

Factly Weekly

Compilation

2024

**For UPSC CSE Prelims
Exam**

**2nd Week
February 2024**

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Subject: Polity and Nation

National Judicial Academy

Why in the News?

The Supreme Court recently emphasized the lawyers to undergo compulsory training at the National Judicial Academy like the judges. The court **advocated for mandatory training for all advocates**.

What is National Judicial Academy (NJA)?

Aspect	Details
About	It is an independent society, operates under the guidance of the Supreme Court of India.
Location	Its 63-acre campus is situated on the outskirts of Bhopal, with a registered office in Delhi.
Established in	1993 under the Societies Registration Act, 1860.
Mandate	Enhancing the Administration of Justice through Judicial Education, Research, and Policy Development .
Funding	It is fully funded by the Government of India .
Functions	It arranges training sessions to assist judges in their adjudicative responsibilities and in managing court administrative tasks.
Chairman	The Chief Justice of India (CJI) serves as the Chairman of the General Body, Governing Council, Executive Committee, and Academic Council of NJA.
Management	1. The Director of NJA is its main executive officer and is appointed by the Chairman , the Honorable Chief Justice of India. 2. NJA academic staff positions include the Director, one Additional Director (Research), three Professors, six Assistant Professors, six Research Fellows, and six Law Associates.

Revised guidelines for Community radio stations

Why in the News?

Recently, the government has released the revised policy guidelines for setting up community radio stations.

What do the newly revised guidelines say?

1. Increase in the number of stations for an entity– The updated guidelines now **permit one institution to establish up to six stations across various operational districts**. Previously it was restricted to one station.

2. **Increase in advertising time and advertisement rates**– The **advertising time** for community radio stations has been **raised from 7 minutes per hour to 12 minutes per hour**. Also, the **advertisement rate** has been **increased from Rs 52 to Rs 74 per 10 seconds**.

3. **Fixing the validity of Letter of Intent (LOI)** – The policy now sets the validity of the letter of intent issued to an organization to **one year**, with an **additional three-month buffer for unforeseen circumstances**.

4. **Establishment of Advisory and content committee**– The guidelines **require the licensee to establish an advisory and content committee with members from the local community**. It must also be ensured that 50 percent of the committee consists of women.

What are community radio stations and their significance in India?

1. **About**– Community radio stations (CRSs) are low-power radio stations with a coverage area of approximately 10-15 km radius, depending on the area's geography. They are intended to be **established and managed by local communities**.

2. **History in India**– India's **first community radio station (CRS)** opened at Anna University's campus in **2004**. Presently, there are 481 CRSs across India, with over 133 becoming operational in the last two years.

3. **Significance**– Community radio stations provide a platform for disseminating content in localized dialects and regional languages. They address **local, context-specific issues and facilitate discussions using local idioms**.

Subject: International Relations

India-UAE Bilateral investment Treaty

Why in the News?

Recently, India and the United Arab Emirates (UAE) signed a significant bilateral investment treaty during Prime Minister Narendra Modi's two-day visit. Several other key agreements were also signed.

What is the significance of this Bilateral investment treaty (BIT)?

1. The goal of the BIT is to enhance investor trust, especially among significant investors. It can **result in higher levels of foreign investments** and more **opportunities for overseas direct investment (ODI)**. It is expected to have a **positive effect on job creation** as well.

2. In addition to boosting investments in India, the BIT with the UAE is expected to **support the goal of Atmanirbhar Bharat** by promoting domestic manufacturing, reducing reliance on imports, and boosting exports.

What are the other key agreements signed?

1. **Digital infrastructure projects**– To establish a framework for broad cooperation, including **investment collaboration, in the digital infrastructure sector**. It also facilitates the exchange of technical knowledge, skills, and expertise.

2. **Linkage of payment platforms**– The two countries also agreed to connect **India's UPI with the UAE's AANI instant payments platform**. Similarly, India's RuPay cards will also be linked with the UAE's JAYWAN card, built on RuPay's technology stack.

3. **India-Middle East Economic Corridor (IMEC) framework agreement**– Both sides also inked an Intergovernmental Framework Agreement on the **India-Middle East Economic Corridor (IMEC)**.

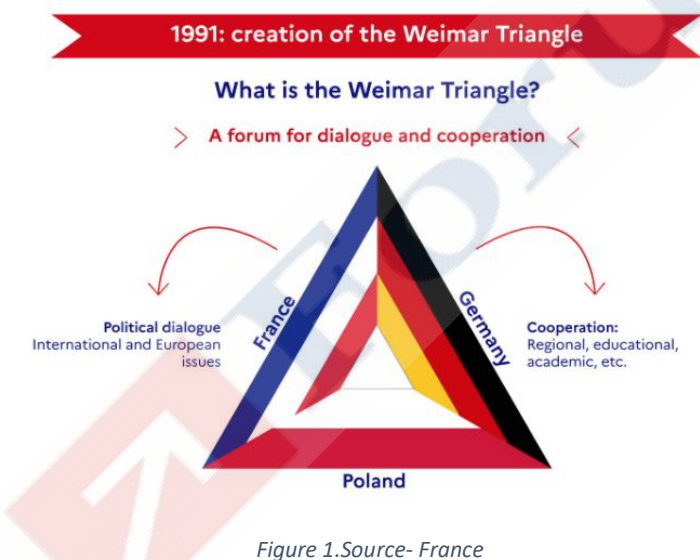
a. The **IMEC initiative proposes a sea-land connectivity project connecting India with West Asia and Europe**.

Weimar Triangle

Why in the News?

Recently, the foreign ministers of Poland, France, and Germany met to discuss reviving the **Weimar Triangle**. They pledged to enhance security and defense capabilities in Europe amidst concerns about Russian aggression spreading in the region.

What is Weimar Triangle?



Diplomatie

1. **About** – The Weimar Triangle was created in 1991. It is a regional alliance to promote cooperation among France, Germany, and Poland.

2. **Origin of name** – The name “Weimar” refers to the city in Germany where the initial meeting took place.

3. **Objective** – To strengthen bonds and encourage cooperation among the three countries, especially in politics, economy, and culture. Also, to tackle the common challenges faced by them.

4. **Initial goal** – Initially, its focus was on promoting reconciliation between Germany and Poland following World War II.

5. **Significance** – The forum offers a platform to discuss regional and global issues and has had a big impact on European relations and policies.

Subject: Indian Economy

SARTHI Portal

Why in the news?

The Union agriculture minister has recently launched Sarathi portal for insurance products to help farmers.

About SARTHI Portal (Sandbox for Agricultural and Rural Security, Technology and Insurance)

Introduction– SARTHI is the comprehensive digital insurance platform launched in collaboration with **United Nations Development Programme (UNDP)** India.

Objective–To provide a **comprehensive suite of insurance products** including **PMFBY**(Pradhan Mantri Fasal Bima Yojana) to farmers.

Coverage–It extends coverage to **health, life, home, shop, agriculture implements**, motor, and parametric products.

Features of the portal–1) It will be a **single-window platform** for viewing, purchasing and availing insurance products.

2) It will have **user-friendly interfaces** for stakeholders.

3) It will have **digital payment** and **effortless claim initiation** options.

Access–It can be accessed via the AIDE app available on Android App Store.

Other initiatives taken by the government

1) Learning Management System (LMS)

Developed by–It is developed in collaboration with the **National E-Governance Division (NeGD)**.

Objective– To provide **all stakeholders** with the essential skills and knowledge needed for efficient **crop insurance** and **agricultural credit**.

Strategy–The LMS will facilitate **training** and **knowledge sharing** through interactive modules and personalized training programs.

2) Krishi Rakshak Portal and Helpline (KRPH) 14447

The platform provides support to farmers to ensure real-time **resolution of grievances** related to **compensation delays** and **insurance queries**.

DigiReady Certification Portal

Why in the news?

The Quality Council of India (QCI) and ONDC have recently announced the launch of the DigiReady Certification (DRC) portal.

About DigiReady Certification

Launched by-The **Quality Council of India (QCI)** and the **Open Network for Digital Commerce (ONDC)**

Objective-To assess and certify digital readiness of **Micro, Small, and Medium Enterprises (MSME) entities.**

Eligible entities-This portal is open for self-assessment to **all Micro, Small and Medium Enterprises (MSMEs) and small retailers.**

Features of portal-1) MSMEs can evaluate their preparedness to seamlessly onboard as sellers on the ONDC platform.

2) This portal will ensure that MSMEs and small retailers can **integrate seamlessly** into existing **digitized** workflows.

3) The certification process evaluates various aspects of **digital readiness**. This includes the presence of necessary documentation for **online operations, proficiency in using software** and technology etc.

Tokenization of assets and government bonds

Why in the news?

The Reserve Bank of India (RBI) plans to explore the tokenization of assets and government bonds as part of its wholesale Central Bank Digital Currency (CBDC) pilot project.

About Tokenization of assets

Definition- It is the process whereby **ownership rights** of an asset are represented as **digital tokens** and stored on a **blockchain**.

Tokens can act like **digital certificates** of ownership that can represent almost any object of value such as **physical, digital, fungible, and non-fungible assets.**

Mechanism of tokenised asset

It involves several steps such as-

- 1) Defining the token type (fungible or non-fungible)
- 2) Selecting the blockchain to issue the tokens on
- 3) Selecting a **third-party auditor** to verify **off-chain assets**, issuing the assets.

Global Pulses Conference: India need to augment pulses production

Why in the News?

The Global Pulses Conference recently **suggested India to augment production of pulses** to meet the nutritional requirements.

The two-day conference is **jointly organised by the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and the Global Pulse Confederation (GPC).**

What is the status of pulse production in India?

- 1. Current Production**– Over the past decade, **pulse production has increased by 60%**, rising from 171 lakh tonnes in 2014 to **270 lakh tonnes in 2024.**
 - 2. India's contribution**– India holds the title of the **world's largest producer, consumer, and importer of pulses.** India contributes **25% to global production, consuming 27% of the world's total, and importing 14%.**
 - 3. Area covered**– **Pulses cover about 20% of the foodgrain area and contribute 7-10% to the total foodgrain production in the country.**
 - 4. Sowing Season**– While pulses are **cultivated in both Kharif and Rabi seasons, Rabi pulses contribute over 60% to the total production.**
 - 5. Pulse Varieties contribution**– **Gram is the leading pulse, comprising about 40% of total production,** followed by **Tur/Arhar at 15-20%,** and Urad/Black Matpe and Moong at approximately 8-10% each.
 - 6. Current status of pulse varieties**- India now produces enough chickpeas (chana) and various other pulse crops to meet its own needs, with only a minor shortfall in pigeon peas (tur) and black gram.
- Note**– The government aims to **attain self-sufficiency in pulses by the end of 2027.**

Subject: Science & Technology

Mxenes

Why in the news?

Researchers have recently reported on the potential of using MXene coatings that can lighten satellite payloads.

About Mxene

Introduction-1) MXenes are an emerging class of two-dimensional (2D) ceramic nanomaterials that were **first discovered** in 2011.

2) MXenes uniquely combine **metallic conductivity, hydrophilic surfaces**, and excellent **mechanical properties**.

Composition-1) They are made from a bulk crystal called **MAX**.

2) Among its various types , **titanium carbide (Ti₃C₂T_x)** is the most widely used.

Application of Mxene

1) **Energy Storage**-They are used in storing energy.For example-Batteries (Li-ion, Li-S, Al-ion), Supercapacitors and Hydrogen storage.

2) **Electromagnetic Shielding**-Radar absorption and 5G communication.

3) **Water Purification**-Desalination membranes,Selective separation and Selective separation.

4) **Composites**-Polymer reinforcement and Ceramic matrix composites.

Satyendra Nath Bose

Why in the news?

Distinguished scientists came together to celebrate 100 years of Satyendra Nath Bose's publications contributing to quantum mechanics.

About Satyendra Nath Bose



Figure 2.Source-wikipedia

Introduction-1) He was an **Indian physicist** who established **modern theoretical physics** in India. He is best known for providing the foundation of **Bose-Einstein statistics** and developing the theory of **Bose-Einstein condensates**.

2) He was born in Calcutta on January 1, 1894. He was an outstanding student who got inspired from brilliant teachers like **Jagadish Chandra Bose** and **Prafulla Chandra Roy**.

3) He started his career in 1916 as a **lecturer in physics at Calcutta University** and then joined Dacca University.

4) At the University of Dhaka, Bose carried out research and studied the **theory of relativity**.

Contribution of Satyendra Nath Bose

1) By treating radiation as a gas of photons (Photon gas) and using new statistical techniques for counting photon states, Bose provided a new **derivation of Planck's law**.

2) The pioneering ideas of Bose, developed further by **Einstein**, were confirmed by the observation of a new state of matter in a diluted gas of ultra-cold alkali atoms, **the Bose-Einstein condensate**. This exotic material exists only when atoms of certain elements are cooled to temperatures near **absolute zero**.

3) At that point, clusters of atoms begin functioning as a single quantum object **with both wave and particle properties**.

4) According to scientists, **BECs** hold crucial information about curious phenomena like **dark energy**, the unidentified energy thought to be responsible for the universe's accelerating expansion.

High Altitude Pseudo Satellite Vehicle (HAPS)

Why in the News?

The National Aerospace Laboratories (NAL) in Bengaluru has successfully completed the first test of a solar-powered high-altitude pseudo satellite vehicle, known as HAPS.

What is High-altitude pseudo satellite vehicle (HAPS)?



Source- The Indian Express

Aspect	Details
About	<ol style="list-style-type: none">1. It is an unmanned aerial vehicle (UAV).2. It is designed for extended periods of operation at high altitudes, typically in the stratosphere.
Features	<ol style="list-style-type: none">1. HAPS can reach altitudes of 18-20 km, nearly double that of commercial airplanes.2. It is solar-powered and can remain in the air for months, even years, offering advantages similar to those of a satellite.3. HAPS operating cost is significantly lower than that of a satellite.
Significance for India	<ol style="list-style-type: none">1. It is still a developing technology; India's recent successful test flight places it among a select group of countries like China, South Korea, and the UK which are developing this technology.2. It can significantly increase India's surveillance and monitoring capabilities in the border areas.3. If calamities damage normal networks, it can deploy mobile communication networks in remote areas.

Frozen smoke (Aerogels)

Why in the News?

Researchers have recently created a sensor using “frozen smoke” that **uses artificial intelligence to detect formaldehyde in real-time**, even at concentrations as low as eight parts per billion. It can exceed the sensitivity of many indoor air quality sensors.

What is Frozen smoke?



Figure 3. Source- new atlas

1. It is **technically known as aerogel** and is an exceptional material. It's **praised as a miracle material**.

2. It was **first developed** in the 1930s.

3. Properties:

a. Aerogel has **low density, high thermal resistance**, and a **very porous structure**.

b. Aerogel has the **texture of a fine, dry sponge** but feels significantly lighter. In fact, **it holds the title as the world's lightest solid**.

c. When gently pressed, **aerogel regains its original shape**, but pressing harder creates a dimple. However, excessive pressure can cause aerogel to shatter into tiny pieces like glass.

d. They are mostly made of air and can eliminate contaminants.

FAST Telescope

Why in the News?

Recently, astronomers from Nanjing University and other institutions discovered a radio pulsar in the supernova remnant CTB 87 using the FAST telescope.

What is Five-hundred-meter Aperture Spherical radio Telescope (FAST)?



Figure 4. Source- WIRED

1. **Location**– It is **located** in a karst depression in Guizhou, **China**.

2. **Size**– It is the **world's biggest single-dish radio telescope**, with a receiving area as large as **30 football fields**.

3. Objective:

a. **Detect neutral hydrogen** at the universe's edge to reconstruct images of the early universe.

b. **Detect pulsars**, set up a pulsar timing array, and **engage in pulsar navigation**.

c. Detecting **gravitational waves in the future**.

d. Leading the **International Very-Long-Baseline Interferometry Network** to study celestial bodies'

hyperfine structures.

e. Searching for **signals of interstellar communication**.

What are Pulsars?

1. Pulsars are **highly magnetized rotating neutron stars** that emit beams of electromagnetic radiation out of their magnetic poles.
2. These beams are observed as **regular pulses of radiation**, hence named as “pulsars.”
3. Pulsars are **formed from the remnants of massive stars** that have undergone supernova explosions.

What are Supernova Remnants?

1. Supernova remnants are the **bright, expanding clouds of gas and dust** formed when massive stars explode.
2. As these stars end their lives, they eject their outer layers into space, while their dense core remains as a neutron star or black hole.
3. Supernova remnants **play a crucial role in the life cycle of galaxies**. They enrich interstellar space with heavy elements and trigger the formation of new stars.

Future Circular Collider (FCC)

Why in the News?

Recently, CERN (the European Organisation for Nuclear Research) scientists are advancing plans for a multibillion-euro project to construct the more powerful Future Circular Collider. The collider plans to **start operating by 2040** with an estimated cost of around 17 billion dollar.

What is Future Circular Collider (FCC)?

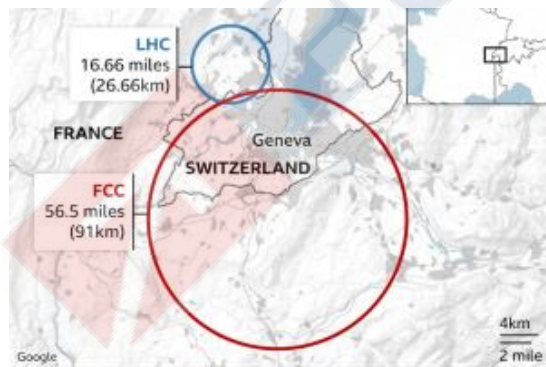


Figure 5. Source-BBC

1. **About**– The Future Circular Collider (FCC) is a **particle accelerator currently under design**, intended to accommodate the next generation of particle colliders.

2. **Purpose**– The FCC aims to design a hadron collider with a center-of-mass energy of about **100 TeV (trillion electron volts)**, which is **eight times more powerful than the Large Hadron Collider’s 13 TeV**.

3. **Location**– The FCC is planned to be in a newly constructed **80–100 km tunnel**. The circular tunnel will be at a depth of 100 to 400 meters on the **France-Switzerland border**.

4. **FCC extends LHC research**– The FCC aims to build upon the ongoing research at the Large Hadron Collider (LHC).

5. Significance:

- a. It will enhance our **understanding of fundamental physics**.
- b. It will foster **advancements in fields such as cryogenics, superconductivity, vacuum tech, and detector instruments**.

PACE satellite

Why in the news?

Nasa's PACE (Plankton, Aerosol, Cloud, ocean Ecosystem) satellite launched on a SpaceX Falcon 9 rocket from the Cape Canaveral Space Force Station.

About PACE satellite

Aspect	Details
Launched by	NASA from the Cape Canaveral Space Force Station's Space launch complex.
Placed at	PACE is placed in a sun-synchronous orbit . Sun-synchronous orbit means that it will always be synced to the same position relative to the Sun.
Objective	To study the interplay of light, aerosols, and clouds .
Primary instrument	Ocean Colour Instrument (OCI) - This is designed to measure the ocean's colour across a spectrum from ultraviolet to short wave infrared.
Payloads	1) Spectro-polarimeter for Planetary Exploration (SPEXone) 2) Hyper Angular Research Polarimeter (HARP2).
Significance	1) It will help scientists better understand about the impact of climate change on ocean phytoplankton . 2) It will help understand the influence of particles in the air, like dust and smoke, on cloud formation, warming and cooling of the planet . 3) It may make significant breakthroughs in aerosol-cloud-ocean research .

Alaskapox- An orthopox virus

Why in the news?

An elderly man from Alaska recently became the first person to die after contracting Alaskapox which is an orthopox virus.

About Alaskapox



Source-NDTV WORLD

Aspect	Details
Origin	It is an orthopox virus that was first discovered in Alaska, USA, in 2015.
Description	It is a double-stranded DNA virus belonging to the same genus (Orthopoxvirus) as smallpox, monkeypox, and cowpox .
Types	They are zoonotic viruses that can infect various mammals, including humans.
Host	Current evidence indicates that the Alaskapox virus primarily occurs in small mammals . The virus has been most commonly identified in red-backed voles and shrews .
Symptoms	1) Symptoms of Alaskapox have included one or more skin lesions (bumps or pustules) and other symptoms like swollen lymph nodes and joint and/or muscle pain. 2) Nearly all patients had mild illnesses that resolved on their own after a few weeks. 3) Immunocompromised people might be at increased risk for more severe illness
Is it contagious?	While human-to-human transmission of Alaskapox has not yet been observed, some orthopoxviruses can spread by direct contact with lesions (particularly broken skin contact with lesion secretions).

InfexnTM- India's First genomics-based infectious diseases Test

Why in the news?

Kerala's medical landscape is undergoing a great shift with the introduction of 'InfexnTM', a revolutionary next-generation sequencing test. This will be India's first genomics-based infectious disease test.

About InfexnTM- A Revolutionary Next-Generation Sequencing Test

Description-The 'infexnTM' is a **state-of-the-art** targeted next generation **sequencing** test.

Objective- To detect any **bacterial and/or fungal infection** along with detection of relevant **antimicrobial resistance** genes, within **24 hours**.

Developed by- IIT-Bombay-based HaystackAnalytics and NIMS Medicity at Neyyattinkara.

Features-1) The test is a **kit-cum-software solution** and can be performed within a hospital.
2) It is “Made in India, Made for the World” test.

NISAR Satellite

Why in the News?

The NISAR satellite which aims to monitor natural processes and changes in Earth’s ecosystems, is set to be launched in March 2024. The **partnership agreement** for NISAR development was signed between NASA and ISRO in 2014.

What is NISAR satellite?

Aspect	Details
Full form	NASA-ISRO Synthetic Aperture Radar (NISAR)
About	1. NISAR is a satellite jointly developed by NASA and ISRO for Low Earth Orbit (LEO) observation . 2. It is an SUV-size satellite weighing around 2,800 kilograms.
Objective	1. Tracking subtle changes in the Earth’s surface. 2. Spotting warning signs of imminent volcanic eruptions . 3. Helping to monitor groundwater supplies . 4. Tracking the rate at which ice sheets are melting .
Launch year	It will possibly launch in early 2024 from Satish Dhawan Space Centre in Andhra Pradesh.
Mission life	Three years
Function	1. It will capture images of Earth’s land, ice sheets, and sea ice every 12 days . 2. It will be able to detect the earth’s surface movement as small as 0.4 inches over an area.
Features	1. It is a dual frequency satellite (L-band and S-band). Note – NASA contributed the L-band radar, GPS, solid-state recorder, and payload data subsystem, while ISRO supplied the S-band radar , GSLV launch system and spacecraft. 2. Another crucial part of the satellite is its large 39-foot fixed antenna reflector . It will be used to focus ‘the radar signals emitted and received by the upward-facing feed on the instrument structure’.

IIT Madras Zanzibar

Why in the News?

IIT-Madras Zanzibar has recently revealed its plans to triple its intake for the 2024-25 batch.

What are Indian Institutes of Technology (IITs)?

- About**– The IITs are a group of **autonomous engineering and technology institutions** in India.
- Controlling Authority**– They operate under the ownership of the **Ministry of Education** and are **governed by the Institutes of Technology Act, 1961**.
- Institutes of National Importance**– The Institutes of Technology Act, 1961 designates them as **Institutes of National Importance**. It outlines their authority, responsibilities, and governance framework as leading technological institutions in the country.
- History**– The history of IITs dates back to the 1940s and 1950s when India realized the need for high-quality technical education to support its industrial development.
 - The **Nalini Ranjan Sarkar Committee's** Report in 1940 proposed the establishment of IITs along the lines of the Massachusetts Institute of Technology (MIT).
 - The **first Indian Institute of Technology, IIT Kharagpur**, was established in 1951.

About IIT Madras Zanzibar

- It is the **first overseas campus** of an IIT.
- It is **located on Zanzibar Island in Tanzania** (an East African nation).

Note– The **K. Radhakrishnan Committee** has proposed establishing IIT campuses abroad.

Bubonic Plague (Black death)

Why in the News?

Recently, a rare case of bubonic plague, **also known as the Black Death**, has been detected in the US. It is likely transmitted by a pet cat.



Figure 6. Source- Edmonton Journal

What is Bubonic plague?

- About**– Bubonic plague is a **severe bacterial infection caused by a bacteria** called **Yersinia pestis**, which is typically found in small mammals and their fleas.

Note- *Y. pestis* bacteria **can harm both humans and animals**.
- Name origin**– Bubonic plague is **named after the swollen lymph nodes (buboes)** it causes. It resulted in millions of deaths in Europe during the Middle Ages.
- Fatality Rate**: It has a case-fatality ratio ranging from **30% to 60%**.

4. Symptoms:

- a. Sudden fever and chills.
- b. Pain in the abdomen, arms, and legs.
- c. Headaches
- d. Swollen lumps in the lymph nodes that may leak pus.

5. Transmission:

- a. Y. pestis is mainly spread by **fleas on rodents and other animals**.
- b. It spreads between animals and humans through flea bites, direct contact with infected tissues, and inhaling infected respiratory droplets.

6. Incubation period– 2 to 8 days.

7. Treatment: Bubonic plague can be cured with **antibiotics like Ciprofloxacin, levofloxacin, moxifloxacin, Gentamicin, and Doxycycline**.

What are the other types of plague?

Bubonic is one type of plague. Other types of plague include:

- a. **Septicemic plague**, when the infection spreads throughout the body.
- b. **Pneumonic plague**, when the lungs are infected.

Micellar water

Why in the News?

This article discusses micellar water, a popular product found in markets. It is **used for effectively removing makeup and sunscreen** due to its cleansing properties.

What is Micellar water?

- 1. Micellar water is a **gentle solution with a mild detergent**. It is a **skincare product** made up of tiny oil molecules called **micelles** – groups of molecules that are good at removing oil.
- 2. The micelles in micellar water are created by special molecules called **surfactants**. These molecules have both hydrophilic (water-loving) and hydrophobic (water-hating) properties.
- 3. These micelles molecules have **water-friendly outer layer that** easily mixes with water.

How micellar water works?

- 1. When someone **applies micellar water to a cotton pad**, an interesting thing happens. The **wet cotton attracts the water-loving part (hydrophilic) of the micelles**, while the **oily part (hydrophobic) sticks out**.
- 2. This **oily part is attracted to makeup, sunscreen, oils, and dirt on your face**.
- 3. As one wipe the cotton pad across your skin, these **substances attach to the micelles and are removed**. Some are even trapped inside the micelles.
- 4. This result in a cleaner skin in the end.

Subject: Environment

Water (Prevention and Control of Pollution) Amendment Bill 2024

Why in the News?

Water (Prevention and Control of Pollution) Amendment Bill 2024, was recently passed by the Parliament. This bill effectively **decriminalizes** almost all penal provisions **except** sections 25 and 26 in the earlier 1974 Water (Prevention and Control of Pollution) Act.

Section 25 pertains to the mandatory requirement of obtaining consent to operate from state pollution boards, while **section 26** deals with the discharge of sewage or trade effluents.

About Water (Prevention and Control of Pollution) Amendment Bill 2024

- To amend**– The Water (Prevention and Control of Pollution) Act 1974.
- Applicability**– Initially, its application will be limited to **Himachal Pradesh, Rajasthan, and the union territories**. Other states have the option to pass resolutions to extend its applicability within their jurisdictions.

Key provisions of the bill:

- Industrial Establishment Consent Exemptions**:- According to **Section 25** of the 1974 Act, **approval from the SPCB was needed** before setting up any outlet expected to release sewage or trade effluent into water bodies, sewers, or land. However, the proposed bill provides certain Industrial Establishment Consent exemptions-
 - The proposed Bill **allows the Central government**, in consultation with the CPCB, to **exempt** specific industrial plants from this requirement.
 - The **central government may issue guidelines for granting, refusing, or revoking consent** granted by the SPCB.
- Additional penal provision under section 25 of the Act**- The bill **retains the penal provision under Section 25** of the original Act. The **establishment and operation of an industry without obtaining SPCB consent** will still be punishable with imprisonment up to **six years and fine**. It also **introduces an additional penalty** between Rs 10,000 and Rs 15 lakh **for tampering with monitoring devices** used to determine the setting up of any industry or treatment plant.
- Selection of Chairman of State Pollution Control Board**- Under the 1974 Act, the state government nominated the chairman of a State Pollution Control Board (SPCB). However, according to the amendment Bill now, **central government will determine the nomination process and the terms of service** for the chairman of SPCB.
- Offences related to polluting matter**:
 - Change of imprisonment to fines in pollution offence**- Under the 1974 Act, the offenders of discharge of polluting matter faced imprisonment between one and a half to six years. The 2024 amendment Bill **replaces imprisonment with penalties** ranging from Rs 10,000 to Rs 15 lakh.
 - Imprisonment in case of failure to pay fines**- **Failure to pay penalties may lead to imprisonment** up to three years or a fine double the penalty amount.

5. Adjudicating officer to determine penalties:

- a. The 2024 amendment Bill allows the central government to **appoint adjudication officers to decide penalties under the Act.**
- b. **Appeals against their orders** can be **made to the National Green Tribunal**, with a deposit of 10% of the penalty.
- c. Penalties collected will go to the **Environment Protection Fund** established under the **Environment (Protection) Act, 1986.**

World Sustainable Development Summit

Why in the news?

Vice-President of India has recently inaugurated the World Sustainable Development Summit in Delhi in February 2024.

About World Sustainable Development Summit

Introduction-It is an **annual flagship** multistakeholder convening. This was previously called as **Delhi Sustainable Development Summit.**

Established in – 2001.

Organized by – **The Energy and Resources Institute (TERI).**

Parties involved – Ministries of Earth Sciences, New and Renewable Energy and Environment, Forests, and Climate Change (MoEFCC).

Objective – To mobilize opinion-makers to address issues concerning **sustainable development** and **climate change.**

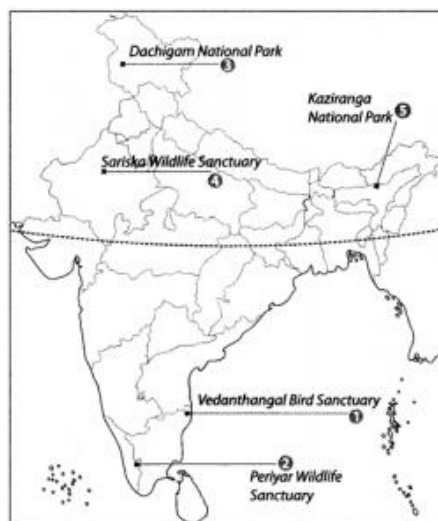
NOTE-It is the **only independently convened international summit** on sustainable development and environment, based in the **Global South.**

Dachigam National Park

Why in the News?

At Dachigam National Park in Jammu and Kashmir, a special diet has been provided to **Himalayan Black Bears** to support them during their natural hibernation period. Because of heavy snowfall and cold weather, the bears had trouble finding their usual food.

About Dachigam National Park



Source- LearnCBSE

Aspect	Details
Location	<ol style="list-style-type: none"> 1. It is located 22 kms from Srinagar in Jammu and Kashmir at altitudes ranging from 5500 feet to 14,000 feet. 2. It covers an area of 141 sq km (square kilometers).
Origin and History	<ol style="list-style-type: none"> 1. Its name, meaning 'ten villages', possibly commemorates the relocation of ten villages for its creation. 2. Initially, its establishment aimed to guarantee the provision of clean drinking water to Srinagar city.
National Park Status	Designated as a protected area since 1910, it attained the status of a national park in 1981 .
Special Feature	The park is renowned for being the habitat of the critically endangered Hangul , also known as the Kashmir stag .
Vegetation	Himalayan moist temperate forest : sub-alpine forest and alpine forest type
Flora	Wild cherry , apple, pear, peach, plum, apricot, chestnut, willow, walnut, oak , pine , birch, poplar, chinar, and elm trees .
Fauna	<ol style="list-style-type: none"> 1. Besides the Hangul, Dachigam boasts populations of musk deer, leopard, Himalayan Grey Langur, leopard cat, Himalayan Black Bear, yellow-throated marten, and various other species. 2. The area is home to raptors like the Eurasian eagle owl, Lammergeier, Eurasian griffon, and white-rumped vulture.

About Himalayan Black bear (*Ursus thibetanus laniger*)



Source- NDTV

1. It is a subspecies of the **Asian black bear**.
2. It is known for its role as a **primary seed disperser** which helps in maintaining ecosystem balance.
3. **Nature:**
 - a. It is typically **nocturnal and elusive**.
 - b. In the northwestern Himalayas, it **hibernates during winter**, while in the eastern Himalayas, it **remains active throughout the year**.
4. **Conservation status**– IUCN: **Vulnerable**

Bor Tiger Reserve

Why in the news?

The Bor Tiger Reserve (BTR) has recently sought Rs 1 crore for various works to start wildlife safaris in the Bangdapur and Hingni forest ranges.

About Bor Tiger Reserve

Aspect	Details
Introduction	It is a wildlife sanctuary which was declared a tiger reserve in July 2014.
Location	It is located in the Wardha District of Maharashtra .
Area	The reserve covers an area of 138.12 sq.km, which includes the drainage basin of the Bor Dam .
Vegetation	It has Dry Deciduous Forest .
Flora	Teak, tendu, bamboo, tarot, and gokhru are some of the abundant species.
Fauna	Apart from tigers, the reserve is home to several other mammals like leopards, sloth bears, sambar deer , Indian bison (gaur), chital, wild boars, and more

<p>Contagious national parks</p>	<p>Towards the North-east – Pench Tiger Reserve Towards the east – Nagzira Navegaon Tiger Reserve, Toward south-east- Tadoba Andhari Tiger Reserve Towards west- Melghat Tiger Reserve ; Towards north-west-Satpura Tiger Reserve</p>
<p>Some important facts</p>	<p>1) It is the smallest tiger reserve in India by area. 2) The Bor Tiger Reserve is traversed by the Bor River, which plays a significant role in the ecology and biodiversity of the reserve. 3) The Bor Tiger Reserve is strategically located between the Pench Tiger Reserve and the Tadoba-Andhari Tiger Reserve in the Nagpur and Chandrapur districts of Maharashtra. This region acts as a crucial tiger corridor connecting these two tiger reserves</p>

Cuscuta dodder

Why in the News?

The invasive weed Cuscuta dodder is gradually choking the Chengalpet forests and Vedanthangal Bird Sanctuary. This poses a **threat to the local vegetation, ecology, and the habitat of migratory birds.**

About Cuscuta dodder



Figure 7. Source-The New Indian Express

1. It is an invasive weed **native to North America.**
2. This **rootless parasitic vine** has invaded acres of trees in the Chengalpet reserve forests and is now spreading within Vedanthangal Bird Sanctuary.
3. It has been observed that dodder **covering the canopy of Barringtonia trees**, which are favored nesting spots for migratory water birds.
4. This holoparasitic plant **forms a canopy on the host plant and sends out numerous tendrils.** It creates a dense mass that eventually **chokes and kills the host.**
5. Dodder has been **designated** as a '**declared noxious weed**' in **25 countries**, where the **importation of its seeds and plant material is prohibited.** In the United States, it stands as the sole weed seed whose transportation is forbidden in all states.
6. Cuscuta seeds are **spheroid** with a **tough coat** which allows them to **survive up to 50 years in dry storage and at least 10 years in the field.**
7. Cuscuta seeds **can germinate without needing a specific stimulant**, unlike root parasites.

Note– A technical paper from the **National Research Centre for Weed Science** in India **highlights Cuscuta as a significant issue in oilseeds, pulses, and fodder crops** across Andhra Pradesh,

Chhattisgarh, Gujarat, Orissa, West Bengal, and parts of Madhya Pradesh. These concerns **persist whether the crops are grown under rain-fed or irrigated conditions.**

About Vedanthangal Bird Sanctuary



Figure 8. Source- Wikipedia

- 1. Location**– It is a **30-hectare protected area** situated in Chengalpattu District, Tamil Nadu.
- 2. Significant Feature**– It is the **oldest water bird sanctuary** in the country.
- 3. Fauna**– The area is a **habitat for migratory birds** like **pintail, garganey, grey wagtail, blue-winged teal, common sandpiper,** and others.
- 4. Ramsar site**– Since 2022, it has been recognized as a **protected**

Ramsar site.

Convention on the Conservation of Migratory Species of Wild Animals

Why in the news?

The Fourteenth Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (**COP14**) is being hosted by the Government of Uzbekistan, in Samarkand from 12-17 February 2024.

About Convention on the Conservation of Migratory Species of Wild Animals



Source-UNEP

Aspect	Details
Origin	It was signed in Bonn, Germany, on 23 June 1979
Description	It is also known as the Bonn Convention. This is an environmental treaty under the aegis of the United Nations Environment Programme .
Objective	To provide a global platform for the conservation and sustainable use of migratory animals and their habitats.
Governance	The Conference of Parties (COP) is the decision-making organ of this convention
Is it legally binding?	Activities by CMS Parties may range from legally binding treaties (called Agreements) to less formal instruments , such as Memoranda of Understanding.

Type of appendices	<p>Appendix I lists endangered migratory species and includes prohibitions regarding the take of these species.</p> <p>Appendix II lists species that have an 'unfavourable conservation status' and encourages range states to draft range-wide agreements for conservation and management of these species.</p>
Some important points	<p>1) It is the only global and UN-based intergovernmental organisation. established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species throughout their range.</p> <p>2) It acknowledges the importance of conserving migratory species.</p>

First-ever State of the World's Migratory Species report

Why in the News?

Recently, the **Convention on the Conservation of Migratory Species (CMS) of Wild Animals** launched the first-ever **State of the World's Migratory Species report**. It was launched at the opening of a major UN wildlife conservation conference (CMS COP14).

The report was **prepared by conservation scientists at the UN Environment Programme**.

What are the key findings of the report?

- 1. Decline in Population** – **Almost half (44 %)** of the migratory species listed under CMS are experiencing a decline in population.
- 2. Risk of Extinction** – Over **one-fifth of CMS-listed species are at risk of extinction**, and **97% of listed fish are facing this risk**.
- 3. Lack of Protection** – **51% of Key Biodiversity areas** important for migratory animals listed under CMS **lack protection**. Also, 58% of monitored sites for these species experience unsustainable human pressure.
- 4. Identified causes:**
 - a.** The most significant threats to migratory species are **overexploitation** and **habitat loss** caused by human activity.
 - b.** **Climate change, pollution**, and **invasive species** also greatly affect migratory species.
- 5. Lack of coverage under CMS**– Despite being listed by CMS, many migratory species remain at risk, with **399 threatened species not yet included under CMS**.

What are the key recommendations of the report?

1. Addressing illegal and unsustainable practices.
2. **Safeguarding critical sites** for migratory species.
3. **Focusing on species most threatened with extinction**.
4. Intensifying actions against climate change and pollution.

5. **Broadening CMS listings** to encompass more endangered species.

UN World Restoration Flagships

Why in the News?

The United Nations recently **designated seven initiatives** spanning Africa, Latin America, the Mediterranean, and Southeast Asia as the **UN World Restoration Flagships**.

What is UN World Restoration Flagships?



Figure 9. Source- DownToEarth

1. About – It is a component of the UN Decade on Ecosystem Restoration, led by the **UN Environment Program (UNEP)** and **the Food and Agriculture Organization**.

Note – The UN General Assembly declared the **UN Decade on Ecosystem Restoration (2021-2030)** to scale up restoration efforts of degraded ecosystems in order to combat climate change, improving food security, water supply, and biodiversity.

2. Objective– Its goal is to **stop, prevent, and reverse the decline of ecosystems** across all continents and oceans.

3. Eligibility– The awards recognize noteworthy initiatives that **contribute to global commitments aimed at restoring one billion hectares of land**.

4. Significance:

a. The recognition granted by the UNEP and FAO of the UN makes the initiatives **qualified for technical and financial assistance from the organization**.

b. **Inclusion in the UN Secretary-General's Report** to the General Assembly.

What are the seven initiatives designated under UN World Restoration Flagships?

1. The Restoring Mediterranean Forests Initiative:

a. It includes countries Lebanon, Morocco, Tunisia, and Turkey.

b. It employs an innovative approach to protect and restore natural habitats and vulnerable ecosystems. Around **two million hectares of forests have been restored across the region since 2017**.

2. The Living Indus initiative:

a. It was approved by the Pakistan parliament after the 2022 climate change induced floods.

b. It was **officially launched at the 27th Conference of Parties** to the **UN Framework Convention on Climate Change** in Sharm el-Sheikh.

c. The initiative **designates the Indus River as a living entity** with rights to protect rivers globally.

3. The Acción Andina social movement- It is led by Peruvian conservation non-profit ECOAN aims to **protect and restore a forest area of one million hectares**.

4. The Sri Lanka Mangrove Regeneration initiative – It is a **community-led program** focused on restoring the natural balance in the ecosystem through **science-driven methods**.

5. The Terai Arc Landscape initiative:

- a. It aims to **restore critical forest corridors in the India- Nepal region** with the help of local communities acting as citizen scientists, anti-poaching units, forest guards, and more.
- b. It also **helped in increasing the tiger population** in the landscape shared by **India and Nepal** to 1,174.

6. Regreening agriculture in Africa- To **reverse land degradation** on 1 million hectares **across 8 countries in sub-Saharan Africa.**

7. The Growing Forests in Africa’s Drylands initiative- It aims to increase from 41,000 restored hectares area to 229,000 hectares by 2030.

Subject: Schemes & Programmes

Kilkari programme

Why in the news?

Health ministry has launched Mobile Health Service ‘Kilkari’ and Mobile Academy in Maharashtra and Gujarat to improve health services..

About Kilkari programme

Aspect	Details
About	‘Kilkari’ means ‘a baby’s gurgle’. It is a centralized interactive voice response (IVR) based mobile health service.
Objective	To improve families’ knowledge and uptake of life-saving preventative health practices.
Funding	Cost is completely born by the central government. It is centrally hosted by the Ministry of Health and Family Welfare (MoHFW).
Implementation	The programme is integrated with the centralized Reproductive Child Health (RCH) portal of MoHFW’s.
Features	1) It delivers free, weekly, time-appropriate 72 audio messages about pregnancy, childbirth, and childcare directly to families’ mobile phones. 2) It starts sending messages from the second trimester of pregnancy until the child is one year old. 2) Women who are registered in Reproductive Child Health (RCH) portal also receive a weekly call with pre-recorded audio content directly on their mobile phones 3) Kilkari audio messages are present in the form of the voice of a fictitious doctor character called Dr. Anita.
Current state of	It is under implementation in 18 States / UTs of India.

implementation	
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What is mobile academy?

- 1) It is a free audio training course designed to expand and refresh the knowledge of **Accredited Social Health Activists (ASHA)**. This course is provided on their **mobile phones** to improve their **communication skills**.
- 2) **Accessibility**-It is an anytime, anywhere training course that can train **thousands** of ASHAs simultaneously via mobile phone.
- 3) **Languages**-It is available in **six languages** viz. Hindi, Bhojpuri, Oriya, Assamese, Bengali & Telugu versions.
- 4) **Current state of operation**-It is operational in 17 States/UTs except Chandigarh.

PM Matsya Kisan Samridhi Sahyojna

Why in the news?

The Central government has recently approved the “Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY).

About Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY)

Aspect	Details
About	The PM-MKSSY is a central sector sub-scheme under the Pradhan Mantri Matsya Sampada for formalisation of the fisheries sector.
Objective	<ol style="list-style-type: none"> 1) Gradual formalisation of the unorganized fisheries sector through self registration of fishers, fish farmers 2) Facilitating access to institutional financing, fisheries sector micro and small enterprises. 3) Providing one-time incentive to beneficiaries for purchasing aquaculture insurance.
Duration	Period of next four 4 years from FY 2023-24 to FY 2026-27 in all States/Union Territories.
Funding	Total outlay- Rs.6,000 crore- 50% i.e. Rs.3,000 crore will be provided by public finance including the World Bank and the AFD external financing , and rest 50% i.e.Rs.3,000 crore will be provided by private sector/benefeciaries .
Intended beneficiaries	Fishers, Fish (Aquaculture) Farmers, Fish workers, Fish Vendors or such other person directly engaged in fisheries value chain. Micro and Small enterprises,SHGs, Fish Farmers Producer Organizations (FFPOs) and Startups in fisheries sector .
Digital platform	National Fisheries Digital Platform will be created to provide 40 lakh small and micro-enterprises work-based identities.

Factly Compilation for the Month of February (Second Week) 2024

Major components	1) Formalisation of fisheries sector 2) Facilitating adoption of aquaculture insurance 3) Adoption and expansion of fish and fishery product safety and quality assurance systems 4) Project management, monitoring and reporting.
Significance	1) It will create 1.7 lakh new jobs, with a special emphasis on employing 75,000 women. 2) It will improve value chain efficiency and ensuring safe, quality fish by supporting 55,000 targeted micro and small enterprises. 3) It will ensure environment friendly fisheries sector. 4) It will Facilitate Ease of Doing Business and transparency.

RMNCAH+N Strategy under National Health Mission

Why in the news?

The RMNCAH+N strategy promotes links between various interventions across thematic areas to enhance coverage of health care services.

About RMNCAH+N Strategy

Introduction– The Government of India implements Reproductive Maternal Newborn Child Adolescent Health Plus Nutrition (RMNCAH+N) strategy under National Health Mission.

Objective– To address the **problem of anemia and malnutrition** among women and children across the county

Various intervention under RMNCAH+N strategy

- 1) **Mothers' Absolute Affection (MAA)**-It is implemented to improve **breastfeeding** coverage which includes early initiation of breastfeeding and exclusive breastfeeding for first six months
- 2) **Nutrition Rehabilitation Centres (NRCs)**-They are set up at **public health facilities** to provide in-patient medical and **nutritional care to children under 5 years** of age suffering from Severe Acute Malnutrition (SAM) with medical complications.
- 3) **Anemia Mukh Bharat (AMB)** -This programme is implemented to reduce **anemia** among six beneficiaries age group – children (6-59 months), children (5-9 years), adolescents (10-19 years), pregnant and lactating women and in women of reproductive age group (15-49 years) in life cycle approach through implementation of six interventions via robust institutional mechanism.
- 4) **National Deworming Day (NDD)**-Under this programme, **albendazole tablets** are administered in a single fixed day approach via schools and anganwadi centres in two rounds (February and August) to reduce the soil transmitted helminth (STH) infestation among all children and adolescents (1-19 years).

5) **Monthly Village Health, Sanitation and Nutrition Day (VHSND)**-It is an outreach activity at Anganwadi centers for provision of **maternal and child care** including nutrition in convergence with the ICDS.

6) **MCP Card and Safe Motherhood Booklet**-These are distributed to the pregnant women for educating them on **diet, rest, danger signs of pregnancy**, benefit schemes and institutional deliveries.

Middle-class housing scheme

Why in the News?

Recently Finance minister has announced a Middle-class housing scheme for the middle class as part of 'Housing for all' policy.

What is this Middle class housing scheme?

1. Its **announcement** was made in the recent **budget for FY 25**.
2. The government will start a program to assist **middle-class individuals living in rented houses, slums, chawls, and unauthorized colonies** to purchase or construct their own homes.
3. While it is part of the 'housing for all' policy, it's **not an extension of Pradhan Mantri Awas Yojana (PMAY)**.
4. It is a new scheme where the government will **define income levels, location, and accommodation types to identify beneficiaries**.

Note- There is **no defined criteria** for the identification of the middle class in India yet.

Subject: Reports/Indices/Summits

World Governments Summit 2024

Why in the News?

Recently, Prime Minister Modi has attended the World Government Summit 2024 in the UAE as a guest of honor. He was a guest of honor at the summit in 2018 as well.

What is World Governments Summit?



Source-narendramodi.in

Factly Compilation for the Month of February (Second Week) 2024

- About**– It is an annual event where leaders, policymakers, experts, and thinkers from around the world meet to discuss and tackle important global issues.
- Started in**– It started in 2013 under the leadership of the Vice President and Prime Minister of the UAE.
- An annual event**– It takes place every year in Dubai, UAE.
- Summit activities focus**– The Summit in its diverse activities explores how governments can use innovation and technology to solve global challenges for humanity in the future.
- 2024 Theme**: Shaping the Future Governments.

First-ever Digital India futureSKILLS Summit

Why in the news?

Ministry of Electronics and Information Technology (MeitY), is hosting the first-ever FutureSKILLS Summit in Guwahati on February 15, 2024.

About First-ever Digital India futureSKILLS Summit

Aspect	Details
Hosted by	National Institute of Electronics and IT at Guwahati
Concerned ministry	Ministry of Electronics & IT
Objective	To deliberate on strategies for catalysing future-ready talent for India & the World. To forge partnerships with industry and academic institutes nationwide to ensure that curricula is aligned with industry demands and standards.
Features	1) It will have over 20 strategic collaborations between NIELIT and Intel, HCL, Microsoft, Kindryl, IIM Raipurs etc. 2) It will have 1000 Prominent Attendees and over 30 Innovative Exhibitions. 3) It will have four-panel discussions on the following themes:- A) Semicon India #futureSKILLS B) IndiaAI #futureSKILLS C) Cyber Security & Emerging Technologies for the #futureSKILLS D) Digital #futureSKILLS – India’s Talent for Global Workforce.

Subject: Art & Culture

Ajanta and Ellora Caves

Why in the news?

The Ministry of Tourism has recently included the UNESCO World Heritage sites of Ajanta and Ellora caves in its Swadesh Darshan Scheme II.

About Ajanta and Ellora Caves

Area of difference	Ajanta caves	Ellora caves
Location	Ajanta caves are located in the Sahyadri ranges (Western Ghats). These are a series of rock-cut caves on Waghora river near Aurangabad in Maharashtra.	It is located nearly 100 Kms away from Ajanta caves in the Sahyadri range of Maharashtra.
Number of caves	There are a total of 29 buddhist caves in Ajanta of which 4 were used as Chaitya or prayer halls while 25 were used as Viharas or residential caves..	Ellora caves are a group of 100 caves at the site of which 34 caves are open to the public. 17 caves out of these 34 are themed around Hinduism, 12 caves depict the themes of Buddhist and 5 caves are of Jain faith.
Major religion	Ajanta Caves are mostly Buddhist sites .	Ellora has a better mix of Hindu, Jain, and Buddhist structures .
Time period of construction	The caves were developed in the period between 200 B.C. to 650 A.D.	They date to the period between the 6th and 11th Centuries AD.
Status	UNESCO World Heritage sites	UNESCO World Heritage sites

About Swadesh darshan scheme

Year of Launching-2015

Concerned ministry–**Ministry of Tourism**, Government of India

Objective-To develop **sustainable and responsible tourism** destinations in the country.

Type of scheme-It is **100% centrally funded** scheme.

Kokborok language

Why in the news?

The Tripura Board of Secondary Education (TBSE) has announced that both Roman and Bengali scripts will be allowed for Kokborok exams.

About Kokborok Language

Description– Kokborok is the language spoken by the Borok people belonging to the State of Tripura. The term kok means “**verbal**”, and borok means “**people**” or “**human**”.

Family-It is a Sino-Tibetan language and can be traced back to at least the 1st century AD when the historical record of Tripuri kings started to be written down in a book called the **Rajratnakar**.

Official status-It is one of the **state languages** of Tripura, along with Bengali. It was notified on January 19, 1979.

Dhokra Shilpkala Sculpture

Why in the news?

Chhattisgarh’s Ocher Studio is helping the artisans to preserve India’s 4,000-year-old craft- Dhokra Shilpkala.

About Dhokra Shilpkala Sculpture



Source-Gaon connection

Aspect	Detail
Description	The word “Dhokra” is believed to be derived from the Dhokra Damar tribes , the traditional metal smiths of Central India.
Origin	The origins can be traced back to the tribal communities residing in the regions of Chhattisgarh, Jharkhand, West Bengal, and Odisha .
Technique	It uses the lost-wax technique , or cire perdue, for metal casting.

Artistry and design	1) The beauty of Dhokra Shilpkala lies in its rustic charm and the organic nature of its designs. 2) Artisans draw inspiration from nature, mythology, and everyday life . They incorporate motifs such as animals, birds, deities, and tribal symbols into their creations. 3) Each piece display a sense of timeless elegance and cultural richness .
Challenges	1) Rapid growth in urbanization 2) Rise of mechanized production techniques.

Nazool Land

Why in the News?

Recently, violence erupted in Haldwani, Uttarakhand, after the administration conducted a demolition drive at a mosque and madrasa allegedly on Nazool land.

What is Nazool land?

1. Nazool land is **government-owned property**. However, usually it is **not directly managed** as state property.
2. It is **often leased to entities for fixed periods**, ranging from 15 to 99 years.
3. In case of lease expiry, one can approach the authority to renew the lease by submitting a written application to the revenue department of the local development authority.
4. The government **can either renew or cancel leases**.
5. **Origin**– Nazool land originated because kings and royals lacked documentation to prove ownership of lands seized during British rule.

How is it governed?

1. While some states have issued government orders to frame rules for Nazool land.
2. **The Nazool Lands (Transfer) Rules, 1956**, is the law **mostly used for adjudicating Nazool land**.

How does the government use Nazool land?

1. The government typically uses Nazool land for public purposes such as constructing **schools, hospitals, Gram Panchayat buildings**, etc.
2. Many cities in India have large portions of Nazool land used for **housing societies**, usually on lease.

BAPS Mandir- Abu Dhabi UAE

Why in the news?

The Prime Minister will inaugurate the BAPS Mandir (Bochasanwasi Akshar Purushottam Swaminarayan Sanstha Mandir), the first Hindu temple in Abu Dhabi.

About the BAPS Mandir (Bochasanwasi Akshar Purushottam Swaminarayan Sanstha Mandir)

Location– It is located at Abu Mureikhah, which is near Al Rahba.

Type– It is built in traditional **Nagar style of architecture**.

Size- It has an astounding 402 pillars, meticulously carved from 25,000 stone pieces. The temple stands tall at **108 feet**, being crowned with **seven shikhars** (spires) each representing one of the **seven emirates of the UAE**.

Material used– **Pink Rajasthan sandstone**, white Italian marble and 18 lakh bricks.

Entrance– The entrance of the temple is marked by eight murtis (idols). These idols symbolise the eight values **foundational to Sanatana Dharma**.

Domes– Temple is surrounded by '**Dome of Harmony**' and '**Dome of Peace**'.

Shrines–

- 1) The temple houses **seven shrines**, each dedicated to different deities hailing from the North, East, West and South parts of India.
- 2) These deities include **Lord Ram and his wife Sita**; Lord Hanuman; Lord Shiva and his wife Parvati and children Ganesh and Karthik etc.
- 3) Each shrine is adorned with **exquisite carvings**. It reflects the life and teachings of their respective deities.

Inscriptions– Stories from ancient civilisations such as **Maya, Aztec, Egyptian, Arabic, European, Chinese and African** are all captured in stone. This is a testament to the **interconnected essence of global spirituality**.

Eco-friendly architecture–

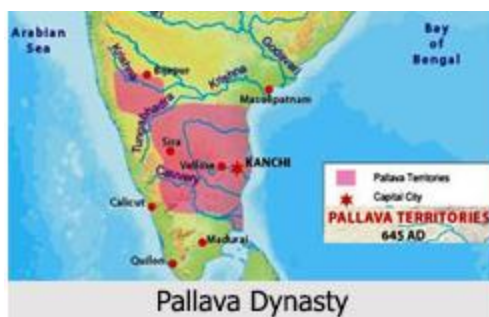
- 1) The temple has been built by using **fly ash** instead of cement to reduce its **carbon footprint**.
- 2) **Nano tiles** have been installed with designs to keep visitors comfortable even in extreme heat.
- 3) It has not used any **ferrous** material.

Kotravai sculpture from the Pallava era found

Why in the News?

Recently, archaeologists unearthed an eighth-century Kotravai sculpture, an artifact dating back to the Pallava period, near Ulundurpet, Tamil Nadu.

What are the significant details regarding the Pallava Dynasty?



Source- Indianetzone

Aspect	Details
About	<ol style="list-style-type: none"> 1. The Pallava Dynasty was a prominent force in South India that existed between the 3rd and 9th Centuries. 2. They governed northern Tamil Nadu, sections of Karnataka, Andhra Pradesh, and Telangana, with Kanchipuram as their capital.
Origin	<ol style="list-style-type: none"> 1. They were earlier feudatories of Andhra Satavahanas. 2. Following the decline of the Andhra Satavahanas in Amaravati, the Pallavas gained autonomy and grew independent 3. They gradually moved southward and established their capital in Kanchipuram during the 4th century CE.
Foreign Traveler Account	<ol style="list-style-type: none"> 1. Chinese traveler Hiuen Tsang, who visited Kanchipuram during the Pallava era, praised their kind rule. 2. He portrayed Bodhidharma, the founder of the Chan (Zen) school of Buddhism in China, as a prince of the Pallava empire.
Notable Kings	During the reigns of Mahendravarman I (571 – 630 CE) and Narasimhavarman I (630 – 668 CE) , the Pallava realm experienced increased wealth and strength.
Architecture	<ol style="list-style-type: none"> 1. The Pallava Dynasty was renowned for their contributions to Dravidian architecture, particularly in temple construction. 2. They played a pivotal role in shifting from rock-cut architecture to stone temples. 3. Mahabalipuram, a significant hub of art, architecture, and literature during Pallava rule, showcases their remarkable achievements. 4. Narasimhavarman II commissioned the construction of the Kailasanatha Temple in Kanchipuram and the Shore Temple.
Religion	They embraced Shaivism , a local religion, and identified as Dravidians .
Combat	<ol style="list-style-type: none"> 1. The Pallava Dynasty engaged in persistent battles with the Chalukya Dynasty to the north and the Tamil kingdoms of Chola and Pandyas to the south. 2. Their conflicts with the Chalukyas of Badami persisted until they were eventually subdued by the Chola kings in the 8th century CE.
Decline	<ol style="list-style-type: none"> 1. The rise of the Rashtrakutas led to the decline of the Pallava Dynasty. 2. In 897 AD, Vijayalaya, the Chola King, defeated Aparajitavarman, the last Pallava King, completely.

Subject: Geography & Places in News

Aral Sea Shrinking

Why in the News?

Recently, NASA's Earth Observatory shared an **in-depth analysis** of the factors contributing to **the disappearance of the Aral Sea**.

What are the factors responsible for disappearance of Aral Sea?

1. As per the space agency's findings, in 1960, the Soviet Union initiated a significant **water diversion project** by redirecting the **Syr Darya and Amu Darya rivers** for irrigation purposes. **Note**– The Aral Sea formed from water flowing from the Syr Darya and the Amu Darya rivers, which relied on glacial melt.
2. While the project caused the desert region surrounding the sea to flourish, it had a **catastrophic effect on the Aral Sea**. The waterbody began to dry up gradually and is now close to completely disappearing.

About Aral Sea



Figure 10. Source-Research gate

1. **Borders**– It marks the border between **Kazakhstan to the north** and **Uzbekistan to the south**.

2. **Served fourth Largest Inland Water Body**– It was **once served as a vast saltwater lake in Central Asia** and ranked as the world's fourth largest inland water body.

3. **Sea remains**–The **remaining fragments of the sea** lie in the climatically harsh core of Central Asia, situated east of the Caspian Sea.

4. **Emergence**–The Aral Sea

depression emerged towards the conclusion of the **Neogene Period**, spanning from approximately 23 to 2.6 million years ago.

5. **Drainage**– It encompasses **drainage from Uzbekistan** and **parts of Kazakhstan, Tajikistan, Afghanistan, Turkmenistan, Iran, and Kyrgyzstan**.

6. **Climate**– It is **known for its harsh climate with hot summers, cold winters, and temperature changes throughout the day**.

Stone age wall discovered in Baltic Sea

Why in the News?

Recently, scientists have discovered a Stone Age wall beneath the Baltic Sea in Germany. It is believed to be the oldest megastructure constructed by humans in Europe..



Figure 11. Source- Wikipedia

About Baltic Sea

1. Location– It is a semi-enclosed sea located in Northern Europe.

2. Branch– It is a branch of the North Atlantic Ocean, stretching northward from southern Denmark towards the Arctic Circle. It divides the Scandinavian Peninsula from the rest of mainland Europe.

3. Borders and Coastline– It has about 8,000 kilometers of coastline, shared by many countries such as Sweden, Poland, Lithuania, Latvia, Finland, Estonia, Germany, Denmark, and Russia.

4. Size– It occupies an area of about 377,000 square kilometers. The sea stretches approximately 1,600 kilometers in length and is about 193 kilometers wide.

5. Maritime link:

a. It connects to the White Sea through the White Sea Canal and to the German Bight of the North Sea via the Kiel Canal.

b. It also connects to the Atlantic Ocean through the Danish Straits.

6. Gulf– The Baltic Sea has three main gulfs: the Gulf of Bothnia to the north, the Gulf of Finland to the east, and the Gulf of Riga slightly to the south of that.

7. Inflows- Over 250 rivers and streams flow into the Baltic Sea. The Neva River is the largest among them.

8. Islands: The Baltic Sea is inhabited by more than 20 islands and archipelagos. Gotland, situated near the Swedish coast, is the largest island in the Baltic Sea.

Distinct Features:

a. It is commonly referred to as the largest brackish inland water body in the world.

b. The Baltic Sea's water is less salty compared to the world's oceans because of the inflow of freshwater from surrounding land and the sea's shallow depth.

About Baltic Nations

1. Countries– Estonia, Latvia, and Lithuania, collectively known as the Baltic Nations.

2. **Borders**– They are bordered by the Baltic Sea to the west and north, by Russia to the east, by Belarus to the southeast, and by Poland and a Russian exclave to the southwest.

Kaji Nemu

Why in the News?

The Assam government recently declared the GI-tagged 'Kaji Nemu' (Citrus Limon) as the official State Fruit.



Figure 12. Source- The New Indian Express

About Kaji Nemu

- 1. About**– It is a **variety of lemon (Citrus Limon)** that is **native to Assam**.
- 2. Shape**– It possesses an **elongated and oblong shape** in contrast to other lemon varieties.
- 3. Distinctive traits:**
 - a.** It is **much juicier than other varieties of lemons**.
 - b.** It is renowned for its **distinct fragrance** and **antioxidant properties**. It is traditionally **associated with Assamese cuisines**.
 - c.** It is considered a **powerhouse of nutrients**, enhancing overall health.
- 4. Cultivation**– It is cultivated across nearly all districts of the Assam and is **available throughout the year**.
- 5. GI Tag**– In 2019, Kaji Nemu was awarded a GI (Geographical Indication) tag.

Note– Assam boasts a significant diversity of citrus, with a **total of 16 species and 52 hybrid varieties**.

Subject: Miscellaneous

Bharat Ratna for P.V. Narasimha Rao, Charan Singh, MS Swaminathan




Why in the News?

The government has recently announced that the Bharat Ratna will be conferred on former PM **P.V. Narasimha Rao and Chaudhary Charan Singh**, as well as Green Revolution pioneer **M.S. Swaminathan**.

This is in addition to the two recipients previously announced earlier this year — socialist leader **Karpoori Thakur** and former Deputy Prime Minister L.K. Advani.

Who were P.V. Narasimha Rao, Chaudhary Charan Singh, and M.S. Swaminathan?

Factly Compilation for the Month of February (Second Week) 2024

		
Dr. M.S. SWAMINATHAN (7 August 1925 - 28 September 2023)	P.V. NARASIMHA RAO (28 June 1921 - 23 December 2004)	CHAUDHARY CHARAN SINGH (23 December 1902 - 29 May 1987)
<ul style="list-style-type: none"> ■ Agricultural scientist & agronomist ■ Born in Kumbakonam, Tamil Nadu 	<ul style="list-style-type: none"> ■ Former Prime Minister of India (1991-96) ■ Born in Warangal, Telangana ■ Credited with steering the liberalisation of Indian Economy 	<ul style="list-style-type: none"> ■ Former Prime Minister of India (1979-80) ■ Born In Noorpur, Uttar Pradesh ■ Leader of the Lok Dal, credited as a leader of farmers in north India
<ul style="list-style-type: none"> ■ Played an instrumental role in Green Revolution and towards food self-sufficiency in India 		

Source- The Hindu

Note- PV Narshima Rao was the **first PM from southern India**.

About Bharat Ratna



Figure 13. Source- The Print

1) **About-** Bharat Ratna is the **highest civilian award of India**, instituted in 1954.

2) **Domain of recognition-** The award initially honored contributions in arts, literature, science, and public services. However, in December 2011, its **scope was expanded** to include **'any field of human endeavor'**.

3) **First recipients-** Scientists Chandrasekhara Venkata Raman, C. Rajagopalachari and Sarvapalli Radhakrishnan.

4) **Non Indians-** The award has also been given to non-Indians – Khan Abdul Ghaffar Khan and Nelson Mandela.

5) **Recommendation for Bharat Ratna-** The recommendations for Bharat Ratna are made by the Prime Minister to the President.

6) Bharat Ratna Award Limit:

- The number of Bharat Ratna Awards is restricted to a **maximum of three in a particular year**.
- However, in 2024, five Bharat Ratna awards were announced**, one more than the four announced in 1999. This marks the highest number ever conferred in a single year.

7) Title guidelines:

- According to **Article 18 (1) of the Constitution**, the Bharat Ratna **cannot be used as a prefix or suffix to the recipient's name**.
- However**, if the award holder wishes to indicate they have received the award, they may do so in their **biodata, letterhead, or visiting card**.