CURRENT Pulse

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Booth Level Officer

Recently, concerns have been raised with several Booth Level Officers (BLOs) deaths have been reported from the states undergoing Special Intensive Revision (SIR) of electoral rolls.

About Booth Level Officer

- A BLO is a representative of the Election Commission of India (ECI) at the grass-root level who assists in updating the roll using his local knowledge.
- They are local government/semi-government officials who are familiar with the local electors and enrolled as voters in the same polling area.
  - Teachers, Anganwadi workers, Panchayat Secretary, Village Level Workers, Electricity Bill Readers, etc are mainly appointed as BLOs.
- BLOs are not full-time electoral officials.
  - Section 13B (2) of the Representation of People Act, 1950 provision paved the way for the introduction of appointing a BLO for the first time in August 2006.

Roles of Booth Level Officer

- They play a significant role in the process of roll revision and collecting actual field information with regard to the roll corresponding to the polling area assigned to them.
- They maintain accuracy and fidelity of the electoral roll at the polling booth level.
- Distribution of Voter Slips: An important role of the BLO is the distribution of Voter Slips to the voters' households before the poll day.
- Informing eligible voters for Postal Ballot: BLOs inform the eligible Electors (senior citizens above 85 years & PwDs with benchmark certificate) about availing Home Voting Facility and Postal Ballot Facility by filling Form 12D.
- Promote use of Election Commission's IT applications: BLOs to promote applications launched by the ECI to facilitate voting and ensure an accurate electoral roll.
- The popular voter oriented apps like Voter Helpline App, eVIGIL app, Know you candidate app, Saksham-ECI.

Indian Statistical Institute Act, 1959

More than 1,500 academics have expressed grave concerns and held demonstrations in Kolkata to protest a Central government plan to repeal the Indian Statistical Institute (ISI) Act, 1959.

About Indian Statistical Institute (ISI) Act, 1959

- The Indian Statistical Institute was founded by Professor P.C. Mahalanobis in Kolkata on 17th December, 1931.
- The ISI, established earlier as a society, plays a crucial role in statistical research, education, and training in India.
- The ISI Act 1959 primarily applies to the ISI, its governing body, employees, and students.
- The Act aimed to recognize the ISI's contributions to national development and provide it with the necessary autonomy and support to carry out its functions effectively.
- The ISA Act 1959 declared the ISI an institution of national importance.
- This Act falls under the Ministry of Statistics and Programme Implementation.

Salient Features of Indian Statistical Institute (ISI) Act, 1959

- Empowers the ISI to grant degrees and diplomas in statistics, mathematics, quantitative economics, computer science, and related subjects.
- Provides for grants, loans, and other financial assistance from the Central Government.
- Mandates the audit of the Institute's accounts by qualified auditors.
- Requires prior approval from the Central Government for certain actions by the Institute, such as altering its objectives, amending its memorandum, or disposing of certain properties.
- Provides for the constitution of committees by the Central Government to prepare the Institute's program of work and review its activities.
- Empowers the Central Government to issue directions to the Institute.
- Allows the Central Government to assume control of the Institute under certain circumstances.

Ramban Sulai Honey

The Prime Minister, during the 128th episode of his radio programme 'Mann Ki Baat' noted that Ramban Sulai honey from Jammu and Kashmir, made from wild basil, gained wider recognition after receiving a GI tag.

About Ramban Sulai Honey

- Ramban Sulai Honey, produced in the Ramban District of Jammu and Kashmir, is known for its rich taste, aromatic floral undertones, and high nutritional value.
- Extracted from Sulai plants growing in the Himalayas, it is prized for its medicinal properties and purity.
- The bees forage on the nectar of snow-white blossoms of Sulai during the months of August to October to produce this well-rounded, naturally sweet honey with floral undertones.
- This crystal-clear honey, ranging from white to amber, contains essential minerals, enzymes, and vitamins that enhance its health benefits.
- Due to superior bee strains and favourable climatic conditions, the honey yield in Ramban is significantly higher than in other regions.
- It earned a Geographical Indication (GI) tag in 2021.
- The Government of India declared Ramban Sulai Honey as the district's "One District, One Product."

What is a Geographical Indication (GI) Tag?

- A geographical indication, or GI, is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- It highlights the unique qualities, reputation, or characteristics that are tied to that region.
- GIs are recognized as an aspect of intellectual property rights (IPRs) under the Paris Convention for the Protection of Industrial Property and the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement.
- The Geographical Indications of Goods (Registration and Protection) Act, 1999, is the main law in India that oversees the registration and protection of geographical indications.
- This act prohibits the use of GI-tagged products and their names without authorization.
- GIs are protected for 10 years and can be renewed forever.
- Examples of GI-tagged items in India include Darjeeling Tea, Mysore Silk, and Kashmiri Saffron.

Masala Bonds

The Enforcement Directorate's (ED) recent decision to issue notices to the Kerala Chief Minister in the KIIFB masala bond investigation marks a significant escalation in a long-running conflict between the LDF government and central agencies over the state's financing model.

About Masala Bonds

- They are rupee-denominated bonds issued outside India by Indian entities.
- The International Finance Corporation (IFC), an arm of the World Bank, issued the first masala bonds in October 2013 as part of its $2 billion dollar offshore rupee programme.
- They are debt instruments which help to raise money in local currency from foreign investors.
- That means the currency risk—if exchange rates change—is on the investor, not the issuer. This helps Indian companies manage their risks better.
- To offset the risk of exchange rate fluctuations, bonds typically offer attractive interest rates that are frequently greater than those offered in the investors' home countries.
- Both the government and private entities can issue these bonds.
- Who Can Invest?
  - Investors outside India who would like to invest in assets in India can subscribe to these bonds.
  - Any resident of that country can subscribe to these bonds which are members of the Financial Action Task Force (FATF).
  - That includes individuals, institutions, and even financial organisations from countries that follow international standards for fair and secure investing, like those under IOSCO (International Organisation of Securities Commissions).
  - It also covers multilateral and regional financial institutions of which India is a member.
- Maturity Period:
  - It depends on the size of the bond.
  - For bonds up to USD 50 million, the maturity is usually 3 years.
  - For larger amounts, it can go up to 5 years, giving investors more flexibility based on their goals.
- What Can The Money Be Used For?
  - The funds raised through Masala bonds are generally earmarked for productive and regulated purposes.
  - The proceeds can fund affordable housing, infrastructure, refinance rupee loans, or meet corporate working capital requirements.
  - Activities like buying land, investing in the stock market, or funding real estate projects are off-limits—unless they've received specific government approvals.

Trade Enablement and Marketing Scheme

Recently, the Minister of state for Micro, Small & Medium Enterprises informed the Rajya Sabha about the Trade Enablement and Marketing Scheme.

About Trade Enablement and Marketing Scheme

- It is the sub scheme of the scheme 'Raising and Accelerating MSME Performance' (RAMP), which is a Central Sector Scheme.
- The initiative will empower MSMEs with digital tools and guidance to effectively utilize the e-commerce marketplace.
- Objective: To support MSMEs to help them access different markets by integrating them with e-commerce platforms.
- Financial Outlay and Duration: The outlay is Rs. 277.35 Cr. for the duration of 3 years from 2024 to 2027.
- Eligibility Criteria: All the Udyam registered Micro and Small Enterprises (MSEs) under manufacturing and services sectors will be eligible for benefits under the Initiative.
- Targeted beneficiaries: It envisages benefiting 5 lakh Micro and Small Enterprises (MSEs) of which 50% are to be women owned MSEs.
- It focus on;
  - Connecting MSMEs with the ONDC Network.
  - Provides access to digital storefronts, integrated payment systems, and logistics support.
  - Reduce operational barriers and help businesses tap into wider customer bases.
  - It emphasizes formalizing operations and establishing digital transaction histories, which will enhance the credibility and trust of participating MSMEs.
- Implementing Agency: National Small Industries Corporation (NSIC)

New Geographical Indication Products

Recently, five products from Tamil Nadu have secured the Geographical Indications (GI) tag.

About New Geographical Indication Products

Woraiyur Cotton Sari

- It is native to Tiruchi district, and is woven in Manamedu on the banks of the Cauvery.
- They are known for their distinctive Korvai border (a continuous running pattern) — block colour palettes, and geometric motifs.
- The border has different motifs, including many geometrical shapes.
- The Devanga community has been the driving force behind the Woraiyur cotton sarees for generations.

Thooyamalli Rice

- Thooyamalli, meaning 'pure jasmine', is a traditional sambha-season rice variety grown over 135 - 140 days.
- It is often referred to as 'pearl rice' due to its shiny nature and is regarded highly for its nutritional benefits.

Kavindapadi 'Naatu Sakkarai'

- Kavindapadi in Erode district is a major supplier of jaggery powder in Tamil Nadu, with vast stretches of sugarcane fields nourished by the Lower Bhavani Project canal.
- It is made locally by mechanically crushing the cane and slowly evaporating the extracted juice.

Namakkal 'Kalchatti'

- Namakkal's famed cookware is made using soapstone (makkal pathirangal).
- It is popularly known as kalchatti, and has been a staple in South Indian kitchens for generations.

Ambasamudram 'Choppu Saman'

- Origin: The art of making choppu saman (wooden toys) has been practiced for over two centuries, with origins tracing back to the 18th century.
- This craft involves the careful handcrafting of miniature wooden toys — from tiny kitchen utensils to small tables, chairs, and other play objects.
- Material used:Traditionally, these toys were carved from indigenous trees like the Manjal Kadamba tree (Neolamarckia cadamba), teak, and rosewood.

RBI Integrated Ombudsman Scheme

According to the RBI's Annual Report, the complaints registered under the Reserve Bank of India's Integrated Ombudsman Scheme (RB-IOS) were up by 13.55 per cent in FY25.

About RBI Integrated Ombudsman Scheme

- It was launched on November 12, 2021.
- It integrated the erstwhile three Ombudsman schemes of RBI namely: the Banking Ombudsman Scheme, 2006, the Ombudsman Scheme for Non-Banking Financial Companies, 2018 and the Ombudsman Scheme for Digital Transactions, 2019.
- It adopted the 'One Nation One Ombudsman' approach by making the RBI Ombudsman mechanism jurisdiction neutral.
- Objective: To provide customers of regulated entities (REs) a speedy, cost-effective and expeditious alternate grievance redress mechanism.

Features of RBI Integrated Ombudsman Scheme

- It defines 'deficiency in service' as the ground for filing a complaint, with a specified list of exclusions.
- Covered Banks: It covers all commercial banks, Non-Banking Financial Companies (NBFCs), RRBs, Payment System Participants, most Primary (Urban) Cooperative Banks with a deposit size of ₹50 crore and Credit Information Companies.
- A Centralised Receipt and Processing Centre has been set up at RBI, Chandigarh, for receipt and initial processing of physical and email complaints in any language.
- Under this scheme, compensation up to Rupees 20 lakh, in addition to, up to 1 lakh for the loss of the complainant's time, expenses incurred and for harassment/mental anguish suffered by the complainant can be awarded.

Venezuela

Recently, US President Donald Trump said his administration would "close the airspace above and surrounding Venezuela in its entirety."

About Venezuela

- Location: It is located on the northern coast of South America.
- Bordering Countries: It is bounded by Guyana to the east, Brazil to the south, and Colombia to the southwest and west.
- Maritime boundaries: It shares a border with the Caribbean Sea and the Atlantic Ocean to the north.
- Capital: Caracas.

Geographical Features of Venezuela

- Terrain: Andes Mountains and Maracaibo Lowlands in northwest; central plains (llanos); Guiana Highlands in southeast
- Major Rivers: Rio Negro (shared with Colombia and Brazil) and Orinoco (shared with Colombia).
- Major Lakes: Lake Guri and Lake Maracaibo (the largest lake in South America).
- Highest Point: Pico Bolivar
- The world's highest waterfall – the Andes Mountains Angel Falls is located in the Guiana Highlands.
- Natural Resources: It is home to the world's largest oil reserves as well as huge quantities of coal, iron ore, bauxite, and gold.

UNESCO's Creative Cities Network

United Nations Educational, Scientific and Cultural Organization

Creative Cities Network

Recently, Lucknow has officially joined the UNESCO Creative Cities Network (UCCN) under the Gastronomy category during the 43rd Session of the UNESCO General Conference.

About UNESCO Creative Cities Network

- It was created in 2004 to promote cooperation among cities that have identified creativity as a strategic factor for sustainable urban development.
- It was launched to promote UNESCO's goals of cultural diversity and strengthen resilience to threats such as climate change, rising inequality, and rapid urbanisation.
- The network covers seven creative fields: crafts and folk arts, media arts, film, design, gastronomy, literature and music.
- Aim of UCCN: The network is aimed at leveraging the creative, social, and economic potential of cultural industries.
- Indian Cities in the UCCN: Kozhikode (Literature) and Gwalior (Music) Jaipur (Crafts and Folk Arts), Varanasi (Music), Chennai (Music), Mumbai (Film), Hyderabad (Gastronomy), Lucknow (Gastronomy), and Srinagar (Crafts and Folk Arts).

Objectives of the UCCN

- It allows member cities to recognise creativity as an essential component of urban development, notably through partnerships involving the public and private sectors and civil society.
- It envisages developing hubs of creativity, innovation and broadening opportunities for creators and professionals in the cultural sector.
- These cities have to achieve the UN agenda of sustainable development.

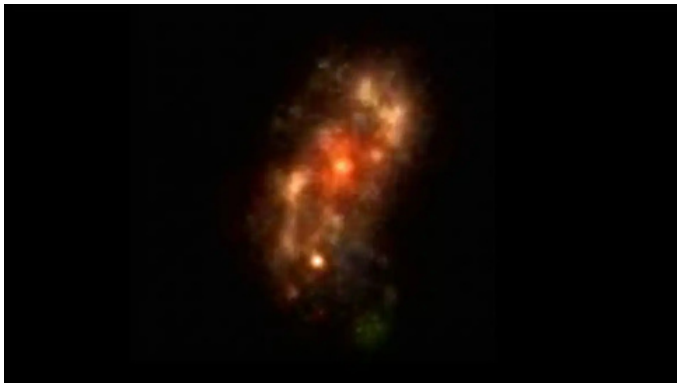
Cold Wave

Higher than normal cold wave days are expected to impact parts of central India as well as some regions in northwest and northeast India, according to the India Meteorological Department (IMD).

About Cold Wave

- Cold waves are unusual weather occurrences caused by extremely low temperatures in the near-surface atmosphere.
- Their duration can range from several days to a few weeks, contingent upon the geography and climatic conditions of the region.
- The India Meteorological Department (IMD) defines a cold wave as a rapid fall in temperature within 24 hours.
- This is distinguished by a marked cooling of the air, or with the invasion of very cold air, over a large area.
- As per IMD, a cold wave is considered when the minimum temperature of a station is 10°C or less for plains and 0°C or less for hilly regions.
    - A cold wave and severe cold wave is considered a negative departure from normal i.e., 4.5°C to 6.4°C and more than 6.4°C in hill stations, respectively.
    - Similarly, the departure in minimum temperature of ≤ 04°C and ≤ 02°C for plains is considered a cold wave and severe cold wave, respectively.
- Cold waves are predominantly experienced during the period December-February, when minimum temperatures drop to very low levels, especially over the northern parts of India.
- Health Risks:
    - Exposure to extreme cold can lead to frostbite, hypothermia, and other cold-related illnesses.
    - Non-freezing cold injuries, such as Immersion Foot—caused by prolonged exposure to cold, wet conditions—are also a risk.
    - In extreme cases, cold exposure may result in fatalities if adequate precautions are not taken.

Alaknanda Galaxy



Recently, researchers at National Centre for Radio Astrophysics - Tata Institute of Fundamental Research (NCRA–TIFR), Pune, have discovered a spiral galaxy and named it as Alaknanda.

About Alaknanda Galaxy

- It is located about 12 billion light years away and has textbook spiral structure.
- It is named after a Himalayan river Alaknanda and the Hindi word for the Milky Way.
- The galaxy has two well-defined spiral arms wrapping around a bright central bulge, spanning approximately 30,000 light-years in diameter.
- It is a powerhouse of stellar birth, creating stars at a rate equivalent to about 60 solar masses annually.
- It looks remarkably similar to our own Milky Way and formed when the Milky way was only 10 per cent of its current age.
- It was discovered by using NASA's James Webb Space Telescope.

What is a Spiral Galaxy?

- Spiral galaxies are twisted collections of stars and gas that often have beautiful shapes and are made up of hot, young stars.
- In a spiral galaxy, the stars, gas, and dust are gathered in spiral arms that spread outward from the galaxy's center.
- Structure
    - Most spiral galaxies contain a central bulge surrounded by a flat, rotating disk of stars.
    - The bulge in the center is made up of older, dimmer stars and is thought to contain a supermassive black hole.
    - Approximately two-thirds of spiral galaxies also contain a bar structure through their center, as does the Milky Way.
    - The disk of stars orbiting the bulge separates into arms that circle the galaxy.
    - These spiral arms contain a wealth of gas and dust and younger stars that shine brightly before their quick demise.

Protosticta sooryaprakashi

A new species of damselfly named, Protosticta sooryaprakashi, sporting vibrant sky-blue markings, has been recently discovered in the biodiversity hotspots of India's Western Ghats.

About Protosticta sooryaprakashi

- It is a new species of damselfly.
- Named the Kodagu Shadowdamsel, it was discovered in Karnataka's Kodagu district.
- The species has been named in honour of the late Dr. Sooryaprakash Shenoy, a renowned botanist.
- Sporting striking sky-blue markings, the Kodagu Shadowdamsel thrives in low-light habitats and requires pristine environmental conditions to breed.
- Entomologists say its presence is a strong indicator of a healthy ecosystem with minimal pollution.
- Despite its resemblance to its close relatives, its slender build makes it the thinnest member of the damselfly family.
- Its distinguishing features include a unique blue spot on its neck and at the tip of its body.
- Unlike dragonflies, which inhabit bright, sunny spaces, damselflies like the Kodagu Shadowdamsel favour cool, shaded areas, making sightings rare and significant.

Bamboo Shrimp

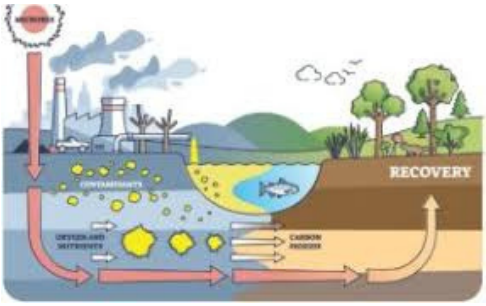
A team of researchers rediscovered Indian populations of the bamboo shrimp in Karnataka and Odisha after 72 years.

About Bamboo Shrimp

- It is a medium-sized freshwater shrimp native to Southeast Asia.
- Common names: Wood Shrimp, Flower Shrimp, Singapore Wood, Marble Shrimp and Asian Fan Shrimp.
- Characteristics
  - The color of their body changes according to their mood. It becomes brighter when they are happy, while it fades when they are in a bad mood.
  - It is an amphidromous species i.e the larvae develop in brackish water before returning to freshwater.
  - They are primarily nocturnal, spending daylight hours sheltering under rocks or driftwood.
  - They are adapted to live in fast-moving streams and rivers, using their strong legs to cling to rocks and other surfaces.
- Distribution: These shrimps are found in various countries of Southeast Asia. Their distribution range includes Malaysia, Singapore and Thailand.
- Habitat: It is a social invertebrate commonly found in fast-flowing streams and rivers.
- Diet: This omnivorous filter feeder shrimp species feeds on water algae and microscopic organisms.
- Adaptation: It is distinctive within their genus due to their specialised feeding technique.
- These shrimp are filter feeders, using fan-like structures on their limbs to filter out particles of edible material from flowing water.

Bioremediation

Bioremediation offers a cheaper, scalable, and sustainable alternative, especially in a country like India where vast stretches of land and water are affected but resources for remediation are limited.



About Bioremediation

- Bioremediation literally means "restoring life through biology."
- It is the use of living organisms, primarily microorganisms, to degrade environmental contaminants into less toxic forms.
- It is used to clean up contaminated soil, air, and water.
- It harnesses microorganisms such as bacteria, fungi, algae, and plants to sequester or transform toxic substances such as oil, pesticides, plastics, or heavy metals.
- These organisms metabolise these pollutants as food, breaking them down into harmless by-products such as water, carbon dioxide, or organic acids.
- In some cases, they can convert toxic metals into less dangerous forms that no longer leach into the soil or groundwater.
- Two Broad Types of Bioremediation:
- In situ bioremediation, where treatment happens directly at the contaminated site, such as when oil-eating bacteria is sprayed on an ocean spill;
- Ex situ bioremediation, where contaminated soil or water is removed, treated in a controlled facility, and returned once cleaned.
- For bioremediation to be effective, the right temperature, nutrients, and food also must be present.
- Proper conditions allow the right microbes to grow and multiply—and eat more contaminants.

Bioremediation Advantages

- It cleans up the environment naturally without the use of toxic chemicals. So, it is an environmentally friendly method.
- Contaminants are converted into water and harmless gases.
- It is cost-effective, as extensive equipment and labor are not needed.
- It is a permanent solution, as the degraded material cannot revert back to the previous one.
- It is a recommended method for removing oil stains.

Bioremediation Disadvantages

- It takes a large area and time from months to years.
- It is limited to the compounds which are degradable.
- It is not able to remove all kinds of impurities from the contaminated site. Like, some kind of inorganic contaminants cannot be treated with this bioremediation method.
- Some heavy metals cannot be completely broken down, resulting in toxic by-products.

Rock Eagle Owl

Recently, a Rock Eagle Owl nest prompted the Telangana forest department to halt quarrying operations for over a month.

About Rock Eagle Owl

- It is also called Indian eagle-owl (Bubo bengalensis) or Bengal eagle-owl.
- It is a large-horned owl species native to hilly scrub forests in India.
- Appearance
  - It is usually brown and grey in colour, with a white throat patch that has black stripes.
  - It was earlier treated as a subspecies of the Eurasian eagle-owl.
  - Its chicks are born with white fluff which is gradually replaced by speckled feathers during the pre-juvenile moult after about two weeks.
  - It is usually seen in pairs. It has a deep resonant booming call that may be heard at dawn and dusk.
- Habitat: They are especially seen near rocky places within the mainland of the Indian Subcontinent south of the Himalayas. They avoid humid evergreen forests and extremely arid areas.
- Distribution: It is mainly found in South Asian countries like India, Nepal, Pakistan

Conservation Status of Rock Eagle Owl

- IUCN: Least Concern
- CITES: Appendix II

Heron Mk II

To enhance their unmanned capabilities in the wake of Operation Sindoor, the Indian armed forces have signed up for more satellite-linked Heron Mk II UAVs under emergency procurement, sources in the Israeli defence industry said recently.

About Heron Mk II

- It is a medium-altitude long-endurance (MALE) unmanned aerial vehicle (UAV).
- It was developed by Israel Aerospace Industries (IAI).

Heron Mk II Features

- It has a length of 8.5 m, a wingspan of 16.6 m, and a payload capacity of 490 kg.
- It has a maximum takeoff weight of 1,430 kg.
- It offers an endurance of 45 hours and a top speed of 150 knots.
- It can reach altitudes up to 35,000 ft and has an operating range of more than 1,000 km.
- It can carry long-range radars and observation sensors, such as electro-optical/infra-red (EO/IR) systems for detection and tracking of targets.
- The electronic intelligence (ELINT) and communications intelligence (COMINT) systems will be installed on board to detect, analyse, geolocate, and gather electronic and communication radio signals for actionable intelligence at long-range stand-off distances.
- It is able to gather intelligence from tens of kilometers away without crossing borders.

Biological Weapons Convention

The External Affairs Minister recently called for urgent reforms to strengthen global biosecurity and modernise the Biological Weapons Convention (BWC), warning that biological threats are becoming harder to manage in a rapidly evolving scientific landscape.

About Biological Weapons Convention

- It is a legally binding international treaty that bans the use of biological and toxin weapons and prohibits all development, production, acquisition, stockpiling, or transfer of such weapons.
- The treaty also bans any equipment or means of delivery that is designed to use biological agents or toxins for hostile purposes or armed conflict.
- It requires signatories to destroy biological weapons, agents, and production facilities within nine months of the treaty's entry into force.
- It opened for signature on 10 April 1972 and entered into force on 26 March 1975.
- It was the first multilateral treaty categorically banning a class of weapon.
- Membership:
  - It currently has 187 states-parties, including Palestine, and four signatories (Egypt, Haiti, Somalia, and Syria).
  - Ten states have neither signed nor ratified the BWC (Chad, Comoros, Djibouti, Eritrea, Israel, Kiribati, Micronesia, Namibia, South Sudan, and Tuvalu).
  - India signed and ratified the BWC in 1974.
- The convention stipulates that states shall cooperate bilaterally or multilaterally to solve compliance issues.
- States may also submit complaints to the United Nations Security Council (UNSC) should they believe another state is violating the treaty.
- However, there is no implementation body of the BWC, allowing for blatant violations.
- There is a review conference every five years to review the convention's implementation, and establish confidence-building measures.

What Are Biological Weapons?

- Biological weapons disseminate disease-causing organisms or toxins to harm or kill humans, animals, or plants.
- They generally consist of two parts – a weaponized agent and a delivery mechanism.
- Almost any disease-causing organism (such as bacteria, viruses, fungi, prions, or rickettsiae) or toxin (poisons derived from animals, plants, or microorganisms, or similar substances produced synthetically) can be used in biological weapons.

GLP-1 Drugs

Recently, the World Health Organization has finally issued global guidelines on the use of popular GLP-1 drugs for weight loss.

About GLP-1 Drugs

- The Glucagon-like peptide-1 (GLP-1) or GLP-1 receptor agonists are synthetic drugs which are being used for the treatment of obesity in adults.
- These drugs are mainly injectables, though oral versions are under development.
- Examples: Two leading GLP-1 drugs are: Semaglutide and Tirzepatide (by Eli Lilly)
- Both have been introduced in India and are transforming obesity and diabetes treatment.

How Do GLP-1 Drugs Work?

- These drugs act by:
- Increasing insulin secretion when glucose is high.
- Inhibiting glucagon release, reducing liver glucose output.
- Slowing gastric emptying, preventing sudden spikes in blood sugar.
- Suppressing appetite, making the person feel full sooner.

Key Facts about Glucagon-like peptide-1

- GLP-1 is both an incretin hormone and a neurotransmitter.
- It is a naturally occurring gut hormone (incretin) released after food intake.
- It is secreted from the small intestine and from the hindbrain after we eat a meal.
- It travels to the pancreas, where it helps to regulate our blood sugar by increasing insulin and decreasing glucagon.
- It works for just a few minutes, so after you eat a meal and GLP-1 is secreted naturally, it gives an immediate effect that lasts maybe 30 minutes.
- GLP-1 also has beneficial effects in many organs, such as the kidney, liver, and cardiovascular system.

INS Aridhaman

Recently, the Indian Navy's Chief Admiral said that India will soon induct its third nuclear-powered ballistic missile submarine (SSBN), INS Aridhaman.

About INS Aridhaman

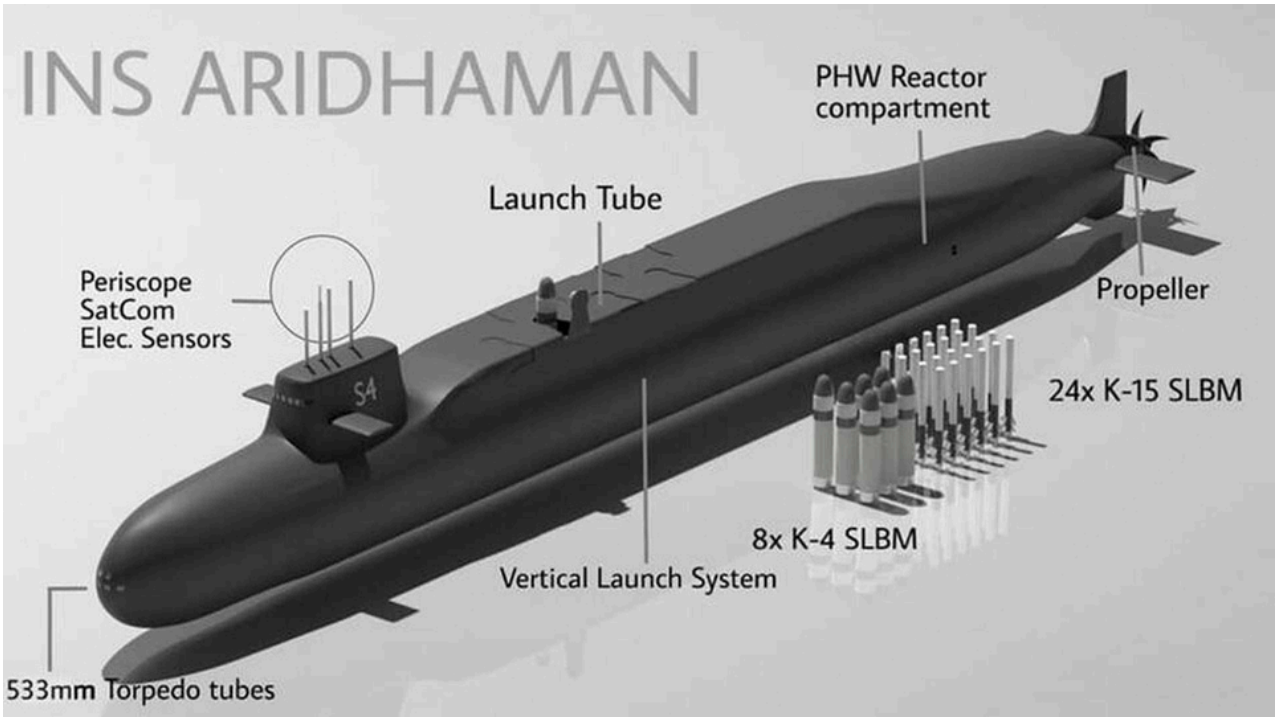
- It is India's third indigenously built nuclear-powered ballistic missile submarine.
- It is the second submarine in the Arihant class.
- It is being built under the Advanced Technology Vessel (ATV) project to build nuclear submarines at the Ship Building Centre in Visakhapatnam.

Features of INS Aridhaman

- Displacement Capacity: It can displace 6,000 tonnes on the surface and 7,000 tonnes submerged.
- It consists of an 83 MW pressurized water reactor supplied by the Bhabha Atomic Research Centre.
- Armaments
  - It has four launch tubes capable of deploying up to 24 K-15 Sagarika submarine each with a 750 km range or
  - Longer-range K-4 missiles extending to 3,500 km for intercontinental strikes.
- It also has anechoic tiles for acoustic damping and advanced sonar suites enhancing its survivability against detection.

History of India's Nuclear Submarine

- INS Arihant was the first vessel under the SSBN project.
- INS Arihant is India's first home-made nuclear submarine. It was launched in July 2009 and was quietly commissioned in 2016.
- The Navy commissioned its second indigenous SSBN, INS Arighaat, in August 2024.



Hornbill Festival

Recently, the 26th edition of Nagaland's iconic Hornbill Festival kicked off with great enthusiasm.

About Hornbill Festival

- It was first organized in the year 2000.
- It aims to promote inter-tribal interaction and preserve Nagaland's heritage, blending the traditional with the contemporary in a harmonious display of unity.
- It is also called the festival of festivals and is held every year.
- Organised by: It is organized by the State Tourism and Art & Culture Departments of the Government of Nagaland.
- It is celebrated at Naga Heritage Village, Kisama which is about 12 km from Kohima in Nagaland.
- It has evolved into a celebration showcasing the diverse and vibrant cultural and traditional heritage of the tribes of Nagaland.
- It was named after the Hornbill bird given its association with the socio-cultural life of the Nagas.
- Theme of 2025 festival: Cultural Connect
- This year Nagaland has officially named Switzerland and Ireland as country partners for the Hornbill Festival 2025.

Vande Mataram 150 Years Celebration

The Prime Minister of India will inaugurate the year-long commemoration of 150 years of the National Song "Vande Mataram" in New Delhi.

About Vande Mataram 150 Years Celebration

- "Vande Mataram," written by Bankim Chandra Chatterjee in a blend of Sanskrit and Bengali, is the National Song of India.
- It was first featured in his novel Anand Math in 1882, with its tune composed by Yadunath Bhattacharya.
- It became a symbol of patriotism during India's freedom struggle.

Historical Background of Vande Mataram

- It was initially composed independently and later included in Bankim Chandra Chatterjee's novel "Anandamath" (published in 1882).
- It was first sung by Rabindranath Tagore at the 1896 Congress Session in Calcutta.
- Vande Mataram, as a political slogan, was first used on 7 August 1905.
- In 1907, Madam Bhikaji Cama raised the tricolour flag for the first-time outside India in Stuttgart, Berlin. The words Vande Mataram were written on the flag.
- On 24 January 1950, the Constituent Assembly adopted Vande Mataram as the National Song of India.
- The National Song is held in equal reverence to the national anthem, but it is not mandatory to sing it at any given occasion.

Sanchar Saathi

The Department of Telecommunications (DoT) has made it mandatory for all newly manufactured or imported mobile phones in India to come with the Sanchar Saathi app pre-installed.

About Sanchar Saathi

- It is a security and awareness platform developed by the Department of Telecommunications (DoT).
- It is available both as an app and a web portal.
- Purpose: To help mobile users manage their digital identity, report suspicious activity, and safeguard their devices.
- The platform also provides educational material on telecom safety and cyber risks, making it a combined service-and-awareness system.

Sanchar Saathi Features

- 'Chakshu' Feature: It lets users report suspicious calls, SMS, and WhatsApp messages, such as fake KYC alerts, impersonation scams, or phishing links. It helps authorities spot fraud patterns.
- Report Spam and Unwanted Commercial Calls: Users can report spam calls and messages that break TRAI rules. Complaints made within seven days can lead to action against the sender.
- Report Malicious Links and Apps: Allows reporting of phishing links, unsafe APKs, and fraudulent websites.
- Checking Mobile Connections Linked To Your Identity: Shows how many mobile numbers are registered using your identity. Helps identify SIM cards taken without your knowledge.
- Blocking Lost or Stolen Phones: Allows users to block the IMEI of a lost or stolen device so it can't be used. Phones can be unblocked if recovered.
- Verifying The Authenticity Of A Device: Allows users to check if a phone is genuine by validating its IMEI. It is useful when buying second-hand phones.
- Reporting International Calls That Appear As Indian Numbers: Some scammers use illegal telecom setups to make international calls appear as regular +91 calls. Sanchar Saathi enables users to report such cases.
- Finding Your Local Internet Service Provider: The app also includes a feature that lets users check which wired internet service providers are available in their area by entering a PIN code, address, or provider name.
- Verifying Trusted Contacts and Helpline Numbers: Provides a directory to confirm genuine customer-care numbers, emails, and websites of banks and other major institutions.

National Centre for Polar and Ocean Research

Recently, the National Centre for Polar and Ocean Research (NCPOR) celebrated its Silver Jubilee and also released commemorative postage stamps.

About National Centre for Polar and Ocean Research

- It was established as an autonomous Research and Development Institution on the 25th May 1998.
- It was formerly known as the National Centre for Antarctic and Ocean Research (NCAOR).
- It has been at the forefront of leading India's scientific expeditions and research programmes in the Polar regions and the Southern Ocean.
- Nodal Ministry: Ministry of Earth Sciences Government of India
- Location: Vasco da Gama, Goa.

Mandate and Functions of National Centre for Polar and Ocean Research

- It is designated as the nodal organization for the co-ordination and implementation of the Indian Antarctic Programme, and executing polar expeditions in the Antarctic, Arctic, Southern Ocean, and Himalayas.
- It also works on strategically vital projects like: Mapping of Exclusive Economic Zone (EEZ), Continental shelf surveys, and the Deep Ocean Mission.
- It has established and operationalised permanent Indian research stations -- DakshinGangotri, Maitri, and Bharati in Antarctica, and Himadri in the Arctic, along with the Himalayan station Himansh.

Caller Name Presentation

In the next few months, the Department of Telecommunications (DoT) will mandate telecom operators to show the KYC-registered name of all incoming callers using Indian phone numbers, a feature known as Caller Name Presentation (CNAP).

About Caller Name Presentation

- CNAP is a technology that enables mobile users to see an incoming caller's name, similar to Truecaller.
- The system retrieves the caller's name from a telecom operator's database and displays it on the recipient's phone.
- Unlike third-party apps, CNAP will rely on the official Customer Application Form (CAF) details provided during SIM registration.
- How Will CNAP Work?
  - Each telecom provider will maintain a database of subscriber names linked to mobile numbers.
  - When a call is made, the system will fetch the caller's registered name and display it on the recipient's screen.
  - Initially, CNAP will work only within the same network, meaning an Airtel-to-Airtel call will display the caller's name, but cross-operator name display, such as Jio-to-Vodafone, will require regulatory approval for data sharing between telecom providers.
- In February 2024, the Telecom Regulatory Authority of India (TRAI) recommended the adoption of CNAP for all smartphones, urging telecom operators to introduce the feature.
  - The aim is to reduce customer harassment from unknown or spam callers.