes in India:

◈ **Initial Targeted Industries:**

➤ Mobile and allied Component Manufacturing, Electrical Component Manufacturing, and Medical Devices.

➤ Now expanded to Automobile and auto components, Electronics and IT hardware, Telecom, Pharmaceuticals, Solar modules, Metals

and mining, Textiles and apparel, White goods, Drones, Advanced chemistry cell batteries, and other sectors as well.

◈ **Incentives:** Calculated based on incremental sales. Range **from 1% to 20%** depending on the industry.

◈ **Additional Incentives:** In some sectors such as advanced **chemistry cell batteries, textile products, and the drone industry**, the incentive is based on **sales, performance, and local value** addition achieved over a period of **five years**.

Chemical industry in India:

◈ India's chemical industry is extremely diversified and can be broadly classified into **bulk chemicals, specialty chemicals, agrochemicals, petrochemicals, polymers and fertilisers.**

◈ Globally, India is the fourth-largest producer of agrochemicals after the United States, Japan and China.

◈ India is the **sixth-largest producer of chemicals** in the world.

◈ India is the second-largest manufacturer and **exporter of dyes and accounts** for about 16% of the world's production.

◈ The country's chemicals industry is **de-licensed, except for few hazardous chemicals**.

◈ The **Chemicals & Petrochemicals** demand in India is expected to nearly triple and reach **USD 1 trillion** by 2040.

◈ About **80% of India's petrochemicals capacity** is integrated with petroleum refineries. This gives India an edge in terms of petrochemical feedstock certainty.

Need to introduce PLI in chemical sector:

◈ **Boost indigenous manufacturing**: The additional production will support the entire chemical value chai.

◈ **Tackling issues**: Due to shifts of supply chain, rising sense of nationalism, accelerating commoditization, business integration and the rapid changes in the chemical industry are trends that have changed chemical industry dramatically.

Government Interventions:

◈ **'India Chem' 2022 initiative:**

➤ The Government is planning to redraft **Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) policy guidelines.**

➤ The theme for India Chem 2022 is "Vision 2030: Chemicals and Petrochemicals Build India".

◈ The government plans to implement PLI system with **10-20% output incentives** for the agrochemical

sector; to create an end-to-end manufacturing ecosystem through the growth of clusters.

◈ A 2034 vision for the **chemicals and petrochemicals sector** has been set up by the government to explore opportunities to improve domestic production, reduce imports and attract investments in the sector.

ECOSYSTEM OF HYBRID EVS

Context: As India is looking forward to increase its renewable energy dependence and following sustainable path of clean energy, the fraction of renewable sources in the power generation mix, and availability of fast-charging infrastructure are still less than ideal.

◈ The **hybrid EVs** offers a way to begin the transition instead of waiting.

What are Hybrid Electric Vehicles (EVs)?

◈ Any vehicle propelled by an electric drivetrain, taking electric power from a portable, electrical energy source, is called an **Electric vehicle (EV).**

◈ In a hybrid EV, an **internal combustion engine (ICE)** is used to produce electricity with an electrical generator.

> In an **internal combustion engine (ICE)**, the ignition and combustion of the fuel occurs within the engine itself. The engine then partially **converts the energy from the combustion to work**.

◈ A small battery, typically **1-5kWh,** is used in a **hybrid EV as an energy buffer** to store the electricity.

◈ The battery can't be charged from the grid.

What are the net emissions of hybrid EVs?

◈ Apart from fuel economy, an important metric is the net emissions of a vehicle.

◈ **Well-to-wheel emissions** include both **tailpipe emissions and emissions due to fuel production** – electricity or fossil fuels.

◈ The **life-cycle emissions** are a more comprehensive index that includes well-to-wheel emissions and emissions due to vehicle and **battery production, maintenance, and end-of-life recycling**.

◈ The grids of different countries are decarbonised to different extents at present.

◈ **In the case of full EVs**: The lower the emissions from power production, the lower the vehicle's well-to-wheel and life-cycle emissions.

How can hybrid or plug-in hybrid EVs help us decarbonise?

◈ The current focus in the industry is on **full EVs.**

◈ **Hybrid EVs – either full or plug-in hybrids –** present a big opportunity to lower emissions in the interim, i.e. from today, with ICE vehicles, until we have full **EVs powered 100% by renewable energy.**

◈ **Higher fuel economy** of hybrids in electric mode drastically reduces fuel **costs, emissions, and oil imports**.

◈ **Regenerative braking in hybrid EVs** – i.e. recovering the kinetic energy of the vehicle while slowing down instead of dissipating it as heat in the braking system – can improve fuel economy especially in urban areas with frequent stop-go conditions and in hilly conditions. An engine start-stop mechanism can also save fuel at traffic junctions and in heavy traffic.

◈ Finally, the purchase price of hybrid cars is only **5-15% higher than conventional vehicles** and is independent of the vehicle range.

What are the challenges to transitioning to electric mobility?

◈ **Lack of fast-charging infrastructure along highways:** This is vital because people generally want to own one affordable car serving both short and long-distance travel needs over 5-15 years. The lack of a fast-charging infrastructure will discourage people from buying full EVs.

◈ **Higher power requirement for heavy vehicles:** Fast-charging means power levels of **50-350 kW for cars** and up **to 1,000 kW** for heavy-duty vehicles.

◈ **Requirements of additional costs**: The high cost and wide variation are due to the high-capacity power connections required, the cost of making and installing a new transformer and cables; service-level agreements; DC charger plug options and quantities; customisation costs; labour costs; and permits.

◈ **Higher costs of Acquisition**: Mass-market price points of cars in the economically developing countries are much lower, to about 12,000 dollars – whereas EVs with a range of 300-400 km will reach parity with conventional vehicles in the richest countries at a **price of 25,000-35,000 dollars in the short term**.

Government Interventions:

◈ **The Faster Adoption and Manufacturing of Electric Vehicles (FAME) Scheme II**, which provides incentives for EV manufacturers and buyers. These incentives include subsidies, tax rebates, preferential financing, and exemptions from road tax and registration fees.

◈ **The National Electric Mobility Mission Plan (NEMMP),** which sets out the target to achieve 6-7 million sales of hybrid and electric vehicles year on year from 2020 onwards by providing fiscal incentives.

◈ **The National Mission on Transformative Mobility and Battery Storage**, which seeks to create a comprehensive ecosystem for the adoption of EVs and support the establishment of Giga-scale battery manufacturing plants in India.

◈ **The Production Linked Incentive (PLI) scheme**, which provides incentives for the manufacturing of electric vehicles and components.

◈ **The Vehicle Scrappage Policy**, which provides incentives for the scrapping of old vehicles and the purchase of new electric vehicles.

◈ The **Go Electric campaign** aims to create awareness on the benefits of **EVs and EV charging infrastructure**.

UNDISPOSED TOXIC WASTE AT BHOPAL DISASTER SITE

Context: **According to a report by the Central Pollution Control Board (CPCB) submitted to the National Green tribunal (NGT), 337 metric tonnes (MT) of hazardous waste stored on the Union Carbide India Limited (UCIL) premises — the site of the 1984 Bhopal gas tragedy is yet to be disposed of.**

Points from the Report:

◈ According to the CPCB report, an **oversight committee** meeting chaired by Union Environment Minister has recommended the Department of Expenditure to release **Rs.126 crore to the M.P. government for remediation and disposal of the 337 MT of toxic waste**.

◈ It also noted that as per a **2009 joint study by NEERI and the National Geophysical Research Institute (NGRI),** the UCIL site contains about **1 million tonnes of contaminated soil**, around **1 tonnes of mercury**

spillage, and **nearly 150 tonnes of underground dumps**.

◈ In 2022, an NGT-appointed committee had found the "**possibility of contamination of soil**" and suggested "**speedy disposal**" of the waste.

About Bhopal Gas Tragedy:

◈ Post-midnight on December 3, 1984, **Methyl Isocyanate (MIC) (Chemical formula- CH3NCO or C2H3NO)** leaked from the **pesticide plant of Union Carbide (now Dow Chemicals)**, an **MNC**, in Madhya Pradesh capital Bhopal.

> ▶ It is estimated that about **40 tonnes of gas and other chemicals leaked** from the Union Carbide factory.

> **Methyl isocyanate** is **extremely toxic gas** and if its concentration in the air touches **21ppm** (parts per million), it can cause death within minutes of inhaling the gas.

◈ It is one of the worst chemical disasters globally and still continues to have its ill effects on the people of the affected areas.

◈ After the tragedy, the government of India enacted a **Public Liability Insurance Act (1991),** making it mandatory for industries to get insurance the premium for this insurance would contribute to an **Environment Relief Fund** to provide compensation to victims of a Bhopal-like disaster.

What Hazardous Waste means?

◈ "Hazardous waste" means any waste which by reason of any of its **physical, chemical, reactive, toxic, flammable, explosive or corrosive** characteristics causes danger or is likely to cause **danger to health or environment,** whether alone or when in contact with other wastes or substances

Hazardous Waste Management:

Stockholm Convention:

● The **Stockholm Convention** is a global treaty that aims to **protect human health and the environment** from the effects of **Persistent organic pollutants (POPs).**

● The Convention entered into force on May 17, 2004.

● The Stockholm Convention, which currently **regulates 29 POPs**, requires parties to adopt a range of control measures to reduce and, where feasible, eliminate the release of POPs.

◈ Hazardous-waste management, is the **collection, treatment, and disposal of waste material** that, when improperly handled, can cause **substantial harm to human health** and safety or to the environment.

◈ Hazardous wastes can take the **form of solids, liquids, sludges, or contained gases**, and they are generated primarily by chemical production, manufacturing, and other industrial activities.

◈ They may cause damage during **inadequate storage, transportation, treatment, or disposal operations**.

◈ Improper hazardous-waste storage or disposal frequently contaminates surface water and groundwater supplies as harmful water pollution and can also be a source of dangerous land pollution.

◈ People living in homes built near old and abandoned waste disposal sites may be in a particularly vulnerable position.

◈ In an effort to remedy existing problems and to prevent future harm from hazardous wastes, governments closely regulate the practice of hazardous-waste management.

What are the various reasons behind such leaks?

◈ **Poor Waste Management:** Inadequate disposal of industrial waste can lead to the release of neurotoxic gases. For example, dumping toxic chemicals into sewers can cause dangerous chemical reactions, as seen in the Ludhiana gas leak incident.

◈ **Inadequate Maintenance of Industrial Plants:** Poorly maintained plants and storage facilities can lead to gas leaks. The Bhopal gas tragedy is an example of a catastrophic gas leak caused by inadequate safety measures and maintenance at a chemical plant.

◈ **Lack of Regulation and Monitoring:** Weak enforcement of environmental regulations and insufficient monitoring of industries and government authorities can result in hazardous gasleaks. Insufficient oversight allows industries to operate without proper safety measures, thereby increasing the risk of gas leaks.

◈ **Overcrowded Urban Areas:** The coexistence of factories and residential buildings in densely populated areas increases the risk of exposure to harmful gases. Inadequate urban planning and zoning regulations contribute to this problem, as seen in the Vizag gas leak incident.

◈ **Infrastructure Failures:** Damaged or poorly maintained pipelines and storage tanks can lead to gas leaks. In some cases, ageing infrastructure and lack of proper maintenance can result in hazardous situations.

Laws governing Hazardous Wastes:

The Indian government has enacted various regulations to prevent neurotoxic gas leaks, such as:

◈ **Environmental Laws:** The government enforces environmental laws like the **Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981,** to regulate the discharge of pollutants and protect the environment.

◈ **Hazardous Waste Management**: The **Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016,** govern the safe handling, storage, and disposal of hazardous waste to minimize the risk of toxic gas leaks.

◈ **Factory Licensing and Inspection:** Factories handling hazardous chemicals must obtain licenses under the **Factories Act, 1948,.** Further, they are subject to regular inspections to ensure compliance with safety standards and regulations.

◈ **Public Liability Insurance Act**: The **Public Liability Insurance Act, 1991,** requires industries dealing with hazardous substances to have insurance policies, providing compensation in case of accidents, including neurotoxic gas leaks.

◈ **Chemical Accidents Rules**: The **Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996,** outline safety requirements and emergency response plans for industries handling hazardous chemicals.

◈ **NDMA guidelines**: The NDMA has established clear guidelines on Chemical Disaster Management for various authorities in India. These guidelines promote a proactive and multi-disciplinary approach to chemical disaster preparedness and response.

ROOM TEMPERATURE SUPERCONDUCTIVITY

Context: **Recently, two South Korean researchers proposed papers, claiming that a 'lead-based compound' developed by them had shown superconducting properties at room temperature, under normal pressure conditions.**

◈ The discovery has the potential to **revolutionize the technology space**, and be one of the most impactful scientific discoveries of this century.

The first material to have been discovered to show **super conductive properties** was **Mercury,** which becomes a superconductor at close to **270 degree Celsius** below zero.
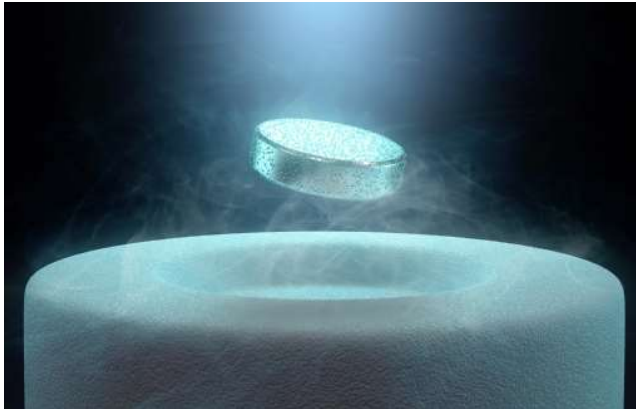
What is Superconductivity?

◈ **Superconductivity** refers to a state in which a **material offers zero,** or near-zero, resistance to electric current.

◈ A current is nothing but the **movement of charged particles**, electrons in most cases, in a particular direction. When the electrons move, they **collide, and interact,** with other atoms in the material.

◈ The current flowing **encounters resistance** which is an essential property in **electrical conductivity**.

◈ Resistance involves a **loss of energy,** mostly in the form of heat. This is the reason why **electrical appliances** get heated is this resistance.

What are Superconducting materials?

◈ Most of the other materials commonly used as superconductors are **Lead, Aluminum, Tin, Niobium, and several others** –at comparable temperatures, called **critical temperature**.

◈ There are several elements that show superconductivity at **higher temperatures** like up to **150 degrees.**

◈ Scientists are looking for a material that can display **superconductivity at room temperature** (usually considered to be **between 20 and 25 degree Celsius**) and under **normal pressure conditions**.

How Superconductivity helps?

◈ Elimination of the **electric resistance** can result in super-efficient electrical appliances like removal of **transmission losses** in power cables, and massive gains in energy.

◈ Also, Superconducting materials show very interesting behaviour under **magnetic field** which allows the functioning of systems like the **MRI scan machine** and the **superfast Maglev trains** that float above the tracks.

◈ Superconductors have very **critical uses** in a wide variety of other scenarios as well.

What are the existing issues faced to induce superconductivity?

◈ As of now, superconductivity can be achieved only at very low temperatures, more than **250 degree** Celsius below zero, very close to absolute zero which is – **273 degree Celsius**.

◈ Additionally, some compounds are difficult to be produced; they are **brittle and chemically unstable**.

◈ The need of low temperatures for the materials to become superconductive, close to the absolute zero, which results in **high operating costs.**

Why the discovery of Room temperature conductivity significant?

◈ It has applications in **magnetic resonance imaging (MRI) machines, low-loss power lines, and ultra-powerful superconducting magnets to mobile-phone towers.**

◈ Researchers are also experimenting with them in **high-performance generators for wind turbines.**

Other researches related to superconducting materials:

◈ Recently, the researchers have created a material that is superconducting at room temperature, however, it only works **at a pressure of 267 Gigapascals (GPa),** which is equivalent to about **three-quarters of pressure** at the centre of Earth (360 GPa).

◈ **Material Used:** A mixture of **carbon, hydrogen and sulfur** was put in a microscopic niche carved between the tips of two diamonds (diamond anvil) and laser light was used on them to trigger chemical reactions.

India's steps in similar direction:

◈ Various **Indian research groups work** on developing novel superconducting materials, and also strive to bring upon significant improvements in the functioning of already existing diverse superconductors ranging from the commonly used **metallic A-15 compounds** to **cuprates, boro-carbides, borides, iron pnictides and chalcogenides to the more recent topological ones.**

◈ **Some of the recent developments are:**

➤ topological insulators superconductivity;

➤ superconductivity at interface of insulator ultra-thin films;

➤ Size effects in Nano structured superconductors along with superconducting junctions, circuits and qubits.

RULES GOVERNING SPACE JUNK

Context: According to the Australian Space Agency, recently found object on Australian shore has been confirmed to be the debris of an Indian Space Research Organisation (ISRO) rocket.

◈ ISRO has agreed with the assessment, saying the debris could be from one of its **Polar Satellite Launch Vehicle (PSLV) rockets.**

What is Space Junk?

◈ Space junk, or space debris, is any piece of machinery or debris left by humans in space.

◈ It can refer to big objects such as dead satellites that have failed or been left in orbit at the end of their mission.

◈ It can also refer to smaller things, like bits of debris or paint flecks that have fallen off a rocket.

◈ All space junk is the result of us launching objects from Earth, and it remains in orbit until it re-enters the atmosphere.

◈ However, there is no regulation against these anti-satellite tests.

Space junk (The numbers)

● 2,000 active satellites in Earth's orbit

● 3,000 dead satellites in Earth's orbit

● 34,000 pieces of space junk larger than 10 centimetres

● 128 million pieces of space junk larger than 1 millimetre

● One in 10,000: risk of collision that will require debris avoidance manoeuvres

● 25 debris avoidance manoeuvres by the ISS since 1999

How much is India responsible for?

◈ India still produces much less space junk than the top three polluters: Russia, the US, and China, according to ODPO data.

◈ Indian-made space debris, however, is on the rise - from 117 pieces in 2018 to 163 in 2019.

CAUSES OF SPACE DEBRIS	CONSEQUENCES OF SPACE DEBRIS
● Defunct satellites ● Missing equipment ● Rocket stages ● Weapons	● Fragmentation incidents ● Small fragments can damage solar panels on active satellites ● Can cause damage and disperse pollutants into the atmosphere ● Congestion

---

Existing Framework:

◈ The **Liability Convention of 1972, the Moon Agreement of 1979, the Outer Space Treaty of 1967, the Rescue Agreement of 1968, and the Registration Convention of 1975** are all relevant legal frameworks for outer space operations.

◈ The **Outer Space Treaty (OST) of 1967**, also referred to as the Constitution of Space Law because it entails the fundamental principles of space operations, is the most important of them all.

Provisions in *magna carta* of space law

● **Article VI of OST**, which declares that States Parties to the Treaty shall bear international responsibility for national activities in outer space.

● **Article VII of OST**, which declares that State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty

---

● **Article IX of OST**, which prescribes that the launching state should take 'appropriate measures' in case it believes that their space exploration will lead to 'harmful contamination of outer space.

Government interventions pertaining to space debris

◈ **ISRO System for Safe & Sustainable Operations Management (IS4OM):** IS4OM is ISRO's holistic approach to ensure the safety of space assets and thus, sustains the utilization of outer space for national development.

◈ **Project NETRA**: It is an initiative by the Indian Space Research Organisation (ISRO) which is an early warning system in space to detect debris and hazards to the Indian satellites.

◈ In 2025, the **European Space Agency** will launch the first space mission to remove debris from Earth's orbit.

◉◉◉◉◉

Section B
[CONTEMPORARY ISSUES BASED ESSAY]

<table>
<tr><td colspan="2"><h2>Topic</h2></td></tr>
<tr><td>ᘒ</td><td>Mines and Minerals (Development and Regulation Amendment) Bill, 2023</td></tr>
<tr><td>ᘒ</td><td>Lok Sabha passes Jan Vishwas (Amendment of Provisions) Bill, 2023</td></tr>
<tr><td>ᘒ</td><td>Bill proposed for selection of 'President as a Visitor' to IIM Institutions</td></tr>
<tr><td>ᘒ</td><td>Rajya Sabha passes Multi-State Cooperative Bill 2023</td></tr>
<tr><td>ᘒ</td><td>Cinematograph (Amendment) Bill, 2023</td></tr>
</table>

MINES AND MINERALS (DEVELOPMENT AND REGULATION AMENDMENT) BILL, 2023

Context: The Rajya Sabha approved the Mines and Minerals (Development and Regulation Amendment) Bill, 2023 which seeks larger participation of the private sector in mineral exploration and production, including that for sought-after lithium.

Key-highlights of the Bill:

◈ The Bill amends the **Mines and Minerals (Development and Regulation) Act, 1957**. The Act regulates the mining sector.

◈ **Out of restrictions**: The **reform initiative** in the Bill brings lithium out from the **list of restrictive atomic minerals** where permission to mine could only be granted by the Centre to government companies.

India's Mining Industry:

● Mining industry plays a crucial role in the country's economy, serving as the backbone for manufacturing and infrastructure sectors.

● According to the **Ministry of Mines,** the total value of mineral production (excluding atomic and fuel minerals) during 2021-22 amounted to Rs 2,11,857 crore, indicating an impressive increase of approximately 31.96 percent compared to the year before.

◈ **Welcomed private players:** The change would allow auction of this critical mineral, used extensively for making batteries for electric vehicles, by the private sector.

◈ **Forestry clearance process**: The amendment Bill will also dispense with the **cumbersome forestry clearance process** for mine reconnaissance and prospecting operations, making it easier for the private sector to participate in exploration of the country's mineral resources.

> **Reconnaissance operations** are defined as operations undertaken for preliminary prospecting and include: (i) aerial surveys, (ii) geophysical, and (iii) geochemical surveys. It also includes geological mapping.

◈ **Auction power:** The Bill empowers the central government to exclusively auction mining lease and composite exploration licence for certain critical high value minerals such as gold, silver, platinum and copper.

◈ **Exploration licence**: One of the major reforms proposed in the Bill is to introduce exploration licence for deep-seated and critical minerals. The exploration licence granted through auction will allow the licence from private sectors to undertake **"reconnaissance" and prospecting operations** for critical and deep-seated minerals.

◈ **Composite mineral licence:** The reform proposals in the amendment legislation also include allowing states to grant composite mineral licence without having to get central nod.

◈ **Fixing mineral-wise maximum area:** It will also raise and fix mineral-wise maximum area limits for mineral concessions to provide larger and economically viable mines to investors.

➤ For prime minerals such as **iron ore**, the maximum area for prospecting licence and mining lease has been doubled to 50 sq. km and 20 sq. km respectively.

➤ This would allow private entries to get same land area for mining as was earlier being given to government companies and that also by the state governments itself without any need for central approval.

Critical and strategic minerals:

● The amendment has now proposed to bring 8 of 12 atomic minerals, into a new category called critical and strategic minerals, including

➤ lithium bearing minerals

➤ zirconium bearing minerals

➤ beach sand minerals

➤ titanium bearing minerals

➤ minerals of rare earth group containing uranium and thorium

What are Critical Minerals?

◈ Critical minerals are elements that are the building blocks of essential modern-day technologies, and are at risk of supply chain disruptions.

◈ These minerals are now used everywhere from **making mobile phones, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.**

❖ Based on their individual needs and strategic considerations, different countries create their own lists.

> Though India has **6% of the world's rare earth reserves**, it only produces 1% of global output, and meets most of its requirements of such minerals from China.

Recent government interventions:

❖ **Mineral Security Partnership (MSP)**: India joined **Mineral Security Partnership (MSP),** a US-led collaboration that aims to catalyse public and private investment in critical mineral supply chains globally.

ELEMENTAL CLASSIFICATION:

Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium and Cadmium.

➤ The MSP includes **Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, UK, the European Commission, Italy, and now India.**

❖ **Identification of critical minerals:** Recently, the Centre has identified '**30 critical minerals**', which are essential for the country's economic development and national security.

LOK SABHA PASSES JAN VISHWAS (AMENDMENT OF PROVISIONS) BILL, 2023

Context: Recently, Lok Sabha passed the Jan Vishwas (Amendment of Provisions) Bill, 2023 introduced by Minister of Union and Commerce which aims at giving further boost to Ease of Living and Ease of Doing Business.

Background:

❖ Bill was first introduced in Lok Sabha in December 2022. Later, it was referred to the **Joint Committee of the Parliament.**

❖ Subsequently, the committee finally adopted its Report.

❖ All the ministries and departments concerned accepted the **six recommendations** out of seven made by the committee and it was tabled and passed on 27 July, 2023.

Key-Features of the Bill:

❖ **Decriminalization:** The Bill seeks to give a boost to the business ecosystem in the country by **decriminalizing many minor offences** and replacing them with monetary penalties under **42 Central Acts** overseen by 19 Ministries.

➤ These are administered by different Union ministries, including finance, agriculture, commerce, environment, road transport and highways, food production and distribution, and electronics and IT.

❖ Decriminalization is proposed to be achieved in the following manner: -

➤ Both Imprisonment and/or Fine are proposed to be removed in some provisions.

➤ Imprisonment is proposed to be removed and fine retained in few provisions.

➤ Imprisonment is proposed to be removed and Fine enhanced in few provisions.

➤ Imprisonment and Fine are proposed to be converted to Penalty in some provisions.

➤ Compounding of offences is proposed to be introduced in few provisions.

❖ **Removal of penalties:** The Bill removes all offences and penalties under the **Indian Post Office Act, 1898.**

❖ **Periodic revision of fine:** A distinctive feature of the proposed law is an increase of 10% of the minimum amount of fine and penalty levied after the expiry of every three years.

❖ **Changes in grievance redressal mechanisms:** There have been changes in **grievance redressal mechanisms** and the appointment of one or more Adjudicating Officers for accessing penalties.

What is the need for such a law?

❖ **Essential for economic growth:** Micro, small, and medium-scale businesses significantly contribute to India's GDP and play a crucial role in the economy. Effective and efficient business regulations are essential to facilitate their transition to the formal sector, create jobs, and boost income.

◆ **Burden of excessive compliance:** Currently, there are 1,536 laws which translate into around 70,000 compliances that govern doing business in India. The burden of excessive compliances is particularly challenging for MSMEs.

◆ **Challenging imprisonment clause:** Out of the 69,233 unique compliances, 26,134 have imprisonment clauses as penalties for non-compliance, which adds to the challenges faced by businesses.

◆ **Constant barriers:** Cumulative legislation, rules, and regulations have created barriers to the flow of ideas, organization, entrepreneurship, and economic growth.

◆ **Additional cost:** An average manufacturing enterprise with over 150 employees deals with 500-900 compliances annually, incurring substantial costs of Rs 12-18 lakh per year.

◆ The Jan Vishwas Bill envisages decluttering the system and shedding the baggage of archaic and obsolete laws.

Advantages of such laws

◆ **Promote ease of living:** The Bill aims to reduce compliance burden and promote ease of living and doing business in the country.

◆ **Freedom to work:** People, companies, and government agencies can work without being concerned of being imprisoned for small-scale, procedural or technical errors.

 ➤ Ensuring adherence to law by businesses and citizens, without losing the rigor of the law.

◆ **Reducing burden on judiciary:** Decrease the number of pending cases and contribute to a more effective and efficient administration of justice.

> As per the **National Judicial Data Grid**, as of July 2023, out of a total of 4.4 crore pending cases, 3.3 crore cases are criminal proceedings.

◆ **Reduced cost:** It will reduce time and costs for both government and businesses.

BILL PROPOSED FOR SELECTION OF 'PRESIDENT AS A VISITOR' TO IIM INSTITUTIONS

Context: Recently, the Centre introduced a bill to make amendments in the Indian Institute of Management (IIM) Act 2017 in the Parliament, to make the 'President the Visitor' of all IIMs.

> **Who is a Visitor?**
>
> The Visitor may, from time to time, appoint one or more persons to review the **work and progress** of the University, including **Colleges and Institutions** maintained by it, and to submit a report thereon; and upon receipt of that report, the Visitor may, after obtaining the views of the Executive Council.

Background:

◆ The move could potentially curb the autonomy granted to **all Indian Institutes of Management (IIMs)** in 2017, regarding the **one-year executive course** offered for MBA.

◆ In July 2020, the **Education Ministry** has also given directions against the one-year executive MBA degree, saying it is "**not in accordance with the UGC Regulations**".

◆ However, the IIMs defended their decision and continued to run the programme.

About the proposed amendment:

◆ The Bill proposes to appoint the **President of India as the "Visitor**" of every IIM through an insertion of a **new section, (10 A),** in the principal 2017 Act.

◆ The amendment is going to restrict the **IIM Board** of the power to **select and appoint chairpersons and directors to the institutes.**

◆ Under the amendments, the **Visitor** will have the **power to appoint the Chairperson** to the **Board of Governors (BoGs)** of the institute, and **nominate an individual** to the search-cum-selection committee for the positions of Director.

◆ As per the Bill, **the Visitor** will also have the **power to appoint the Chairperson** to the Coordination Forum of the institute.

◆ The amended bill has done away with **Section 17 of the IIM Act 2017** that gave powers to the board to initiate an **inquiry in the functioning of an IIM**, if required.

◆ While the **central government** does not have any power at present to order the IIMs on any matter, the amendments make it so that any directive from the **Ministry of Education** would have to be implemented by the institute.

What is the present system of IIMs?

◆ The **BoG,** is the principal **executive body** of the IIMs, regulates the functioning of the institutes.

◈ Besides the chairperson, it comprises **one nominee of the central government** and **one nominee of the respective state governments,** among others.

◈ Under the **IIM Act, 2017**, the BoG had the power to appoint the chairman, chosen from among eminent persons distinguished in the field of industry or education or science or technology or management or public administration or such other field.

◈ A retired **high court judge** was to conduct the **inquiry in the functioning of an IIM**, based on which the board would take the decision.

Powers of President as a Visitor:

◈ The **President of India** shall be the **Visitor of the University**.

◈ **Functions:**

➤ The Visitor may, from time to time, appoint one or more persons to review the work and progress of the University, including Colleges and Institutions managed by it.

➤ It also submits a report thereon; and upon receipt of that report after obtaining the views of the **Executive Council** through **the Vice-Chancellor**, takes such action and issues such directions as he considers necessary in respect of any of the matters dealt with in the report and the University shall be bound to comply with such directions.

◈ **Powers:**

➤ The Visitor shall have the **right to cause an inspection** to be made by such person or persons as he may direct, of the University, its **buildings, laboratories and equipment**, and of any College or Institution maintained by the University or admitted to its privileges; and also of **the examinations, teaching and other work conducted** or done by the University and to **cause**

an inquiry to be made in like manner in respect of **any matter connected with the administration or finances of the University, Colleges or Institutions.**

Concerns associated:

◈ **Transfer of Autonomy**: The **search and selection committee**, headed by the chairman of the BoG, will still be there. But in the amended bill, the director will be appointed by the BoG with prior approval of the Visitor.

◈ **Changing essence of the Board**: The amendments are certainly a change from the original philosophy of the bill, which called for accountability of the board and gave it autonomy. Though internationally the concept of a board has worked, there have been a few instances in IIMs which were concerning.

Indian Institute of Management (IIMs) in India:

● The Indian Institutes of Management (IIMs) located at **Ahmedabad, Kolkata, Bangalore, Lucknow, Indore, Kozhikode and Shillong** are institutions of excellence, established with the objectives of imparting high quality management education and training, conducting research and providing consultancy services in the field of management to various sectors of the Indian economy.

● During the **Eleventh Five Year Plan**, six new IIMs have been set up at **Rohtak (Haryana), Raipur (Chhattisgarh), Ranchi (Jharkhand), Tiruchirappalli (Tamil Nadu), Kashipur (Uttarakhand) and Udaipur (Rajasthan).**

● These Institutions are recognized as **premier management institutions**, comparable to the best in the World for teaching, research and interaction with industries.

● All the IIMs are **registered Societies** governed by their **respective Board of Governors**.

RAJYA SABHA PASSES MULTI-STATE COOPERATIVE BILL 2023

Context: **Rajya Sabha passed the Multi-State Cooperative Societies (Amendment) Bill, 2023.**

◈ The Bill had been approved by Lok Sabha recently, and was now passed in Rajya Sabha by **voice vote.**

Highlights of the Bill:

◈ **Objective:** The Bill seeks to establish a 'Cooperative Election Authority' with a view to introducing electoral reforms in the cooperative sector.

◈ **Need of the Bill**: There are about **8.6 lakh cooperatives in the country**, out of which active

Primary Agricultural Cooperatives (PACs) are around 63,000 which needs regulations.

◈ The Bill amends the **Multi-State Co-operative Societies Act (MCSA), 2002**. It establishes the Co-operative Election Authority to conduct and supervise elections to the **boards of multi-state co-operative societies**.

◈ A multi-state co-operative society will require prior permission of government authorities before the redemption of their shareholding.

◈ A **Co-operative Rehabilitation, Reconstruction and Development Fund** will be established for the revival of sick multi-state co-operative societies. The Fund will be financed through contributions by profitable multi-state co-operative societies.

◈ The Bill allows state co-operative societies to merge into an existing multi-state co-operative society, subject to the respective state laws.

What are Multi-state Cooperative societies?

◈ They are societies that have operations in more than one State, for instance, a farmer producers Organisation that procures grains from farmers from multiple states.

At present, India has more than **1,500 multi-State cooperative societies**, with the highest number being in Maharashtra.

◈ The **MSCS Act 2002** was passed to govern such cooperatives whose members and areas of operation are spread across more than one state.

Why multistate cooperative societies are significant?

◈ The mission of the multi-state society is to facilitate the voluntary formation and democratic functioning of cooperatives as peoples institutions based on **self-help and mutual aid** and enable them to promote their economic and social betterment and to provide functional autonomy.

◈ Cooperative Society provides **financial assistance to its members**. The members are responsible for raising capital to help those in need.

◈ It mainly protects the weaker sections within **rural communities from exploitation by wealthy individuals and companies.**

Laws governing Cooperative societies in India:

◈ As per the Constitution, states regulate the **incorporation, regulation, and winding up** of state co-operative societies.

◈ **Parliament** can legislate on matters related to **incorporation, regulation, and winding up** of multi-state co-operatives.

◈ The **Multi-State Co-operative Societies Act, 2002** provides for the formation and functioning of multi-state co-operatives.

◈ In 2011, the Constitution was amended (adding Part IXB) to specify guidelines for running co-operative societies.

◈ **These guidelines provide for**: (i) composition of the boards of co-operatives, (ii) election of members of the board, (iii) audit of accounts of co-operative societies, and (iv) supersession of the board.

The Supreme Court, in July 2021, held that **Part IXB** will only be applicable to multi-state co-operative societies, as states have the jurisdiction to legislate over state co-operative societies.

What are the present concerns in management of Cooperatives?

◈ Inadequacies in governance

◈ Politicisation and excessive role of the government

◈ Inability to ensure active membership

◈ Lack of efforts for capital formation

◈ Inability to attract and retain competent professionals

CINEMATOGRAPH (AMENDMENT) BILL, 2023

Context: Recently, the Parliament has passed the Cinematograph (Amendment) Bill, 2023.

About Cinematograph (Amendment) Bill, 2023:

◈ **Objective:** The bill expands the scope of the law from censorship to also **cover copyright and introduces stringent anti-piracy provisions.**

◈ The bill aims to amend the existing **Cinematograph Act of 1952.**

Key highlights:

◈ **Anti-Piracy Provisions:** The bill aims to deter piracy of films by **imposing strict penalties** on individuals involved in unauthorized audio-visual recording and distribution of copyrighted content. The provisions include:

➤ **Jail Term: Imprisonment from 3 months to 3 years.**

➤ **Fine:** From Rs.3 lakhs to **5% of the audited gross production cost.**

◈ **Expansion of Copyright Coverage:** It aims to extend the coverage of the Cinematograph Act, 1952, which was **primarily focused on censorship, to now encompass copyright protection.**

◈ This move aligns with the evolving landscape of film distribution and aims to **safeguard the intellectual property rights of filmmakers** and content creators.

◈ **Government's Limited Powers over CBFC:** It emphasizes the **autonomy of the Central Board of Film Certification (CBFC).**

  ➤ The Government may no longer have **revisional powers over the CBFC's decisions,** based on the Supreme Court's judgment in the case of **K.M. Shankarappa vs. Union of India (2000).**

◈ **Age Ratings:** The amendment bill introduces a new age rating system for films that require adult supervision. The current U/A rating, which covers a broad age range, will be split into three distinct categories:

  ➤ **U/A 7+**: Films suitable for children above the age of 7 with parental guidance.

  ➤ **U/A 13+**: Films suitable for children above the age of 13 with parental guidance.

  ➤ **U/A 16+**: Films suitable for children above the age of 16 with parental guidance.

◈ This new classification system aligns with the **graded-age classifications** implemented for streaming platforms under the **IT Rules, 2021 and Shyam Benegal Committee** recommendations (2017).

◈ **Recertification for TV and Other Media:** Historically, films rated for adults have been prohibited on television since a 2004 Bombay High Court order.

  ➤ As a result, broadcasters often voluntarily make cuts to films and seek re-certification from the CBFC for a U/A rating.

  ➤ The bill formalizes this practice, allowing films to be **recertified for television and "other media."**

  ➤ **Perpetual Validity of Certificates:** The Act has been amended to **remove the 10-year validity restriction on CBFC certificates**, thereby granting them perpetual validity.

The Cinematograph Act of 1952:

◈ The **Cinematograph Act, 1952** was enacted by the Parliament to ensure that films are exhibited in accordance with the limits of tolerance of Indian society.

◈ It lays down the principles of guidance for certifying films, such as the interest of **sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality,** or involves defamation or contempt of court.

◈ **Section 3 of the Act** provides for the establishment of Central Board of Film **Certification (CBFC, popularly known as the censor board).**

  ➤ CBFC is a statutory body under the **Ministry of Information and Broadcasting, that** regulates the public exhibition of films under the provisions of the Cinematograph Act 1952.

◈ It also provides for the constitution of an **Appellate Tribunal** to hear appeals against the decisions of the Board.

◉◉◉◉◉

Section C [PRELIMS]

—— **To Attempt** ——
Weekly Current Affairs Test, Visit

www.iasscore.in

- Geographical Indication (GI) Tags in 2023
- Stapled visa and its applicability
- UN Commission for Social Development (CSocD)
- Akhil Bharatiya Shiksha Samagam and ULLAS Initiative
- RCS-UDAN Scheme on ground level
- The Vivad Se Vishwas II (Contractual Disputes) scheme
- 'STAR series' numbering system in Banknotes
- Indian firms can now directly list on IFSC exchanges
- Government Panel provides anti-air pollution measures
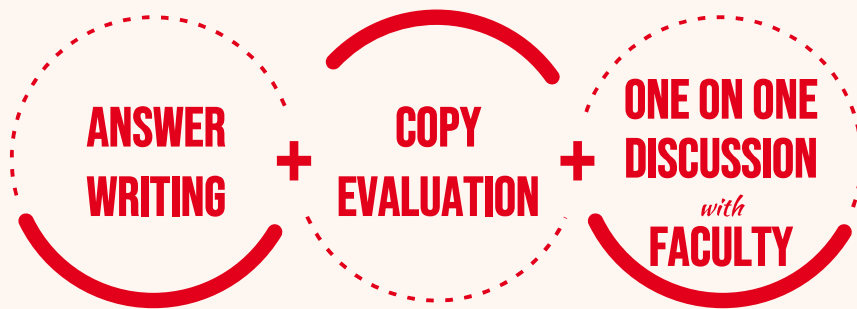
GEOGRAPHICAL INDICATION (GI) TAGS IN 2023

Context: With the recently added products in GI tag lists, has made the total number of GI tags in India 2023 to over 430.

About GI tags:

◈ **Background:**

➤ A **Geographical Indication (GI)** tag is given to an entrepreneur or a group of businessmen of a particular **area/ state/ country to manufacturer goods** of exemplary quality.

➤ These tags are issued according to the **Geographical Indications of Goods (Registration and Protection) Act, 1999.**

◈ **Key Points:**

➤ GI tags are issued for products like **agricultural goods, wine and spirit drinks, foodstuff, handicrafts, and industrial products.**

➤ **Top 5 states** in India which holds maximum

number of GI tags includes **Uttar Pradesh, Tamil Nadu, Karnataka, Maharashtra, and Kerala.**

➤ **Tamil Nadu and Karnataka** holds maximum number of GI tags followed by Kerala with **35 GI tag, Uttar Pradesh with 34 GI tag and Maharashtra with 31 GI tag.**

◈ **Significance:**

➤ It provides legal security for the manufacturer of unique goods originating from a particular place in the Country.

➤ The GI tag also helps customers to get the finest quality products of their desired quality.

➤ The GI tag is an assurance of authenticity. If manufacturers have a GI Tag then it is an indication that the product they are manufacturing is genuine.

➤ It also enhances and promotes goodwill of manufacturers of GI tag goods by boosting the product demand in the national and international markets.

Latest entrants: The products included are **Tandur red gram of Telangana**, **gamocha of Assam**, **Alibag white onion** of **Maharashtra, and Raktsey Karpo apricot of Ladakh** among others.

GEOGRAPHICAL INDICATION (GI) TAG LIST FOR 2023:

Name of the product	Category of the product	State or Union Territory
Narasinghapettai nagaswaram	Handcrafted	Tamil Nadu
Dindigul Locks	Manufactured	Tamil Nadu
Idu Mishmi Textiles	Handicraft	Arunachal Pradesh

Khola Chilli	Agricultural	Goa
Srivilliputtur Palkova	Food Stuff	Tamil Nadu
Kaji Nemu	Agricultural	Assam
Kandangi Saree	Handicraft	Tamil Nadu
Kashmir Saffron	Agriculture	Jammu & Kashmir
Kandhamal Haladi	Agricultural	Odisha
Manipuri Black Rice	Food Stuff	Manipur

Hmaram	Handicraft	Mizoram
Ngotekherh	Handicraft	Mizoram
Kodaikanal Malai Poondu	Agricultural	Tamil Nadu
Rasagola	Food Stuff	Odisha
Palani Panchamirtham	Food Stuff	Tamil Nadu
Pawndum	Handicraft	Mizoram

Tawlhlohpuan	Handicraft	Mizoram
Tirur Betel Leaf (Tirur Vettila)	Agricultural	Kerala
Gulbarga Tur Dal	Agricultural	Karnataka
Mizo Puanchei	Handicraft	Mizoram

STAPLED VISA AND ITS APPLICABILITY

Context: **India has called off the wushu (martial art) team's scheduled visit to China after it issued stapled visas to three athletes from Arunachal Pradesh.**

Two hundred and twenty-seven Indian athletes are participating in 11 other sports at the games that are held every two years, and are officially known as the **FISU World University Games.**

What are Stapled visas?

❖ A stapled visa is simply an **unstamped piece of paper** that is attached by a pin or staples to a page of the passport and **can be torn off or detached at will**.

❖ This is different from a regular visa that is affixed to the passport by the **issuing authority** and stamped.

❖ When a person with a stapled visa returns to their home country, the entry and exit passes on the stapled visa are torn off.

❖ This means that no details of the trip are recorded. It is also an expression of China that it does not acknowledge Arunachal Pradesh and J&K as part of India.

A passport is the **certificate of its holder's identity and citizenship**.

China's Interest:

❖ Passports, visas, and other kinds of immigration controls reiterate the idea of a nation-state and its sovereignty which is **inalienable and inviolable**.

❖ Since **nation-states reserve the right to control and regulate** who enters or leaves their borders, a passport and visa entitle their holders to travel freely and **under legal protection across international borders.**

❖ China has been using this 'stapled visa' approach specifically for Indian nationals from Arunachal Pradesh and Jammu and Kashmir.

❖ They started issuing stapled visas to residents of Arunachal Pradesh in the mid-2000s and to those from Jammu and Kashmir from 2009.

What's the reason behind this rift?

❖ Chinese and Indian-controlled areas are physically divided by the **Line of Actual Control** (LAC), which runs from the western region of Ladakh to the eastern state of Arunachal Pradesh, which China claims in its entirety.

❖ In 1962, a border conflict broke out between China and India.

❖ In the past few years, soldiers from both sides have patrolled certain locations near the contentious border.

❖ **Latest irritant in relations:** The 2020 stand-off between soldiers of the Indian Army and the Chinese People's Liberation Army (PLA) along the Line of Actual Control (LAC) in eastern Ladakh.

ADDITIONAL INFORMATION	
Different Types of Passports in India	
Blue Passport	General public use this passport to travel for leisure or business purposes
White Passport	Government officials use this passport for travelling abroad for official work.
Diplomatic Passport	Indian diplomats and senior government officials use this passport during foreign tours where they represent India.
Orange Passport	Individuals who have not studied beyond class 10 can use this passport for flying abroad.

UN COMMISSION FOR SOCIAL DEVELOPMENT (CSocD)

Context **India's Permanent Representative to the UN, Ambassador Ruchira Kamboj, has assumed the chairship of the 62nd Session of the Commission for Social Development, the first time in nearly 50 years the country has held this position within the UN agency.**

Key-highlights:

❖ **Theme:** "Fostering Social Development and Social Justice through Social Policies to accelerate Progress on the Implementation of the 2030 Agenda for Sustainable Development and to achieve the overarching goal of poverty eradication".

❖ It pledged to make the **conquest of poverty, the goal of full employment and the fostering of social integration** overriding objectives of development.

About UN Commission for Social Development:

● The purpose of the commission is also to advise the **United Nations Economic and Social Council (ECOSOC)** on social policies of a general character and, in particular, on all matters in the social field not covered by the specialised inter-governmental agencies.

● The Chair is backed by vice-chairs from **Luxembourg, North Macedonia, Dominican Republic**, and a forthcoming African State election.

● **Members:** The commission has **46 members**, who are elected by the ECOSOC, based on equitable geographical distribution for four-year terms.

➤ India is **a member** of the **62nd session** of the **Commission for Social Development**, and its **term expires in 2027.**

AKHIL BHARATIYA SHIKSHA SAMAGAM AND ULLAS INITIATIVE

Context: Recently, the Prime Minister (PM) of India inaugurated Akhil Bharatiya Shiksha Samagam a two-day event. The event is organized to mark the third anniversary of the National Education Policy (NEP) 2020.

◈ Additionally, the Union Minister of Education launched the **ULLAS: Nav Bharat Saksharta Karyakram mobile application.**

What are the Key Highlights of Akhil Bharatiya Shiksha Samagam?

◈ The PM released the **first installment of funds under the PM SHRI Scheme,** supporting the establishment of schools that nurture engaged, productive, and contributing citizens, in alignment with the NEP 2020 vision.

◈ The PM also released **education and skill curriculum books translated into 12 Indian languages**, enhancing learning by allowing students to **study in their mother tongue.**

What is ULLAS: Nav Bharat Saksharta Karyakram?

◈ The **ULLAS (Understanding Lifelong Learning for All in Society)** is a transformative initiative launched by the Indian government to promote **lifelong learning and bridge the gaps in basic literacy** and critical life skills **among citizens aged 15 and above.**

◈ The program aims to empower individuals with essential knowledge and skills for **personal and national development.**

◈ ULLAS **User-Friendly Mobile Application** serves as a digital gateway to diverse learning resources via the **DIKSHA portal.**

◈ **Key Features of ULLAS: Nav Bharat Saksharta Karyakram:**

  ➤ **Lifelong Learning Focus:**

   ● Emphasizes continuous learning throughout life.

   ● Fosters a culture of knowledge-sharing and personal development.

  ➤ **Digital and Financial Literacy:**

   ● Equip participants with digital literacy skills.

   ● Promotes financial awareness and empowerment.

  ➤ **Critical Life Skills:**

   ● Impart important life skills such as **legal literacy and digital literacy.**

   ● Enhances **citizenship and empowerment.**

  ➤ **Incentives for Student Volunteers:**

   ● Provides **credits in school/university for student volunteers.**

   ● Offers appreciation through certificates, letters, and felicitations.

RCS–UDAN SCHEME ON GROUND LEVEL

Context: According to a recent update, out of the 479 airport routes that were revived by the Union Government under the Regional Connectivity Scheme (RCS-UDAN), 225 have ceased its operations.

About the update:

◈ As per the information, of the **225 routes** that have ceased operations, **128 routes shut down even before completing the mandatory three-year period under the scheme**.

◈ Airlines found **70** of these routes to be **commercially unviable** despite the subsidy, while the remaining **58** have been cancelled either due to "**non-compliance**" by the airline operator, or the airline surrendering routes, or the airline companies shutting down.

◈ **As many as 97 routes shut down after completing the three-year period during which the government provides support**.

Scenario of Civil aviation in India:

◈ Since the launch of modern **civil aviation in India in 1911**, only 76 airports had been connected by scheduled commercial flights.

◈ The number of **operational airports has gone up to 141 from 76 in 2014**.

With 479 new routes initiated, UDAN Scheme has provided air connectivity to more than **29 States/ UTs across the country.**

About Regional Connectivity Scheme – UDAN:

◈ The **Regional Connectivity Scheme (RCS)-UDAN (Ude Desh Ka Aam Naagrik)** is a regional connectivity

scheme launched by the Government of India, as a part of the **National Civil Aviation Policy in 2016**.

◈ The scheme has recently celebrated its fifth anniversary.

◈ It aims to operatie for a period of **10 years (2016-26),** envisages providing connectivity to un-served and underserved airports through revival of existing airports and air strips.

◈ **Objective:** To take flying to the masses by improving air connectivity for **tier-2 and tier-3 cities** and subsidising air travel on these routes.

◈ The routes are awarded after a bidding process, and the winning airlines are given certain incentives, along with **viability gap funding (or a subsidy) equivalent to 50% of the seating capacity on their aircraft**.

➤ In return, the airlines sell **50% of their seats** at a flat rate of **Rs.2, 500 per hour of flight**, in order to make air travel affordable.

◈ **Airport Authority of India (AAI)** is the implementing agency for the scheme.

Phases of the Scheme:

◈ **RCS – UDAN scheme** has gone through different phases in which new flight routes and airports/airstrips have been added under the program:

➤ **UDAN 1.0:** 5 airlines companies were awarded 128 flight routes to 70 airports.

➤ **UDAN 2.0:** Helipads were also connected.

● In this phase, Central government awarded contracts to 15 airliners to operate in 325 routes across hilly, remote areas.

● It involved connecting 56 new airports and helipads to 36 existing aerodromes, as per the Ministry of Civil Aviation.

➤ **UDAN 3.0:** Inclusion of Tourism Routes under Phase 3 in coordination with the Ministry of Tourism.

● Inclusion of Seaplanes for connecting Water Aerodromes.

● Bringing in a number of routes in the North-East Region under the ambit of UDAN.

➤ **UDAN 4.0:** It was launched in December 2019 with a special focus on North-Eastern Regions, Hilly States, and Islands.

➤ **UDAN 4.1:** Launched in March 2021, the UDAN 4.1 round is focused on connecting smaller airports, along with special helicopter and seaplane routes.

● In addition to these, some new routes have been proposed under the **Sagaramala**

Seaplane Services in consultation with the Ministry of Ports, Shipping, and Waterways.

● **UDAN 5.0:** Launched in April 2023, the **UDAN 5.0** round is focused on Category-2 (20-80 seats) and Category-3 (>80 seats) aircrafts. There is **no restriction** on the distance between the **origin and the destination of the flight**.

What are the Challenges?

◈ **Infrastructure**: **Lack of instrument landing systems (ILS)** lead to flight cancellations and the repeated cancellations make it difficult to **build traffic on the route** on a sustained basis.

◈ **Traffic route** - The bigger challenge is putting in place an **ideal network design**.

◈ **Time slots** - Subsequently, finding convenient **time slots for every route** has become an administrative challenge. This is because, the number of runways is not increasing in high traffic airports and the airport capacity lagging the passenger traffic growth.

➤ Especially, the new regional airlines have faced a major challenge in connecting the metro airports to the new **Udan routes**, since they don't have pre-existing slots in them.

THE VIVAD SE VISHWAS II (CONTRACTUAL DISPUTES) SCHEME
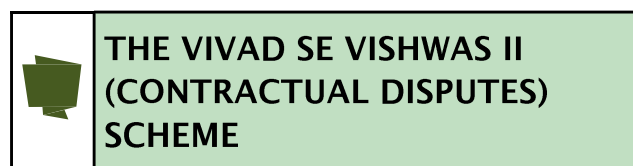
Context: In order to settle the pending contractual disputes of government and government undertakings, the finance ministry has launched the 'Vivad se Vishwas II – (Contractual Disputes)' scheme.

◈ The last date for submission of claims is October 31, 2023.

Background:

◈ The Finance Minister had announced the scheme, termed '**Vivad se Vishwas II — (Contractual Disputes)'** Union Budget 2023-24.

◈ The **Department of Expenditure** had indicated the guidelines for its operation in an earlier order issued in May 2023.

About the Scheme:

◈ **Objective**: The **Vivad Se Vishwas II (Contractual Disputes) scheme** is aimed at clearing the backlog of litigation, freeing lock-up funds, and improving the ease of doing business.

◈ Under the scheme, **contractors would be offered settlement amounts** depending on the status of a dispute.

◈ The scheme will apply to **all domestic contractual disputes** where one of the parties is either the **Government of India or an organisation working** under its control.

◈ Apart from **Ministries and Government departments,** the scheme would apply to **autonomous bodies, public sector banks and enterprises** and all organisations, like metro rail corporations, where the Government of India has a **50 per cent stake**.

◈ Under the scheme, it would be mandatory for **Government departments** to accept the settlement where the claim amount is **Rs.500 crore or less.**

◈ To be **eligible for settlement under the scheme**, the ministry has laid out **two conditions** —

➤ **For Arbitral award passed on or before January 31, 2023**- the settlement amount offered is up to 65 per cent of the net amount awarded.

➤ **For Court award passed on or before April 30, 2023-** The settlement amount offered to the contractor will be up to 85 per cent of the net amount awarded/ upheld by the court.

◈ **Applicability:** The scheme shall be applicable to all kinds of procurement, including procurement of goods, services and works.

➤ It is also applicable to all **'earning contracts'** (i.e. contracts where government receives money in exchange for goods, services, rights, etc.) as well as contracts under **Public Private Partnership (PPP) arrangements.**

◈ **Government e-Marketplace (GeM)** has developed a dedicated web-page for implementation of this scheme.

◈ Eligible claims shall be processed only through GeM.

‘STAR SERIES’ NUMBERING SYSTEM IN BANKNOTES

Context: **To address the concern regarding the validity of the STAR series numbering system, the Reserve Bank of India (RBI) confirmed that notes with a star (*) symbol are genuine and valid.**

About the ‘STAR series numbering system’:

◈ The asterisk (*) was introduced on the new Rs. 500 banknotes in December 2016.

◈ The symbol is inserted in the **number panel of a banknote** that is used as **replacement for defectively printed notes** in a packet of **100 pieces** of serially numbered banknotes.

◈ A banknote with a star (*) symbol is **identical to any other legal banknote**, except that in the number panel a star (*) symbol is added between the prefix and the serial number.

◈ **Features:**

➤ The **Star series notes** will look exactly like the existing notes of **Rs.10, Rs.20 and Rs.50** in the Mahatma Gandhi series but will have an additional character viz. **a *(star) in the number panel**.

➤ Packets with star series notes will have **100 pieces as usual but not in serial order.**

◈ They are genuine and can be freely used as legal tender.

Need

◈ **To replace defectively printed banknote:** When a defect is detected, these banknotes are replaced with new ones having the same serial number, ensuring the sequential order in the packet is maintained.

◈ **International best practices:** The star series numbering system is part of RBI's efforts to follow international best practices and ensure cost-effectiveness at printing presses.

What Is Legal Tender?

● Legal tender is anything recognized by law as **a means to settle a public or private debt** or meet a **financial obligation, including tax payments, contracts, and legal fines or damages**.

● The **national currency** is **legal tender** in practically every country.

● A creditor is legally obligated to accept legal tender toward repayment of a debt.

INDIAN FIRMS CAN NOW DIRECTLY LIST ON IFSC EXCHANGES

Context: India companies can list their shares directly on foreign exchanges at the International Financial Services Centre (IFSC) in Gujarat International Financial Tech (GIFT) City in Gujarat.

What is GIFT City?

◈ The Gujarat International Finance Tec-City (**GIFT City**), the first and **only IFSC currently operational in India**, was established in 2015.

◈ GIFT City is **India's first operational smart city** and **International Financial Services Centre** is an emerging global financial and IT services hub, a first of its kind in India, designed to be at or above par with globally benchmarked business districts.

◈ It is the **only green-field smart city in India** set up as a multi-service **special economic zone (SEZ)** and is regulated by the **IFSC Authority (IFSCA).**

◈ It is both a conduit and a destination for **foreign direct investment (FDI).**

◈ The IFSCA oversees all financial institutions, ahead of bodies such as the **Reserve Bank of India (RBI) and the Securities and Exchange Board of India (SEBI).**

Significance of the move

◈ At present, Indian companies are allowed to list in overseas markets through the **American Depository Receipt (ADR) and Global Depository Receipt (GDR) routes.** Once the listing of Indian companies on IFSC exchanges is cleared, listing of these entities on foreign bourses could follow.

◈ The move will give domestic firms access to foreign funds.

◈ This will also facilitate access to global capital and result in better valuation of the Indian companies.

GOVERNMENT PANEL PROVIDES ANTI–AIR POLLUTION MEASURES

Context: A government panel tasked with improving the air quality in Delhi and its adjoining areas has made crucial changes to a set of anti-air pollution measures followed in the region in winter.

Key-highlights of the changes

◈ The changes include strict restrictions on the plying of overage vehicles and a complete ban on the use of coal and firewood in eateries, restaurants and hotels when the **air quality index (AQI)** breaches the 200 mark.

◈ In addition, **BS III petrol and BS IV diesel four-wheelers** will be immediately if the AQI crosses the 400 mark.

Bharat Stage (BS) Emission Standards (BSES)

• The **Bharat Stage (BS) Emission Standards (BSES)** were introduced by the Government of India in 2000, and are set by the **Central Pollution Control Board (CPCB)** under the **Ministry of Environment**.

• 'BS' stands for **Bharat Stage**, the emission regulation or fuel standards mandated by the government of India for motor vehicles.

  ➤ **BS-I** was launched in 2000
  ➤ **BS-II** in 2001 (nationwide in 2005)
  ➤ **BS-III** in 2005 (nationwide 2010)
  ➤ **BS-IV** in 2010 (nationwide 2017)

• There is no BS-V, and BS-VI arrived in 2017 (nationwide 2020).

• **BS-VI or less polluting emission** norms were mandated across the country from April 1, 2020, which meant that all new vehicles being manufactured after the norms were forced to comply with the new standards that cover four-wheelers, two-wheelers as well as commercial vehicles.

Amended GRAP:

◈ The **Commission for Air Quality Management (CAQM)**, a **statutory body** formed under an Act in 2021, had amended the **Graded Response Action Plan (GRAP),** first notified in 2017, in July last year also to ensure proactive implementation of anti-air pollution steps based on forecasts -- up to three days in advance.

◈ GRAP is classified under four different stages of adverse air quality in Delhi:

➤ **Stage I –** 'Poor' (AQI 201-300)

➤ **Stage II** – 'Very Poor' (AQI 301-400)

➤ **Stage III** – 'Severe' (AQI 401-450)

➤ **Stage IV** – 'Severe Plus' (AQI greater than 450)

◈ The revised GRAP now recommends **strict enforcement** of the orders of the Supreme Court and the **National Green Tribunal** on overage diesel and petrol vehicles under **Stage 1.** It also calls for a **complete ban** on the use of coal and firewood in eateries, restaurants and hotels if the AQI crosses the 200 mark

◈ The new steps suggested in the revised GRAP include "strict action to curb air pollution at all identified hotspots in the region under **Stage 2**".

◈ Under **Stage 3**, states must impose strict restrictions on the plying of **BS III petrol and BS IV diesel four-wheelers.**

◉◉◉◉◉

Section D [QUIK BYTE]

- INDIAai
- Govt to identify process to determine Waqf properties
- ST status for Paharis and Paddaris
- AudioCraft AI tool
- Safety of Polypill for cardiovascular diseases in India
- World Hepatitis Day 2023
- BPaL regimen trial
- Alpha-gal syndrome
- International Tiger Day

[SPECIES IN NEWS]

- Western Tragopan (Tragopan-melanocephalus)
- Seagrass
- Iberian wolf

[LOCATION IN NEWS]

- Dhala structure
- Cocos Island
- Kuril islands

INDIAai

Recently, **Meta** has signed a **memorandum of understanding (MoU)** with government's **INDIAai, initiative**, for collaboration on artificial intelligence and emerging technologies, which will make Meta's open-source AI models available for use by Indian AI ecosystem.

About:

- INDIAai is a **knowledge portal, research organisation and an ecosystem building initiative.**

- It stands to unite and promote collaborations with various entities in India's AI ecosystem.

- The portal offers the latest and up-to-date information and analysis on AI as news and articles, provides detailed information on the key ecosystem players, and provides insights into the global and Indian AI landscape.

- Furthermore, INDIAai offers resources, upskilling and career insights, and many more resources for **students, entrepreneurs, professionals, and C-suite executives.**

Govt to identify process to determine Waqf properties
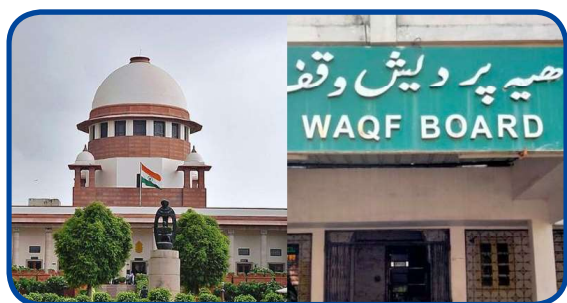
The **Ministry of Minority Affairs** has ordered to expedite cases of dispute on Waqf properties.

About Waqf:

- **By meaning of word:** Property given in the name of God for religious and charitable purposes.

- In legal terms, it is a **permanent dedication** by a person professing Islam, of any movable or immovable property for any purpose recognised by the Muslim law as **pious, religious or charitable**.

How is waqf created?

- A waqf can be formed through a deed or instrument, or a property can be deemed waqf if it has been used for religious or charitable purposes for a long period of time.

- The proceeds are typically used to finance educational institutions, graveyards, mosques and shelter homes.

- A person creating the waqf cannot take back the property and the waqf would be a continuing entity.

- A non-Muslim can also create a waqf but the individual must profess Islam and the objective of creating the waqf has to be Islamic.

The Waqf Act, 1995:

- Waqf is governed by the act.

- A survey commissioner under the Act lists all properties declared as waqf by making local investigation, summoning witnesses and requisitioning public documents.

- The waqf is managed by a mutawali, who acts as a supervisor.

Trust vs. Waqf:

- It is similar to a trust established under the Indian Trusts Act, 1882, but trusts can be set up for a broader purpose than religious and charitable uses.

- A trust established can also be dissolved by the board unlike a waqf.

ST status for Paharis and Paddaris

Recently, the government has brought a Bill to include four communities in the list of **Scheduled Tribes (STs)** in Jammu and Kashmir.

- The Tribes are namely, **"Gadda Brahmin", "Koli", "Paddari Tribe", and "Pahari Ethnic Group".**

About:

- **Paharis:** The Paharis are Hindus, Muslims, and Sikhs, and include people of Kashmiri origin who settled in the districts of Rajouri and Poonch over a period of time.

- **Paddaris:** They live in the remote Paddar area of the hilly Kishtwar district.

- Spread over two tehsils, the Paddari homeland borders **Zanskar (Ladakh)** in the north and the east, Pangi in Himachal Pradesh in the south, and the rest of J&K in the west.

> The 2011 census recorded the **Paddari population at 21,548**, comprising 83.6% Hindus, 9.5% Buddhists, and 6.8% Muslims. The people of the area, including those who have come from elsewhere to settle there, speak the **Paddari language**.

Tribes in J & K:

- With a population of almost 18 lakh, the **Gujjar-Bakerwal** is the **third largest group** after **Kashmiris and Dogras** in J&K.

- There are two smaller groups of namely **Gaddis and Sippis.**

- These four communities to **10% reservation** in government jobs and admission to educational institutions.

- Also in 2019, they were empowered politically after the Centre announced a 10% quota for them in Lok Sabha and Assembly seats in J&K.

AudioCraft AI tool

Meta Platforms has introduced its **open-source AI tool** called '**AudioCraft'** that will help users to **create music and audio based on text prompts**.

About the AI tool:

- The AI tool is bundled with **three models**, **AudioGen, EnCodec and MusicGen**, and works for **music, sound, compression and generation**.

- MusicGen is trained using company-owned and specifically licensed music.

- Artists and industry experts have raised concerns over copyright violations, as **machine learning software** work by recognizing and replicating patterns from data scraped from the web.

Applications:

- Music recommendation system is powered by AI algorithms that analyze the user's listening habits to provide personalized recommendations.

- Users can discover new music they are more likely to enjoy, leading to better user experiences.

## Safety of Polypill for cardiovascular diseases in India

The World Health Organisation (WHO) included **three fixed dose combinations of cardiovascular medicines** or '**Polypills**' on its revised **Model Lists of Essential Medicines (EML) 2023** for use in primary and secondary prevention of atherosclerotic cardiovascular diseases.

What are Polypills?

- Polypills is the combination of **three blood-pressure-lowering drugs** at low doses, with a **statin, aspirin, and folic acid (the polypill),** that could reduce **cardiovascular** events by more than **80% in healthy individuals**.

- Effect of Polycap on blood pressure, lipids, heart rate, and urinary thromboxane B2, and assessed its tolerability.

- **Significance:** It is an important low-cost public health intervention which can prevent over millions of cardiovascular events and deaths every year.

World Hepatitis Day 2023
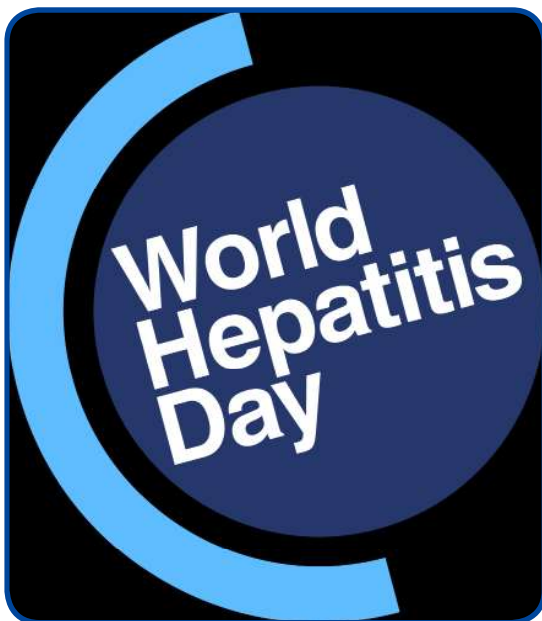
Every year **World Hepatitis Day** is observed on July 28.

About:

> **About Hepatitis :**
>
> - Hepatitis is an **inflammation of the liver** that is caused by a variety of **infectious viruses and non-infectious agents** leading to a range of health problems, some of which can be fatal.
>
> - There are five main strains of the hepatitis virus, referred to as **types A, B, C, D and E.**
>
> - **Risk factor:** Unsafe drinking or washing water, sharing needles, exposure to toxic chemical, unsafe sex, autoimmune disorder

- World Hepatitis Day (WHD) is recognized annually on July 28th, the birthday of **Dr. Baruch Blumberg (1925–2011).**

- The day aims to promote prevention, testing and treatment, and to show support for those affected by hepatitis.

- Four to **43 out of 100,000 adults** and about **2 to 10 out of 100,000 children** have autoimmune hepatitis.

- **Theme for 2023**: *One life, one liver*

BPaL regimen trial

The interim results of a **randomised phase-3/4 trial** carried out in India to evaluate the safety and effectiveness of an **all-oral, short-course treatment** using just three drugs-BPaL combination for people with **pre-XDR TB** or **treatment intolerant/non-responsive MDR pulmonary TB** appears promising.

About the update:

- The BPaL regimen uses **only three drugs — bedaquiline, pretomanid and linezolid —** and the treatment lasts **only for 26 weeks**, in contrast to **eight-nine tablets** each day for 18 months in the conventional treatment for DR-TB.

- WHO-approved BPaL regimen of 600 mg linezolid for **26 weeks**.

- In one intervention arm, the participants were given **600 mg of linezolid** daily for 13 weeks followed by **300 mg of linezolid for the remaining 13 weeks**.

- In the second intervention arm, the participants were given **600 mg of linezolid daily for nine weeks** followed by 300 mg of linezolid for the remaining **17 weeks.**

- The primary outcome of the current trial is to evaluate sustained treatment success at the end of one year post TB treatment using the BPaL regimen.

Alpha-gal syndrome

Alpha-gal syndrome has been on the rise in the United States.

What is it?

- Alpha-gal syndrome is a **food allergy** that causes people to become allergic to red meat and other products made from mammals.

- The condition is developed after being bitten by the **Lone Star tick.**

- The tick, found in the eastern and southern parts of the country, injects a **sugar molecule known as alpha-gal** into the human body through its bite.

- This causes the immune system to develop a reaction – ranging from severe to mild – to red meat.

International Tiger Day

July 29 is celebrated world over as the **International Tiger Day** in a bid to raise awareness on various issues surrounding tiger conservation.

About:

- It was first instituted in 2010 at the **Tiger Summit in St Petersburg, Russia** when the 13 tiger range countries came together to create **Tx2, the global goal to double the number of wild tigers by the year 2022.**

- The tiger is officially classed as **endangered** by the IUCN.

- **Project Tiger** was launched by the Indira Gandhi government on April 1, 1973, in a bid to promote conservation of the tiger.

- It came at a time when the population of tigers in India was rapidly dwindling, reaching an all-time low due to unfettered hunting and habitat loss.

Western Tragopan (Tragopan-melanocephalus)

Himachal Pradesh's State bird – **Western Tragopan (Tragopan-melanocephalus)** has been facing threat due to habitat loss in parts of the country.

About the Species:

- The **Western Tragopan (*Tragopan-melanoc ephalus*)** is amongst the rarest of all living pheasants.

- **State Bird:** Himachal Pradesh (status accorded in 2007)

- **IUCN Status:** Vulnerable (Population decreasing)

- **Habitat:** It is endemic to the northwest Himalaya, within a narrow range from north Pakistan through Jammu and Kashmir and Himachal Pradesh, to the western part of **Garhwal.**

- **Diet:** Its diet consists primarily of plant matter, but it also includes insects and other small animals.

- It nests on the ground or in trees, as do other pheasants, but it roosts in trees alone or in couples.

- **Immatures males** look like females but are bigger and have longer legs. During mating season, adult males display their distinctively bare throats, or lappets, by making loud sounds to attract females.

- **The male,** who tips the scales at **1.8 to 2.2 kg,** sports a tall, black crest with a bright red tip and a bright red face and neck. Its back is a tan colour with large white patches of **varying sizes and shapes**.

- **Females** do not have crest feathers. The female has predominantly black feathers with white centre stripes. It has a pinkish face and legs with a speckled pale brownish grey upper body. The female has predominantly black feathers with white centre stripes. It weighs **between 1.3 kg and 1.4 kg**.

- **Pheasant** is any bird of the family **Phasianidae (order Galliformes)** that is larger than a quail or partridge.

SPECIES IN NEWS

Seagrass

A project attempting to restore climate change fighting marine plants in Cornwall has proved a success in its first year.

What is Seagrass?

- Seagrass is a **flowering marine plant** that has the potential to capture carbon from the environment up to 35 times faster than tropical rainforests.

- Seagrass live in near-shore waters of most of the worlds' continents.

- Environmental significance:

  ➤ They are the **main diet of dugongs** and **green turtles**.

  ➤ They provide a habitat for many, smaller marine animals, some of which, like prawns and fish, are commercially important.

  ➤ They also absorb nutrients from coastal run-off and stabilise sediment, helping to keep the water clear.

  ➤ Seagrasses store more than twice as much carbon from planet-warming **carbon dioxide (CO2)** per square mile than forests do on land, according to a 2012 study.

- The plants also help support fisheries and protect coasts from erosion.

Iberian wolf

According to latest information, the **Iberian wolf (Canis lupus signatus)**, **native** to the Iberian Peninsula comprising **Spain and Portugal**, has been extinct in the historic region of **Andalusia** in the extreme south of Iberia since 2020.

About Iberian Wolf (Canis lupus signatus):

- It is a subspecies of **Grey wolf** that has been isolated from mixing with other wolf populations for over a century.

- The Iberian wolf forms the **largest wolf population** in Western Europe.

- Grey wolves are **nocturnal predators** and are mainly **carnivores.**

- Due to population controls and damage to livestock, Iberian wolves were, as of September 2021, the only **Western European** subspecies of wolf whose hunting remained legal, yet only in Spain.

- Nonetheless, very few hunting permits were given every year, strictly north of the **Douro River**.

- Along with the difficulty of their hunt by virtue of their vigilant nature and the rarity of their sightings, they were strongly desired by many European hunters as a big-game trophy.

LOCATION IN NEWS

Dhala structure

Recently, the Scientists from Allahabad University and the University of Bern have discovered that the **Dhala structure** in India was formed by a **rare ureilite meteorite** between 2500 and 1700 million years ago, making it the world's seventh oldest impact structure.

What is Dhala Structure?

- It was an **asteroid** about one kilometre in diameter, Dhala in the **Bundelkhand region of Madhya Pradesh's Shivpuri district** is one of the oldest impact structures in the world.

- An Indian geologist, **Jayanta K Pati**, discovered it.

- Named after the village Dhala, the crater is an eroded leftover of the original impact structure, estimated to be at a diameter of 11 kilometres, the largest in Asia.

- In fact, it is the largest confirmed impact structure reported between the **Mediterranean and south-east Asia**, claims the discoverer.

- While a British scientist discovered the **Lonar crater**, the Dhala crater is the only one discovered in the subcontinent and **Far East Asia** by an Indian scientist.

> **Ureilite meteorite:**
> - Ureilite is a rare type of stony meteorite that has a unique **mineralogical composition** very different from that of other stony meteorites.
> - Ureilites tend to have a **high percentage of carbon** (average 3% by weight) in the form of **graphite and nanodiamonds.**

Cocos Island

Recently, an **Indian Navy Dornier maritime patrol aircraft** and an **Indian Air Force (IAF) C-130 transport aircraft** visited **Australia's Cocos (Keeling) Islands (CKI)** in the **Southern Indian Ocean.**

About the Location:

- They are a small group of islands located in the **Bay of Bengal.**

- **Great Coco Island**, the largest in the group, lies just 55 km from India's strategic **Andaman and Nicobar Islands.**

- They are part of the **Yangon Region of Myanmar**.

- It is geologically an extended division of the **Arakan Mountains** or **Rakhine Mountains** submerges as a chain of islands in the Bay of Bengal for a long stretch and emerges again in the form of the Andaman and Nicobar Islands.

- They are part of the same topography as India's Andaman & Nicobar Islands.

Significance of the location:

- Cocos Islands had been a point of cooperation between the space agencies of the both India and Australia as for **India's Gaganyaan human space flight mission.**

- Australia's active support in establishing a temporary ground station at CKI for the Gaganyaan missions, and potential opportunities for cooperation in earth observation, satellite navigation, space situational awareness, weather and climate studies using satellite data is important.

Kuril islands

The strategically located islands are known as Kuril Islands in Russia, and were seized by Soviet forces in the closing days of **World War-II**.
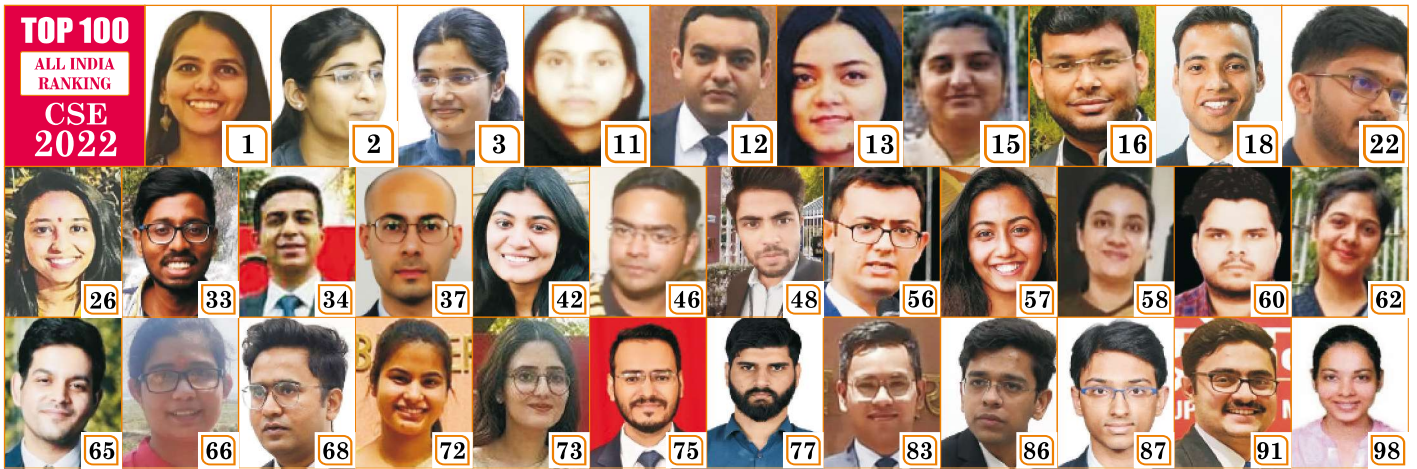
- China might have plans to own it.

Background:

- The Kuril Islands dispute between Japan and Russia is over the sovereignty of South Kuril Islands.

- The South Kuril Islands comprise **Etorofu island, Kunashiri Island, Shikotan Island** and the **Habomai Island.**

- These islands are claimed by Japan but occupied by Russia as the successor state of the Soviet Union.

About the Location:

- The Kuril Islands are stretched from the **Japanese island of Hokkaido** to the southern tip of **Russia's Kamchatka Peninsula** separating the **Okhotsk Sea** from the **North Pacific Ocean**.

- The chain is part of the belt of geologic instability circling the **Pacific (Ring of Fire)** and contains at least 100 volcanoes, of which 35 are still active, and many hot springs.

◉◉◉◉◉

GS SCORE — An Institute for Civil Services

CSE RESULTS

TOP 100 ALL INDIA RANKING CSE 2022

1, 2, 3, 11, 12, 13, 15, 16, 18, 22, 26, 33, 34, 37, 42, 46, 48, 56, 57, 58, 60, 62, 65, 66, 68, 72, 73, 75, 77, 83, 86, 87, 91, 98

SUCCESS IS A PRACTICE WE DO!

TOP 100 ALL INDIA RANKING CSE 2021

02, 04, 07, 12, 24, 25, 29, 31, 32, 43, 44, 45, 46, 49, 52, 53, 54, 66, 67, 68, 80, 83, 89, 92, 93, 95

TOP 100 ALL INDIA RANKING CSE 2020

8, 9, 12, 13, 14, 16, 17, 19, 20, 24, 26, 28, 30, 31, 36, 38, 41, 45, 50, 51, 52, 55, 56, 58, 59, 67, 68, 70, 71, 73, 74, 76, 78, 83, 84, 85, 86, 89, 93, 98, 100