

OFFICERS IAS ACADEMY™

OFFICERS' PULSE



APRIL 2026 (Digest)

CURRENT AFFAIRS
MONTHLY

The **PULSE** of UPSC at your fingertips.

Foreword

Officers Pulse Digest is a comprehensive monthly current affairs magazine that serves as a complete resource for UPSC CSE Prelims. It includes significant topics from sources like **The Hindu, Indian Express, Business Standard, Yojana, Kurukshetra, Down to Earth**, and more.

Although “**Officers Pulse- Digest**” is primarily oriented towards Prelims, reading “Officers Pulse- In depth” along with it is crucial for effectively tackling the Prelims examination.

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POLITY

1) RAJYA SABHA DEPUTY CHAIRMAN APPOINTMENT

Why in News?

In a historic development, nominated Member of Parliament Harivansh Narayan Singh has been elected as the Deputy Chairman of the Rajya Sabha. He was also re-elected unopposed for a third consecutive term.

About

The Deputy Chairman is the presiding officer of the Rajya Sabha who performs the duties of the Chairman (Vice-President of India) in his absence. **Article 89(2)** of the Constitution provides for the election of the Deputy Chairman of the Rajya Sabha from among its members. Whenever the office becomes vacant, the House elects another member to the post.

Election of the Deputy Chairman of the Rajya Sabha

- When the office falls vacant, the Chairman of the Rajya Sabha (Vice President) fixes the election date, and the Secretary-General notifies members.
- Any sitting Rajya Sabha member can contest for the post of Deputy chairman.
- On the election day, the Chairman presides over the process. If only one valid nomination exists, the candidate is elected unopposed; otherwise, voting is held.
- A **simple majority of members present and voting** elects the winner.
- **No separate oath is required**, as the MP oath already taken is sufficient.

Role and Functions

The Deputy Chairman presides over the proceedings of the House in the absence of the Chairman (Vice-President of India) and exercises all the powers of the Chairman during that period.

Salary and Allowances

The salary and allowances of the Deputy Chairman are determined by Parliament and are charged upon the Consolidated Fund of India.

Voting Power

Like the Chairman, the Deputy Chairman, while presiding over the House, does not vote in the first instance. However, he can exercise a casting vote in the event of a tie.

Independence of the Office

The Deputy Chairman is not subordinate to the Chairman and is directly responsible to the Rajya Sabha.

Position as a Member

When the Chairman presides over the House, the Deputy Chairman functions as an ordinary member, participating in debates and exercising his right to vote.

Removal Procedure

- The Deputy Chairman may be removed by a resolution passed by a majority of all the then members of the Rajya Sabha, if at least 14 days' prior notice has been given.
- He cannot preside over the House when a resolution for his removal is under consideration.

Vacancy in Office

- The office of the Deputy Chairman becomes vacant:
 1. if he ceases to be a member of the Rajya Sabha;
 2. if he resigns by writing to the Chairman; or
 3. if he is removed by the House.
- In such cases, the Rajya Sabha elects another member as Deputy Chairman.

Panel of Vice-Chairpersons

- Under the Rules of Procedure of the Rajya Sabha, the Chairman nominates a panel of Vice-Chairpersons from among the members of the House. Any member from this panel may preside over the proceedings in the absence of both the Chairman and the Deputy Chairman.
- However, a Vice-Chairperson cannot preside when the office of either the Chairman or the Deputy Chairman is vacant.

2) INTER STATE WATER DISPUTE

Why in News?

The Mahanadi Water Disputes Tribunal (MWDT) may soon deliver its judgement with regards to Mahanadi River water sharing formula between Odisha and Chhattisgarh as both States failed to place concrete proposal for mutual settlement.

About

- Inter State Water Disputes in India arise when two or more states contest the sharing, control, or use of river waters flowing across political boundaries.
- India has 25 major river basins, many spanning multiple states, making water a federal and political issue.

Constitutional Provisions

- **Article 262:** Empowers Parliament to adjudicate interstate river water disputes and exclude the jurisdiction of courts, including the Supreme Court, in such matters.
- **Entry 17, State List:** States have power over water supply, irrigation, canals, drainage, water storage, and water power, subject to Union provisions.
- **Entry 56, Union List:** Parliament can regulate and develop interstate rivers and river valleys in the public interest.

Parliamentary Acts & Legislative Frameworks

- **Inter-State River Water Disputes (ISRWD) Act, 1956:** Provides for adjudication of

interstate river water disputes through tribunals when negotiations fail.

- **River Boards Act, 1956:** Enables creation of river boards for coordinated development of interstate river basins, though no board has been effectively operationalized.
- **2002 Amendment to ISRWD Act:** Introduced timelines—1 year for tribunal constitution and 3 years for award delivery.
- **Dispute Resolution Committees (DRCs):** Established for pre-tribunal negotiations to encourage amicable settlement of disputes.
- **Inter-State River Water Disputes (Amendment) Bill, 2019:** Proposes a single permanent tribunal with multiple benches, fixed timelines, and a centralized national water data bank.

RIVER DISPUTE AND STATES

- **Cauvery River Dispute** – Karnataka, Tamil Nadu, Kerala, Puducherry
- **Krishna River Dispute** – Maharashtra, Karnataka, Telangana, Andhra Pradesh
- **Ravi-Beas Dispute** – Punjab, Haryana, Rajasthan
- **Mahanadi Dispute** – Odisha, Chhattisgarh
- **Godavari River Dispute** – Maharashtra, Telangana, Andhra Pradesh and other states
- **Mahadayi (Mandovi) Dispute** – Karnataka, Goa, Maharashtra
- **Narmada Dispute** – Madhya Pradesh, Gujarat, Maharashtra, Rajasthan
- **Vamsadhara Dispute** – Andhra Pradesh, Odisha

Supreme Court Judgments & Judicial Interpretation

- **Interpretation of Tribunal Awards:** The Supreme Court can interpret the scope, meaning, and finality of tribunal awards in interstate river water disputes.
- **Ensuring Implementation:** States can approach the Supreme Court to enforce compliance with tribunal awards if another state fails to implement them.
- **Article 136 (Special Leave Petitions):** Although Article 262 bars original

jurisdiction, the Supreme Court can hear appeals against tribunal decisions through Special Leave Petitions (SLPs) under Article 136.

3) CENTRAL ARMED POLICE FORCE ACT 2026

Why in News?

The Central Armed Police Forces (General Administration) Act, 2026 received the assent of the President to regulate the recruitment, service conditions, and administrative structure of officers in the Central Armed Police Forces (CAPFs).

About

- The CRPF Act, 2026 is a comprehensive legislation aimed at regulating the administrative and service-related matters of specified Central Armed Police Forces (CAPFs).
- These include **recruitment, deputation, promotion, and conditions of service**. The Act applies to five CAPFs listed in the Schedule to the Act. These are:
 - Central Reserve Police Force (CRPF)
 - Border Security Force (BSF)
 - Central Industrial Security Force (CISF)
 - Indo-Tibetan Border Police (ITB)
 - Sashastra Seema Bal (SSB)

Key provision of the Act

The central government may amend the Schedule by notification to make the Act applicable to other CAPFs. Officers include:

- Group A (general duty or executive) officers of the rank of Assistant Commandant and above in CAPFs,
- Officers on deputation from the Indian Police Service (IPS), and
- Officers of the Indian Army on deputation or re-employment.

Reservation of senior posts for IPS deputation

The Act mandates:

- **50% of Inspector General** posts to be filled by deputation

- **Minimum 67%** of Additional Director General posts by deputation
- Special Director General and Director General posts only through deputation.

Rules under the Act have overriding effect

In case of inconsistency between rules under this Act and any other rule or order, rules framed under this Act will prevail.

Power to amend Schedules

The Central Government may add or amend:

- Acts in the First Schedule
- Recruitment rules in the Second Schedule through notification.

Power to remove difficulties

The Central Government may issue orders to remove implementation difficulties, provided such orders are made within three years from commencement of the Act.

4) NATIONAL HUMAN RIGHTS COMMISSION

Why in News?

National Human Rights Commission takes suo motu cognizance of the reported explosion causing fire at a chemical factory leaving 16 workers injured in Bharuch district, Gujarat

About

- The **National Human Rights Commission (NHRC)** of India was established in **1993** as a statutory body.
- It derives its mandate and powers from the **Protection of Human Rights Act (PHRA), 1993**, which was later significantly updated by the **Protection of Human Rights (Amendment) Act, 2019**.
- It is in conformity with the **Paris Principles**, adopted at the first International workshop on National Institutions for the Promotion and Protection of Human Rights held in Paris and endorsed by the General Assembly of the United Nations.

Composition & Appointment

- **Multi-member Body:** Consists of a Chairperson, five full-time members, and seven ex-officio members.
- **Chairperson Eligibility:** Any person who has been a **Chief Justice of India** OR a **Judge of the Supreme Court** (Amended in 2019).
- **Full-time Members:** One member who is/has been a SC Judge; one who is/has been a HC Chief Justice; and **three members** (at least one must be a woman) with knowledge of human rights.
- **Ex-officio Members:** Chairpersons of 7 National Commissions (SC, ST, Women, Minorities, OBC, Protection of Child Rights, and Chief Commissioner for Persons with Disabilities).
- **Selection Committee:** Appointed by the President on the recommendation of a **6-member committee**.
- **Committee Members:** PM (Head), Speaker (LS), Deputy Chairman (RS), Leaders of Opposition (both Houses), and Union Home Minister.
- **Tenure:** **3 years** or until age **70**, whichever is earlier (Reduced from 5 years in 2019).
- **Reappointment:** Members are eligible for reappointment (2019 amendment).
- **Post-retirement Bar:** The Chairperson/Members are ineligible for further employment under the Central or State Governments.

Removal & Autonomy

- **Removal Authority:** Only the **President of India**.
- **Grounds for Removal:** Insolvency, paid employment outside duties, infirmity of mind/body, or conviction of an offense.
- **Misbehavior/Incapacity:** Removal requires an inquiry and report by the **Supreme Court**.
- **Financial Autonomy:** The Commission has its own budget, though it is administratively linked to the **Ministry of Home Affairs**.

- **Independent Staff:** It has its own investigative staff headed by a Director General of Police.

Powers and Functions

- **Civil Court Powers:** During inquiries, it enjoys powers of a civil court, including summoning witnesses, seeking documents, and receiving evidence on affidavits.
- **Suo Motu Powers:** It can initiate investigations on its own based on media reports or other credible information, even without a formal complaint.
- **Intervention in Court Proceedings:** It may intervene in cases involving human rights violations with the approval of the concerned court.
- **Jail and Detention Visits:** It can inspect jails and detention centres under state control to examine the living conditions of inmates.
- **Review of Human Rights Issues:** It reviews factors, including terrorism, that hinder the enjoyment of human rights and recommends remedial measures.
- **Treaty and Research Functions:** It studies international human rights treaties and recommends measures for their effective implementation in India.
- **Human Rights Awareness:** It promotes human rights literacy through publications, media outreach, seminars, and other educational programmes.
- **Support to NGOs:** It encourages and supports the work of non-governmental organizations engaged in the protection and promotion of human rights.



*National Human Rights Commission comes under the purview of the **Right to Information (RTI) Act, 2005**.*

The NHRC has designated:

- *Public Information Officers (PIOs)*
- *Appellate Authorities*

To process RTI applications and appeals.

5) NCERT RECOGNISED DEEMED UNIVERSITY

Why in News?

The Ministry of Education has officially announced the National Council of Educational becomes-deemed to be university-status.

About

In India, the University Grants Commission (UGC) does not independently establish conventional Central or State universities; those require an Act of Parliament or a State Legislature.

However, under **Section 3 of the UGC Act, 1956**, the **UGC possesses the statutory authority** to evaluate and recommend institutions of higher education for the conferment of "**Deemed-to-be-University**" status, as well as the power to recommend the **removal** of such status.

Central and State Universities (Via Legislation)

- **Central Universities:** Established by an Act of Parliament (e.g., JNU, DU). The Ministry of Education (MoE) oversees them, and the President of India acts as the Visitor.
- **State Universities:** Established by a Legislative Act of a State Assembly (e.g., University of Mumbai).

Private Universities

- Established through a specific State Legislative Act passing a sponsoring body's proposal. However, to grant recognized degrees, they must comply with **Section 22** of the UGC Act and be listed in the UGC's official directory of private universities.

Institutions Deemed to be Universities

- High-performing institutions that are *not* full universities but are granted the status and privileges of a university due to their excellence in specialized areas of work.
- **The Legal Route:** Conferred by the Central Government (Ministry of Education) on the explicit advice of the UGC, under **Section 3 of the UGC Act, 1956**.

Case of NCERT: "Deemed to be University" under a Distinct Category

What is the "Distinct Category"? Under the **UGC (Institutions Deemed to be Universities) Regulations, 2023**, the "Distinct/De-Novo" category allows greenfield or specialized existing institutions focusing on unique, strategic disciplines, national priorities, or cultural heritage to get university status without needing a long historical track record of standard NAAC accreditations.

New Powers: With this status, NCERT can now independently design its own curriculum, conduct evaluations, expand research, start Doctoral (Ph.D.) programs, and **confer its own graduate and postgraduate degrees**.



Institutions of National Importance (INI)

Conferred on premier public institutions by an Act of Parliament (e.g., IITs, IIMs, AIIMS). They do not fall under the standard UGC administrative loop but possess independent degree-granting authority.

6) CENSUS 2027: INDIA FIRST DIGITAL ENUMERATION EXERCISE

Why in News?

India has launched the first phase of its long-delayed 2027 census, marking the country's first fully digital population count.

About

- **Census:** Systematic collection of demographic, social, cultural, and economic data for governance and policy-making.
- **Legal Framework:** Governed by the Census Act, 1948 and Census Rules, 1990.
- **Constitutional Status:** Census is a Union subject under Entry 69 of the Union List in the Seventh Schedule.

Phases of Census 2027

- **Phase I – Houselisting & Housing Census (HLO):** Conducted from April–September 2026 to collect data on housing conditions, amenities, and household assets.
- **Phase II – Population Enumeration (PE):** Conducted in February 2027 to collect demographic, socio-economic, migration, and fertility data.

Salient Features of Digital Census

- **Caste Enumeration:** Census 2027 will include caste enumeration along with SC and ST data collection.
- **First Digital Census:** Census 2027 will be India's first fully digital census exercise.
- **Census Management & Monitoring System Portal:** Real-time portal for monitoring and managing census operations at all administrative levels.
- **Houselisting and Housing Census Mobile Application:** Offline mobile app for digital houselisting data collection in 16 regional languages.
- **Houselisting Block Creator Web Mapping Application:** Uses satellite imagery for digital creation of Houselisting Blocks to avoid duplication and omission.
- **Self-Enumeration Portal:** Allows households to submit census details online before field verification by enumerators.

S No. Question		S No. Question		
Condition of the House	1	Line Number	9	Household number
	2	Building number	10	Total number of persons normally residing in the household
	3	Census house number	11	Name of the head of the household
	4	Predominant material of Floor of the Census house	12	Sex of the head of the household
	5	Predominant material of Wall of the Census house	13	Weather the head of the household belongs to SC/ST/Other
	6	Predominant material of Roof of the Census house	14	Ownership status of the Census house
	7	Ascertain use of Census house	15	Number of dwelling rooms exclusively in possession of the household
	8	Condition of the Census House	16	Number of married couple(s) living in the household
Amenities available to the household	17	Main source of drinking water	26	Radio/Transistor
	18	Availability of drinking water source	27	Television
	19	Main source of lighting	28	Access to Internet
	20	Access to Latrine	29	Laptop/Computer
	21	Type of Latrine	30	Telephone/Mobile Phone/ Smartphone
	22	Waste water outlet	31	Bicycle and Scooter/ Motorcycle/Moped
	23	Availability of bathing facility	32	Car/Jeep/Van
	24	Availability of kitchen and LPG/PNG connection	33	Main cereal consumed in the household
	25	Main Fuel used for cooking	34	Mobile number (For Census related communications only)
			Others	



The earliest references to conducting census in the country can be found in Kautilya's Arthashastra (321-296 BC) and later in the writings of Abul Fazl in 'Ain-e-Akbari' during the days of Emperor Akbar.

- *Census 2027 will be the 16th in the series of Indian census and 8th since independence*

ECONOMY

7) SPECIAL DRAWING FACILITY

Why in News?

The Telangana government availed ₹27,730 crore under the **Special Drawing Facility (SDF)** and ₹64,188 crore through **Ways and Means Advances (WMA)** from the Reserve Bank of India during 2024–25 to manage its financial requirements and temporary cash mismatches.

About

- According to the official guidelines of the Reserve Bank of India (RBI), when a State Government needs short-term liquidity to bridge its cash flow mismatches, it must follow a **predefined sequential order of financial accommodation**.
- A state cannot jump to a normal loan or an overdraft without fully exhausting the cheaper, collateral-backed options first.

The sequence is:

- 1) Special Drawing Facility (SDF) / Special WMA
- 2) Normal Ways and Means Advances (WMA)
- 3) Overdraft (OD) Facility

- **Ways and Means Advances (WMA)** is a temporary loan facility provided by the **Reserve Bank of India (RBI)** to both the Central and State Governments to bridge temporary mismatches in their receipts and payments.
- It is a **liquidity management tool**.
- It is governed by Section 17(5) of the **RBI Act, 1934**.
- These advances must be repaid within **three months** (90 days) from the date of the advance.

Special Drawing Facility (SDF)



- SDF is a liquidity management mechanism provided by the **Reserve Bank of India (RBI)** to State Governments and Union Territories.
- It acts as a **primary window** for states to manage temporary mismatches in their cash flows.

- It is the first line of credit used before moving to other facilities like **Ways and Means Advances (WMA)** or **Overdraft (OD)**.
- The SDF is strictly against collateral.
- States must pledge their investments in specific **Government of India (GoI) Securities**, such as **Auction Treasury Bills (ATBs)**, **Government of India Dated Securities**.
- The interest rate for the SDF is typically linked to the **Repo Rate**.
- It is generally set at **Repo Rate minus 1%** (100 basis points).

This makes it significantly cheaper than WMA (which is at the Repo Rate) or Overdraft (which is Repo + 2%).

Normal Ways and Means Advance

- This is unsecured borrowing. The limits for Normal WMA are based on a three-year average of the State's actual revenue and capital expenditures.
- The interest charged on WMA is linked to the monetary policy rate:
 - If it is within the limit, then interest is charged at the **Repo Rate**.
 - If the government exceeds the WMA limit or the 90-day period, it enters an Overdraft. This carries an interest rate of **Repo Rate + 2%**.
- The limits for WMA are not permanent; they are reviewed periodically by the RBI in consultation with the Government of India.

Feature	Special Drawing Facility (SDF)	Ways and Means Advances (WMA)	Overdraft (OD)
 Nature	Secured (against GoI securities)	Unsecured (up to a limit)	Unsecured (beyond WMA)
 Cost	Lowest (Repo - 1%)	Moderate (Repo Rate)	Highest (Repo + 2%)
 Usage Order	Used First	Used Second	Used Last

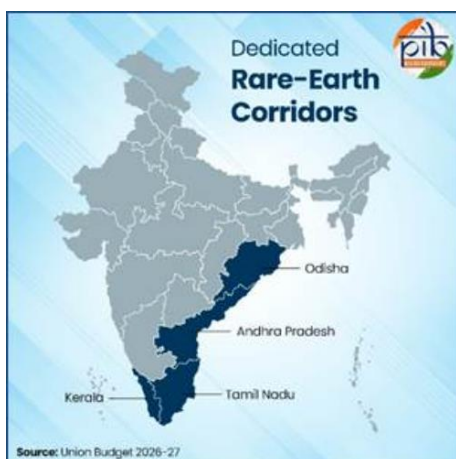
8) RARE EARTH CORRIDOR

Why in News?

India will set up Rare Earth Corridors in **Odisha, Kerala, Andhra Pradesh, and Tamil Nadu** to boost domestic mining and processing **as per Union Budget 2026-2027**.

About

- The Union Budget 2026–27 introduced Dedicated Rare Earth Corridors in **Odisha, Kerala, Andhra Pradesh, and Tamil Nadu**.



- It aims to promote mining, processing, research, and manufacturing of rare-earth materials and Rare Earth Permanent Magnets (REPMs).
- It leverages mineral-rich coastal states for industrial development.
- It strengthens domestic supply chains and reduces import dependence.

9) NATIONAL FIBRE MISSION

Why in News?

The Ministry of Textiles held a major stakeholder consultation in New Delhi on April 7, 2026, regarding the National Fibre Scheme (also known as the National Fibre Mission).

About

- The National Fibre Mission is a **flagship initiative announced in the Union Budget 2026–27** to strengthen India's fibre ecosystem.
- The mission seeks to **integrate fibre production, processing, innovation, value addition, and**

exports while supporting farmers, artisans, MSMEs, and the textile industry.

- It was introduced as part of an **Integrated Programme for the Textile Sector**, alongside the Textile Expansion & Employment Scheme, National Handloom & Handicraft Programme, Tex-Eco Initiative, and Samarth 2.0.
- It is being implemented **under the Ministry of Textiles**.

Objectives

- It **promotes both natural fibres** (cotton, jute, silk, wool) and **man-made/technical fibres**.
- It enhances domestic fibre production and **reduces import dependence**.
- It improves quality, productivity, and value addition across the textile value chain.
- It supports research, innovation, and sustainable fibre technologies.
- It increases farmers' income and generates employment in textile and allied sectors.
- Strengthen India's position in global textile exports.

10) WOMANIYA INITIATIVE

Why in News?

The Womaniya initiative onboarded over 2.1 lakh women-led Micro and Small Enterprises (MSEs) and facilitated 13.7 lakh orders worth more than ₹28,000 crore in GeM.

About

- Womaniya Initiative** is a special initiative launched in **2019** under Government e Marketplace (GeM).
- It aims to promote **women entrepreneurship** by enabling women-led enterprises to directly participate in government procurement.

Objectives

- Increase participation of women in public procurement.
- Promote **financial inclusion and economic empowerment** of women.
- Support the government's target of reserving **3% of procurement from women-owned enterprises**.

- Encourage **formalization and digital inclusion** of women-led businesses.

Key features

- Through GeM, women entrepreneurs can **sell goods and services directly to government ministries, departments, PSUs, and other public institutions**, eliminating middlemen.
- It supports **women-led Micro and Small Enterprises (MSEs), Self-Help Groups (SHGs), artisans, weavers, startups, and marginalized women entrepreneurs**.
- The initiative addresses the **triple challenge** faced by women entrepreneurs:
 - **Access to markets**
 - **Access to finance**
 - **Access to value addition and business opportunities**

11) PETROLEUM AND NATURAL GAS REGULATORY BOARD

Why in News?

PNGRB is finalizing bids for four LPG pipelines to enhance infrastructure and reduce road transportation by 2030.

About

- The PNGRB is a **statutory regulatory authority** established **to ensure the organized growth of the petroleum and natural gas sectors**.
- Its primary mandate is to **protect the interests of**

Government e-Marketplace

*The **Government e-Marketplace (GeM)** is an online public procurement platform launched in **2016** by the Ministry of Commerce and Industry to facilitate the procurement of goods and services by government departments and public sector organizations.*

both consumers and the entities engaged in the sector, while fostering a competitive and efficient market.

- It was constituted under **The Petroleum and Natural Gas Regulatory Board Act, 2006**.
- It is under the **Ministry of Petroleum and Natural Gas (MoPNG)**.

Objectives

- To **protect consumer interests** by ensuring fair trade practices and adequate availability of petroleum and natural gas.
- To **promote competitive and efficient markets** in the petroleum, petroleum products, and natural gas sectors.
- To **facilitate the development of pipelines** and energy distribution infrastructure across India.
- To **ensure uninterrupted, equitable, and reliable supply of petroleum** and natural gas throughout the country.

Functions

- It is **responsible for regulating the midstream and downstream sectors** of the oil and gas industry in India.
- It **does not** regulate the **"upstream" sector** meaning the actual production of crude oil and natural gas.

12) FINANCIAL INTELLIGENCE UNIT

Why in News?

The Financial Intelligence Unit-India (FIU-IND) and the Pension Fund Regulatory and Development Authority (PFRDA) signed a comprehensive Memorandum of Understanding (MoU) to enhance information sharing and coordination.

About

- The **Financial Intelligence Unit – India (FIU-IND)** is the central national agency of India responsible for gathering and analyzing financial intelligence to combat money laundering and terror financing.
- It is an **administrative/executive body** established in **November 2004**, which serves as the "nerve center" for the country's anti-money laundering (AML) and countering the financing of terrorism (CFT) framework.
- It is under the **Department of Revenue, Ministry of Finance**.
- It reports directly to the **Economic Intelligence Council (EIC)**, which is chaired by the Union Finance Minister.

Objectives

- FIU-IND protects the **integrity and stability of the financial system** by identifying, analysing, and **preventing illegal financial transactions**, including money laundering and terror financing.
- It **ensures** that **proceeds from criminal activities are not integrated into the formal economy** by maintaining a national database of suspicious and high-value financial transactions and examining transaction patterns.
- It **detects**, tracks, and disrupts the **movement of funds linked to terrorist activities** and organisations.
- It **acts as a processing and intelligence-sharing agency** (not an investigative body like the CBI or ED), it disseminates actionable financial intelligence to domestic and international law enforcement agencies.
- It **promotes coordination and information exchange with global bodies** such as the Egmont Group to combat cross-border financial crimes.
- It also **monitors compliance of banks** and financial institutions with the provisions of the **Prevention of Money Laundering Act, 2002**.

13) FIRST SEMICONDUCTOR FAB

Why in News?

The Government of India has officially notified the country's first commercial semiconductor chip fabrication plant as a Special Economic Zone (SEZ) at Dholera in Gujarat.

About

- It is India's **first large-scale semiconductor fabrication facility (fab)**.
- It is located in Dholera SIR (Special Investment Region), Gujarat.
- It is being developed by **Tata Semiconductor Manufacturing Pvt Ltd in a strategic technology partnership with Taiwan's Powerchip Semiconductor Manufacturing Corporation (PSMC)**.
- It focuses on converting silicon wafers into microchips in ultra-clean manufacturing environments (cleanrooms)

- It is a key component of India's **Semicon India Programme**.

Objectives

- **To reduce import dependence on semiconductors** (India currently imports most chips)
- To strengthen **strategic autonomy in critical technologies**.
- It aims to support sectors like:
 - Electronics manufacturing
 - Automotive (EVs, sensors)
 - Telecom and 5G/6G
 - Defence and space technology
- To build a **domestic semiconductor ecosystem** (design, fabrication, packaging, testing)

14) STARTUP INDIA FUND OF FUNDS

Why in News?

The Government of India has notified the Startup India Fund of Funds (FoF) 2.0 to address funding gaps in the startup ecosystem and mobilize greater domestic capital participation.

About

- The **Startup India Fund of Funds (FoF)** is a flagship initiative of the Government of India designed to address the funding needs of domestic startups.
- It was first introduced in 2016.
- Now, **Startup India Fund of Funds 2.0 (FoF 2.0)** with a fresh corpus of **₹10,000 crore** has been instituted.
- The Department for Promotion of Industry and Internal Trade (DPIIT) acts as the nodal ministry monitoring the scheme.

Objective

To help startups receive the required funding.

Working mechanism

- **The government creates a Fund of Funds (FoF)** with a fixed corpus. This is just a pool of money, not directly used for startups.

- **SIDBI manages the FoF** on behalf of the government.
- **FoF invests in SEBI-registered AIFs (venture capital funds).**
These AIFs are professional investment funds.
- **AIFs raise additional money from private investors.** Government money acts as “anchor” or support.
- **AIFs invest in startups** by buying **equity shares** across seed, early, and growth stages.
- **Startups use this funding to grow and scale** and these AIFs will have a part of ownership of the startup.
- **Returns flow back** when startups succeed and exit happens.
- Money goes back to AIFs and indirectly strengthens the ecosystem

ENVIRONMENT

15) NAGOYA PROTOCOL

Why in News?

India has secured global leadership in the issuance of **Internationally Recognised Certificates of Compliance (IRCCs)** under the Nagoya Protocol on Access and Benefit-sharing (ABS). India accounts for over 56% of all certificates issued worldwide.

About

- Nagoya protocol is a **legally binding** international agreement, **adopted in 2010** in Nagoya, Japan and entered into force in 2014.
- It is a supplementary agreement to the **Convention on Biological Diversity, 1992**.
- India ratified it in 2012 and implemented it through the **Biological Diversity Act, 2002**.

Objective

- The objective of the protocol is to guarantee **fair and equitable benefit-sharing** from the **utilization of genetic resources** with the providing community or country.
- The Nagoya Protocol mandates **Prior Informed Consent (PIC)** from the provider country before access to biological resources is granted. Benefits arising from the utilization of such resources must be shared fairly through **Mutually Agreed Terms (MAT)**.

Internationally Recognized Certificates of Compliance (IRCCs)

- Under the Nagoya Protocol, countries granting access to **genetic resources and associated traditional knowledge** are required to issue IRCCs.
- Internationally Recognized Certificates of Compliance (IRCCs) are

official e-permits used to track the legal access and utilization of genetic resources globally.

- They serve as **binding proof** that researchers or companies have obtained Prior Informed Consent (PIC) and established Mutually Agreed Terms (MAT) to share benefits fairly with the provider country.

CONVENTION ON BIOLOGICAL DIVERSITY, 1992

- *The Convention on Biological Diversity (CBD) is a legally binding international treaty designed to promote sustainable development by protecting the world's biological resources.*
- *It was adopted at the 1992 Rio Earth Summit.*
- *It has three main goals:*
 - **Conservation** of biological diversity.
 - **Sustainable use** of its components.
 - **Fair and equitable sharing** of benefits arising from genetic resources
- *To implement these goals, it adopted two landmark supplementary agreements:*
 - **Cartagena Protocol on Biosafety (2000):** It addresses the safe transfer and use of living modified organisms (LMOs).
 - **Nagoya Protocol (2010):** Provides a legal framework for implementing the third objective regarding the sharing of benefits from genetic

16) PLASTIC WASTE MANAGEMENT (AMENDMENT) RULES, 2026

Why in news?

The Government of India has **officially notified the Plastic Waste Management (Amendment) Rules, 2026**, amending the baseline 2016 regulation.

About

- Plastic waste management rules 2026 introduces a phased, stricter set of **Extended Producer Responsibility (EPR) targets** for Producers, Importers, and Brand Owners (PIBOs), effective April 1, 2026.
- It mandates the **actual use of recycled content in commercial packaging**.
- It **introduces market-based trading certificates** and compliance flexibilities to ease the transition for industries.
- The amendments are notified under **Environment Protection Act, 1986**.

Key Amendments

The rules mandate that different types of plastic products must contain a specified minimum percentage of recycled plastic material. The Category-Wise Minimum Recycled Plastic Content Targets as follows:

- **Category I - Rigid Plastics**, which are easy to collect and includes HDPE (High-Density Polyethylene) and PET (Polyethylene Terephthalate) containers.
 - 30% recycled content in FY 2025-26.
 - Gradual increase to 60% by FY 2028-29.
- **Category II - Flexible Plastics**, which are in moderate difficulty to collect and includes carry bags and snack wrappers.
 - 10% initially.
 - Increased to 20% by FY 2027-28.
- **Category III - Multi-Layered Plastics**, which are hardest to recycle and includes Tetra Paks and foil wrappers.
 - 5% initially.
 - Increased to 10% by FY 2027-28.

Carry-Forward Provision: Companies failing to

meet their FY 2025-26 targets face no immediate penalties. Shortfalls can be carried forward for three years (until 2028-29), provided at least one-third of the deficit is cleared annually.

Tradable EPR certificates: Companies **exceeding their recycling quotas** earn tradable EPR certificates. Deficit-running firms can **purchase these credits** on a centralized portal to fulfil obligations without physically processing their own plastic waste.

Sectoral Exemptions

- Recycled content targets are **waived where other laws strictly prohibit** it, notably food packaging (FSSAI), medicines (CDSCO), and pesticides (Central Insecticides Board).
- Companies claiming exemptions must **disclose the legal basis** in annual Central Pollution Control Board (CPCB) filings, and all compliant packaging **must carry clear labelling**.

End-of-Life Disposal

- Non-recyclable plastic fractions can legally be **diverted to energy-recovery streams**, including waste-to-energy plants, co-processing in cement/steel plants, synthetic fuel conversion, and road construction.

Key Regulatory Bodies

- **Central Pollution Control Board (CPCB)** oversees the national-level implementation, particularly regarding Extended Producer Responsibility (EPR) PIBOs, operating in more than two states. The CPCB operates the **centralized EPR portal**, which serves as a single-point data repository.
- **State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs):** Responsible for enforcing regulations, including registration of manufacturing units, within their respective states or union territories.

- **Urban Local Bodies (ULBs) & Rural Local Bodies (Gram Panchayats):** Entrusted with the implementation of waste management, including segregation, collection, and disposal of plastic waste.

The Ministry of Environment, Forest and Climate Change banned specific single-use plastic (SUP) items identified as having low utility and high littering potential, with effective from July 1, 2022.

17) **NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)**

Why in news?

On March 25, 2026, the Indian Union Cabinet approved **updated Nationally Determined Contributions (NDCs 3.0)** for 2031–2035.

About

- NDCs are **voluntary, self-determined, non-binding climate action plans** submitted by each country to set its own targets according to national circumstances and development priorities to **reduce greenhouse gas emissions** and address climate change.
- The concept of NDCs was institutionalized under the **2015 Paris Agreement** adopted within the framework of the **United Nations Framework Convention on Climate Change (UNFCCC)**.
- It is based on the principle of **Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)**.
- They are also **time-bound and progressive**, requiring periodic updates every 5–10 years with increasingly ambitious commitments.
- India's NDCs are operationalized through the **National Action Plan on Climate Change (NAPCC)** and its nine national missions, as well as the

State Action Plans on Climate Change (SAPCC).

India's updated NDC 3.0 Targets

- **Non-Fossil Fuel Energy:** To achieve **60% of its cumulative installed electricity** capacity from non-fossil sources by 2035,
 - which is up from the 50% by 2030 target, which India already overachieved, reaching ~52.5% in early 2026.
- **Emissions Intensity:** The target is to reduce the emissions intensity of its GDP by **47% by 2035**, compared to 2005 levels,
 - which is up from the 45% by 2030 target.
- **Carbon Sinks:** India has committed to creating an additional carbon sink of **3.5 to 4.0 billion tonnes of CO₂ equivalent** through intensified forest and tree cover by 2035,
 - which is an increase from the previous 2.5–3.0 billion tonnes target.

18) **PROTOTYPE FAST BREEDER REACTOR (PFBR)**

Why in news?

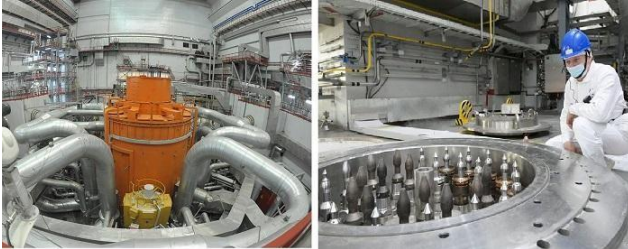
India's indigenously designed Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu attained its **first criticality** on **April 6, 2026**, marking India's entry into the **second stage of its three-stage nuclear program**.

About

- **Fast Breeder Reactors (FBRs)**, which use fast neutrons to produce more fissile material than they consume, mark India's achievement of **Stage II** of its three-stage nuclear power programme.
- The **PFBR** is a 500 MWe advanced reactor, technologically designed and developed by the Indira Gandhi Centre for Atomic

Research IGCAR), an R&D centre **under the Department of Atomic Energy.**

- It was built, commissioned, and operated by **Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI)** at the Kalpakkam Nuclear Complex.



*“Criticality” is the point at which a **sustained and controlled nuclear fission** chain reaction begins. At this stage, neutrons produced by fission equal those lost through absorption and leakage, resulting in a **stable power output**. It marks the transition from the construction phase to the operational phase.*

India’s Three-Stage Nuclear Power Programme

It was designed to efficiently utilize the country’s limited uranium and abundant thorium reserves through a closed nuclear fuel cycle.

Stage 1 – Pressurised Heavy Water Reactors (PHWRs):

Natural uranium is used as fuel, producing plutonium as a by-product for the next stage.

Stage 2 – Fast Breeder Reactors (FBRs):

Plutonium-based reactors **generate more fissile material than they consume** and help breed Uranium-233 from thorium. The PFBR at Kalpakkam represents India’s progress in this stage.

Stage 3 – Thorium-Based Reactors: Uranium-233 obtained from Stage 2 will be used with thorium to **produce large-scale nuclear energy**, enabling long-term energy independence.

Thus, each stage supports the next, making the programme a strategic pathway toward sustainable nuclear energy.

19) SAKER FALCONS

Why in news?

Kazakhstan along with Saudi-backed organisation releases **34 Captive-Bred Endangered** Saker Falcons in Altyn-Emel National Park, Kazakhstan.

About

- The **Saker Falcon** (*Falco cherrug*) is a massive, powerful bird of prey and the **second-largest falcon species** in the world.
- It is renowned for its incredible hunting speed of approximately **200 mph**.
- It is the national bird of Hungary, Mongolia, and the United Arab Emirates.
- Its typical habitats include **semi-deserts, expansive grasslands (steppes), agricultural open lands, and arid mountainous country**.
- It is mostly found across the **Palaearctic region**, stretching from



Central Europe eastwards across Central Asia (such as Kazakhstan and Mongolia) all the way to Manchuria, China.

- It is highly valued as an **ecological indicator species** or umbrella species, as it is an apex predator that sits at the top of the food web in open landscapes, its presence or absence serves as a **barometer for the overall health** of its surrounding ecosystem.

Conservation Status

- **IUCN Red List:** Endangered (EN).
- **Wildlife Protection Act (WPA), 1972:** Schedule I.
- **CITES:** Appendix II.

20) MADHAV TIGER RESERVE

Why in news?

Female tigress MT-6 was tranquilised and placed in a fenced enclosure at Madhya Pradesh's Madhav Tiger Reserve after being suspected of involvement in a fatal human attack

About

- Madhav Tiger Reserve is situated on the northern fringe of the **Central Highlands**, the park forms part of the **Upper Vindhyan Hills** and is characterised by plateaus, valleys, and forested landscapes.
- **Location:** Shivpuri district of **Madhya Pradesh** in the Chambal region.
- It was declared as **India's 58th Tiger Reserve** and the 9th Tiger Reserve of Madhya Pradesh.
- The area was initially established as Madhya Bharat National Park in 1955 and was designated a **National Park in 1958**. It later came to be known as Madhav National Park.

Vegetation and Ecosystem

- The reserve comprises **northern tropical dry deciduous forests** and **dry thorn forests typical** of north-western Madhya Pradesh.
- The park is home to **several wildlife species** including tigers, leopards, wolves, jackals, wild dogs, nilgai, chinkara, chousingha, sambar, chital, barking deer, wild boar, and pythons.
- Madhav Tiger Reserve is also part of one

of **India's major tiger corridors** and is managed under the Tiger Conservation Plan framed under the Wildlife (Protection) Act, 1972.

21) SEMAGLUTIDE

Why in news?

Canada becomes the first G7 country to approve a **generic version of semaglutide**.

About

- **Semaglutide** is a **synthetic drug** designed to mimic the action of the GLP-1 hormone.
- It belongs to a class of medicines called GLP-1 receptor agonists (GLP-1 RAs).
- It acts by mimicking the natural GLP-1 hormone released from the gut after food intake, **thereby stimulating insulin secretion** and lowering blood glucose levels.
- It is prescribed to **manage type 2 diabetes**, reduce cardiovascular risks, **slow chronic kidney disease (CKD) progression**, and aid in **weight management** for overweight or obese individuals.



GLP-1 receptor agonists are a class of medicines that mimic the action of **GLP-1 (Glucagon-Like Peptide-1)**, a natural hormone produced in the intestine after eating.

Common GLP-1 receptor agonist drugs include:

- *Semaglutide*
- *Liraglutide*
- *Dulaglutide*

22) SENTINEL SPECIES

Why in news?

Recently, the International Union for Conservation of Nature (IUCN) declared the **emperor penguin** to be an endangered sentinel species.

About

- A sentinel species is an organism whose health and population dynamics serve as an **early warning system** for the overall condition of its ecosystem.
- These species are **highly sensitive to environmental stressors** like pollution, habitat degradation, and disease. So, they exhibit noticeable reactions far sooner than other organisms.
- They generally occupy a fixed geographic area and live long enough to accumulate **environmental toxins** over time.
- Their biological makeup naturally **amplifies the effects** of environmental changes, making ecological shifts rapidly apparent.

Emperor Penguin

- Emperor penguins navigate vast Antarctic distances using the **Sun's position, Earth's magnetic field, and spatial memory.**



- They breed during the harsh Antarctic winter; males incubate eggs on their feet for nearly two months without feeding, while females travel long distances to forage and return with food for the

chicks.

- Emperor penguins act as vital **sentinel species for the Antarctic**, providing critical data on the progression of global warming and polar ice melt.
- Their health and survival rates **directly reflect the rapid climate shifts** occurring in the Antarctic region.
- **Conservation Status:** Endangered species

International Union for Conservation of Nature (IUCN):

- *It is a membership Union of government and civil society organisations, founded in 1948.*
- *IUCN Red List categorizes species into 9 distinct groups ranging from Least Concern to Extinct based on their extinction level.*
- *This list helps governments and organizations plan conservation efforts, protect wildlife, and manage biodiversity.*

23) IMPROVED COOKSTOVES (ICS)

Why in news?

Amid rising LPG prices and supply disruptions, India and several developing countries are witnessing a **sharp rise in the adoption of Improved Cookstoves.**

About

- Improved Cookstoves (ICS) are advanced **biomass cooking stove** designed to improve fuel efficiency and minimize harmful emissions.
- They operate on fuels such as **firewood, crop residues, dung cakes, pellets, and briquettes.**

Advantages

- ICS attain an **efficiency of about 38-45%**, far higher than traditional chulhas, which operate at nearly 10%

efficiency because of poor airflow and high heat loss.

- The secondary aeration design of an ICS ensures **volatile gases are cleanly combusted** before escaping, thereby **reducing indoor air pollution**.
- The verifiable reduction in greenhouse gas emissions achieved by an ICS can be aggregated and converted into valuable **global carbon credits**. This market-based green finance is utilized by NGOs and private corporations to fully **subsidize the upfront manufacturing costs** for poor communities.



ICS are significantly **more sustainable than traditional biomass stoves**, with thermal efficiency ranging from 25–45%, although **LPG remains more efficient overall** at around 55–60% and produces substantially lower indoor air pollution.

SCIENCE & TECHNOLOGY

24) INS NIREEKSHAK

Why in News?

INS Nireekshak participated in the fourth edition of the **India–Sri Lanka Diving Exercise (DIVEX 2026)** held in Colombo.

About

- INS Nireekshak is a specialized **Diving Support and Submarine Rescue Vessel** of the Indian Navy.
- The ship was built by Mazagon Dock Shipbuilders Limited in 1985, **entered naval service in 1989**, and was formally commissioned in 1995.
- It is equipped with advanced deep-sea diving systems, recompression chambers, and infrastructure to deploy **Deep Submergence Rescue Vehicles**.
- The vessel holds the national record for the **deepest saturation dive** carried out in the country at a depth of 257 meters.
- It became the first ship in the Indian Navy to receive an "**on-the-spot**" **Unit Citation** from the Chief of the Naval Staff for its challenging deep-sea salvage operations.

DIVEX 2026

- IN–SLN DIVEX 2026 was the **fourth edition of the bilateral diving exercise** conducted between the Indian Navy and the Sri Lanka Navy in Colombo.
- The exercise focused on **specialised underwater operations**, including diving, search, rescue, and salvage missions to improve interoperability between the two navies.
- As part of humanitarian cooperation, India handed over two **BHISHM** (Bharat Health Initiative for Sahyog, Hita and Maitri) cubes to Sri Lanka under the Aarogya Maitri initiative.

Aarogya Maitri

- It is designed to supply vital **medical resources** to developing nations facing natural disasters or humanitarian crises.

BHISHM

- The **BHISHM Cube** is the **world's first fully portable, modular disaster hospital** designed for rapid deployment via air, sea, land, and drones.
- Each **waterproof and corrosion-proof** unit is equipped with portable ventilators, surgical tools, and a dedicated app to manage up to 200 casualties.

25) INS TRIKAND

Why in News?

Indian Naval Ship INS Trikand made a port call at Dar-es-Salaam, Tanzania, as part of India's maritime outreach in the Indian Ocean Region.

About

- The Indian Naval Ship (INS) Trikand is a **frontline guided-missile stealth frigate**.
- It is the third and final ship of the **second batch of Talwar-class frigates** ordered from Russia.
- These ships are modified versions of the Russian Krivak III-class frigates.
- It was built by the Yantar Shipyard in Kaliningrad, Russia, and was commissioned into the Indian Navy on **June 29, 2013**.
- It operates under the **Western Naval Command** and is based in Mumbai. Its motto is "*Always Victorious*".

Features

- INS Trikand uses a **combined gas turbine and gas turbine (COGAG) propulsion system**, enabling speeds above 30 knots and long-range blue-water operations.

- The frigate is **equipped with BrahMos supersonic cruise missiles** launched through a vertical launch system (VLS), giving it **strong long-range strike capability**.
- Its air defence **includes the Shtil-1 missile system**, Igor-S MANPADS, and Kashtan CIWS for **protection against aircraft and incoming missiles**.
- INS Trikand carries **533 mm torpedo tubes, RBU-6000 rocket launchers**, and advanced sonar systems for **anti-submarine operations**.
- The ship has a flight deck and hangar for helicopters like **Kamov-31 and Kamov-28/Chetak** used for **surveillance, ASW**, and rescue missions.



Beyond its weapons, the INS Trikand is heavily utilized in India's role as a **"Net Security Provider"** and **"First Responder"** across the Indian Ocean under the broader *MAHASAGAR* and *SAGAR* (Security and Growth for All in the Region) visions.

26) INS SUNAYNA

Why in News?

INS Sunayna made its first port call at Malé, Maldives, under the IOS SAGAR initiative, reinforcing India-Maldives maritime cooperation.

About

- **INS Sunayna** is an advanced indigenous warship of the Indian Navy. It serves as a vital tool for both maritime defense and international naval diplomacy.

- It is the second of the **Saryu-class Patrol Vessels**, which are highly versatile Naval Offshore Patrol Vessels (NOPVs).
- It was indigenously designed and constructed by **Goa Shipyard Limited (GSL)**.
- It operates under the **Southern Naval Command**.

Features

- It is powered by two KOEL/Pielstick diesel engines, enabling speeds **in excess of 25 knots** with an impressive operational range of 6,000 nautical miles at an economic speed of 16 knots.
- It features an automatic power management system integrated by Larsen and Toubro (L&T), alongside state-of-the-art navigation, communication, and electronic support systems.
- It is equipped with a **76mm main gun** integrated with an electro-optic fire control system.
- It is fitted with Close-in Weapon Systems (CIWS) and **Chaff launchers** designed to decoy radar-guided anti-ship missiles.
- It features a flight deck capable of carrying and operating a utility helicopter, significantly extending its surveillance and search-and-rescue (SAR) footprint.

27) INS SUDARSHINI

Why in News?

The Indian Navy's Sail Training Ship INS Sudarshini will embark on the flagship voyage of Lokayan 26, a 10-month transoceanic expedition.

About

- INS Sudarshini is the Indian Navy's second **indigenously built sail training ship**, commissioned on 27 January 2012.
- Constructed by Goa Shipyard Limited and based at Kochi under the Southern Naval Command, it serves as a premier platform for training naval officers and Coast Guard personnel.

- **Lokayan 26** is the flagship 10-month transoceanic expedition of INS Sudarshini, launched by the Indian Navy on 20 January 2026 from Kochi. The voyage spans more than **22,000 nautical miles**, covering **18 foreign ports across 13 countries** over four continents.

Key highlights of the expedition include participation in two prestigious international tall-ship events:

- Escale à Sète in France
- SAIL 250 in the United States, organized as part of America's 250th Independence celebrations.

The expedition is designed as an advanced sail-training deployment for more than **200 trainees** from the Indian Navy and the Indian Coast Guard

28) INS TARAGIRI

Why in news?

INS Taragiri, the **fourth warship of the Project 17A class**, was commissioned into the Indian Navy on **3 April 2026** at **Visakhapatnam, Andhra Pradesh**, in the presence of the Raksha Mantri Shri Rajnath Singh.



About

- INS Taragiri is a **Project 17A stealth frigate** built under India's indigenous warship construction programme.
- It is developed by **Mazagon Dock Shipbuilders Limited (MDL)** with

significant participation from Indian industry, aligning with the vision of **Aatmanirbhar Bharat in defence manufacturing**.

- It is part of a series of seven advanced stealth frigates being inducted into the Indian Navy.

Features

- The ship has over **75% indigenous content** and involves participation of more than **200 MSMEs** in its supply chain.
- It features a **stealth design** with reduced **radar cross-section (RCS)** and an advanced hull form for improved survivability.
- It is equipped with **supersonic surface-to-surface missiles, medium-range surface-to-air missiles**, and advanced **anti-submarine warfare (ASW) systems**.
- It integrates a modern **Combat Management System (CMS)** for coordinated multi-domain operations.
- It uses a **Combined Diesel or Gas (CODOG)** propulsion system, enabling both high speed and long-range endurance.
- It is capable of **anti-air, anti-surface, and anti-submarine warfare**, and also supports **Humanitarian Assistance and Disaster Relief (HADR)** and **naval diplomacy missions**.

29) ARTEMIS II

Why in news?

The **National Aeronautics and Space Administration (NASA)** launched the Artemis II mission on 1 April 2026 as a major step toward restoring human deep-space exploration **beyond low-Earth orbit** after more than five decades and successfully concluded the mission on 11 April 2026 with a safe parachute splashdown in the Pacific Ocean.



About

- **Artemis II** is the **first crewed mission** under NASA's **Artemis Programme** and marks humanity's return to the Moon's vicinity since the Apollo 17 mission in **1972**.
- The mission is designed as a **10-day lunar flyby** to test the **Orion spacecraft's** deep-space systems and **life-support capabilities** with astronauts onboard.

Key Features

- The astronauts will not land on the Moon.
- The spacecraft will follow a **free-return trajectory**, travelling about **7,400 km beyond the Moon's far side**, and return to Earth using a **lunar gravity assist (slingshot maneuver)**, where the Moon's gravity bends and accelerates its path, enabling a fuel-efficient return.
- The mission uses NASA's **Space Launch System (SLS)**, which generates about **8.8 million pounds of thrust**, making it more powerful than the Apollo-era **Saturn V** rocket.
- NASA is also testing **O2O (Orion Artemis II Optical Communications System)**, a laser-based communication system capable of transmitting data at up to **260 Mbps**, enabling **4K video transmission from lunar distance**.

- The mission includes the **AVATAR experiment**, which uses **organ-on-a-chip technology** with astronaut cells to study the effects of **microgravity and deep-space radiation** on human biology.
- It also demonstrates **international collaboration** by deploying CubeSats from Germany, Argentina, South Korea, and Saudi Arabia for studies on **space weather, radiation shielding, and lunar technologies**.

30) COAL GASIFICATION

Why in News?

The Union Cabinet has approved a Scheme for Promotion of **Surface Coal/Lignite Gasification Projects** with a financial outlay of Rs.37,500 crore, to reduce import dependence and strengthen energy security.

About

- Coal gasification is a **thermo-chemical process** in which coal or lignite reacts with oxygen and steam in a **controlled** high-temperature and high-pressure environment **to produce synthesis gas (syngas)**.
- It is **superior to direct combustion** because it extracts the chemical value of coal rather than just burning it for heat.
- Syngas mainly contains **carbon monoxide (CO) and hydrogen (H₂)**, along with smaller quantities of carbon dioxide and methane.
- Syngas is used to produce **urea, methanol, ammonia, synthetic natural gas (SNG)**, and other industrial chemicals.
- Coal gasification is considered a **cleaner and more efficient method** of utilising coal resources compared to conventional coal burning.

Key Features of the Scheme

- The scheme promotes the **gasification of nearly 75 Million Tonnes** of coal and lignite to help achieve India's target of 100 Million Tonnes of coal gasification by 2030.
- Financial assistance is capped at a **maximum of 20%** of the cost of plant and machinery, which is disbursed to eligible projects in four equal installments linked to specific performance milestones.
- The financial incentives are strictly capped at a maximum of ₹5,000 crore for any single project and ₹9,000 crore for single product-centered projects, **excluding synthetic natural gas (SNG) and urea**.
- The total financial support allocated to any single corporate entity group or business conglomerate is restricted to a **maximum cap of ₹12,000 crore** across all supported projects.
- To ensure long-term investment stability, the government has extended the coal linkage tenure up to **30 years under the Non-Regulated Sector (NRS)** linkage auction framework.



How Surface Coal Gasification (SCG) differs from Underground Coal Gasification (UCG)?

SCG converts mined coal into syngas in above-ground reactors under controlled conditions. Underground Coal Gasification (UCG) gasifies coal in-situ within deep seams, reducing the need for mining. SCG offers greater control, whereas UCG carries higher environmental and groundwater contamination risks.

Syngas

By converting coal into versatile syngas, impurities can be easily filtered out, **carbon capture is more efficient**, and the resulting gas can be used to produce high-value chemicals and clean fuels

Uses of Syngas

Syngas is a versatile intermediate feedstock used to produce

- power and Synthetic Natural Gas (SNG),
- fertilisers such as urea and ammonia,

31) BHASHINI

Why in News?

The Digital India BHASHINI Division (DIBD) conducted a specialized Sanchalan/Seva Workshop on Pali Language Preservation and Digital AI Model Development at the University of Delhi.

About

- BHASHINI is an AI powered language translation platform, bridging literacy, language, and digital divides.
- Its mission is to make language and technology accessible to everyone.
 - Voice-first **multilingual solutions** for seamless communication.
 - Largest co-creation **AI platform** driving collaboration and innovation.
 - Breaking language, literacy, and digital barriers for inclusivity.
- Digital India **BHASHINI Division**, a division under Digital India Corporation, of the Ministry of Electronic and Information Technology, implements it.
- It has enabled features like text-to-text translation in **22 languages**, automated

speech recognition, **text-to-speech synthesis, optical character recognition, video translation, document translation, language detection, and voice-based payments**, among others.

- Bhashini has an app which can be used by people.
- It also provides API (application programming interface) integration to startups which want to use Bhashini's language features on their platforms, such as chatbots, etc.
- The **National Payment Corporation of India (NPCI)** has collaborated with Bhashini to allow users to make conversational payments through UPI in Indian languages

INTERNATIONAL RELATIONS

32) IMF SUPPORT TO RWANDA

Why in News?

IMF has agreed on an **Extended Credit Facility** of about US\$250 million for Rwanda to support macroeconomic stability and reforms. Despite strong 2025 growth (9.4%), Rwanda faces rising inflation and external risks, with IMF recommending tight monetary policy, exchange rate flexibility, and fiscal discipline to sustain growth and rebuild buffers.



About

- The IMF is a global financial institution established in 1944 at the Bretton Woods Conference and began operations in 1945.
- It promotes international monetary stability and supports global economic growth. Its headquarters is located in Washington D.C., United States.
- It is a near-universal body with more than 190 member countries. Membership is open to countries that accept IMF rules and obligations. India is a founding member of the IMF.

Functions of the IMF

The International Monetary Fund provides financial assistance to member countries facing

- Balance of Payments (BoP) crises
- foreign exchange shortages
- economic instability
- external debt stress

- natural disasters or pandemics

These functions are carried out through IMF financial instruments.

IMF Financial Instruments

- 1) **Stand-By Arrangement (SBA)** - Short-term assistance for temporary BoP problems
- 2) **Extended Fund Facility (EFF)** - Long-term support for structural reforms
- 3) **Rapid Financing Instrument (RFI)** - Quick emergency funding during crises
- 4) **Rapid Credit Facility (RCF)** - Concessional emergency support for low-income countries
- 5) **Extended Credit Facility (ECF)**-Long-term concessional support for prolonged BoP issues
- 6) **Standby Credit Facility (SCF)** - Short-term concessional support for low income countries.
- 7) **Resilience and Sustainability Facility (RSF)**: Support for long-term challenges like climate change
- 8) **Special Drawing Rights (SDR)** - International reserve asset to supplement foreign exchange reserves

IMF Voting Rights

- In the International Monetary Fund, voting power consists of **basic votes** (equal for all member countries) and **quota-based votes** (based on each country's financial contribution to the IMF).
- A country's quota determines its voting power, financial contribution, borrowing limits, and allocation of Special Drawing Rights (SDRs).
- The United States holds the highest IMF voting share (~16.5%), followed by Japan and China (~6.1% each), Germany (~5.3%), France (~4.0%), and India (~2.7%).

Key Publications of IMF

1. World Economic Outlook
2. Global Financial Stability Report
3. International Financial Statistics
4. Regional Economic Outlook Report

33) IAEA – IRAN NUCLEAR ATTACK

Why in News?

International Atomic Energy Agency Director-General Rafael Grossi welcomed U.S.–Iran ceasefire talks and raised concerns over recent attacks near nuclear facilities, including Iran’s Bushehr plant. He also highlighted nuclear safety risks in conflict zones, commented on UN reforms, and emphasized India’s role in global governance.

About

- **The International Atomic Energy Agency (IAEA) is the world’s leading intergovernmental organisation** for cooperation in the nuclear field.
- Established in 1957, it promotes the safe, secure, and peaceful use of nuclear science and technology and is widely known as the **“Atoms for Peace and Development” organisation**.
- Its headquarters is located in **Vienna, Austria**. It is an autonomous organisation within the United Nations system.
- It reports to the UN General Assembly and the UN Security Council.
- It has 178 member countries. India is a **founding member** of the IAEA.
- International Atomic Energy Agency and **Mohamed ElBaradei** who served as the **Director General of the IAEA from 1997 to 2009** jointly received the **Nobel Peace Prize in 2005**.

Structure of the IAEA

General Conference

- Comprises all member states
- Meets annually to approve policies and budgets

Board of Governors

- Consists of 35 members
- Meets five times a year
- Approves safeguards agreements and appoints the Director General

Secretariat

- Headed by the Director General

- Responsible for day-to-day administration and implementation of programmes

Major Functions

The IAEA ensures that nuclear materials are used only for peaceful purposes through:

- on-site inspections,
- monitoring mechanisms,
- and data analysis.

It also strengthens national and global preparedness for nuclear emergencies and promotes the peaceful application of nuclear technology in sectors such as:

- energy
- healthcare
- food and water security
- and industry

Major Treaties under IAEA framework

1. Treaty on the Non-Proliferation of Nuclear Weapons (1968) - Prevents spread of nuclear weapons and promotes peaceful nuclear use.
2. Comprehensive Nuclear-Test-Ban Treaty (1996) - Bans nuclear test explosions.
3. Convention on Nuclear Safety - Ensures safety of nuclear power plants.

India and IAEA

- ❖ *India is one of the few nuclear-armed states that is not a signatory to the Nuclear Non-Proliferation Treaty (NPT).*
- ❖ *Only India’s civilian nuclear reactors are under IAEA inspection*

34) WTO RULING ON TRANSNATIONAL SUBSIDIES

Why in News?

A panel discussion was held in New Delhi on the **WTO ruling in DS 616**, concerning the EU’s **anti-dumping and countervailing duties on stainless steel imports from Indonesia**. The case examined whether certain **foreign-linked financial contributions could be treated as subsidies**

under WTO rules, raising key issues on transnational subsidies and trade remedies.

About

A **transnational subsidy** (also known as a cross-border or transborder subsidy) occurs when a government provides financial support to a company or project located **outside of its own territory**.

WTO (World Trade Organization)

- The World Trade Organization (WTO) is the only global international organisation dealing with the rules of trade between nations.
- It aims to ensure smooth, free, fair, and predictable international trade.
- It was established on 1 January 1995, replacing the General Agreement on Tariffs and Trade (GATT 1947).
- The WTO is headquartered in Geneva, Switzerland. It has more than 160 member countries, including India. India is a founding member of the WTO.

Key Functions

- **Trade negotiations:** Framework for global trade agreements
- **Dispute settlement:** Resolves trade conflicts between member countries
- **Trade monitoring:** Reviews national trade policies
- **Capacity building:** Assists developing countries in trade integration

Key Agreements

- **TRIPS (Trade-Related Aspects of Intellectual Property Rights):** Protects intellectual property like patents and copyrights
- **TRIMS (Trade-Related Investment Measures):** Regulates investment measures that affect trade
- **The Fisheries Subsidies Agreement of the World Trade Organization (2022):** Aims to protect marine ecosystems by restricting harmful fisheries subsidies.

Governance

- Decisions are taken by **consensus** among members
- Highest body is the **Ministerial Conference**, held usually every two years

Reports released by WTO

1. World Trade Report
2. World Trade Statistical Review
3. Global Trade Outlook and Statistics

HIGHLIGHTS OF 14TH MINISTERIAL CONFERENCE OF WTO

- ❖ **14TH MINISTERIAL CONFERENCE OF WTO**
The WTO Ministerial Conference is the organization's highest decision making body of trade ministers that meets biennially, and its latest session (MC14) concluded in March 2026 in Yaounde, Cameroon.
- ❖ **Key Highlights Collapse of the E-Commerce Moratorium:** *The 28-year multilateral ban on cross-border digital tariffs expired, allowing nations to tax electronic transmissions (streaming, software, data).*
- ❖ **Launch of Plurilateral Digital Trade Pact:** *Bypassing the full WTO deadlock, 66 members (70% of global trade) launched a separate agreement to standardize baseline digital trade rules.*
- ❖ **Enactment of Global IUU Fishing Ban:** *Under the WTO Agreement on Fisheries Subsidies, the 2022 global ban on state funding for illegal, unregulated, and unreported (IUU) fishing officially entered into force.*

35) BRICS-MENA

Why in News?

Deputy Foreign Ministers and Special Envoys of BRICS and the Middle East and North Africa (MENA) region met under India's BRICS Chairmanship, expressing concern over the U.S.–Israel–Iran tensions and the broader West Asia situation, and discussing the Palestine issue, the Gaza crisis, humanitarian assistance, and the role of the United Nations Relief and Works Agency in delivering aid to affected populations.

What is BRICS-MENA?

BRICS–MENA is an informal way of describing growing economic, energy, and strategic cooperation between BRICS countries and the Middle East–North Africa region.

About BRICS

- BRICS is a grouping of major emerging economies that cooperate on issues related to **global governance, economic development, trade, and financial stability**.
- It is not a treaty-based organisation but a **platform for coordination among member countries**.

Members

- BRICS originally began as BRIC in **2009** with Brazil, Russia, India, and China as its founding members. South Africa joined in 2010, after which it became BRICS.
- The grouping has since expanded to include Egypt, Ethiopia, Iran, the United Arab Emirates, and Indonesia, reflecting its growing focus on representing the broader Global South.
- India holds the current BRICS Presidency for 2026.

Objective

- Strengthen **economic cooperation among emerging economies**
- Promote **multipolar world order**
- Reform global institutions like **IMF and World Bank**
- Enhance trade, investment, and development cooperation

Key Institutions

- **New Development Bank (NDB)** – funds infrastructure and sustainable development projects
- **Contingent Reserve Arrangement (CRA)** – provides liquidity support during balance of payment crises

Key initiatives

- **BRICS Multilateral Guarantee Initiative:** Proposal to attract private investment in developing countries by reducing investment risk
- **De-dollarisation efforts:** Promotion of trade and financial settlements in local currencies to reduce dependence on the US dollar
- **Reform of global institutions:** Advocacy for changes in the United Nations, IMF, and World Bank to improve representation of developing countries

36) UNESCO CHAIR ON GENDER INCLUSION & SKILL DEVELOPMENT – SSPU PUNE

Why in News?

Symbiosis Skills and Professional University, in collaboration with UNESCO, launched Asia's first UNESCO Chair on Gender Inclusion and Skill Development.

About

- The UNESCO Chair on Gender Inclusion & Skill Development is an academic and research initiative under UNESCO's UNITWIN (University Twinning and Networking) Programme.
- UNESCO established the UNITWIN/UNESCO Chairs Programme in 1992 to support global collaboration among universities in research, training, and capacity building.
- A UNESCO Chair designates a university or department as a recognized centre of expertise in a specific field.

Objectives of the UNESCO Chair

- Empower women through skill training
- Improve participation in technical and new-age industries
- Bridge education–employment gap
- Align skills with future labour market needs

UNESCO

- ❖ India has **44 UNESCO World Heritage Sites** including cultural, natural, and mixed sites
- ❖ India has several elements on UNESCO's **Intangible Cultural Heritage list**, including yoga and Kumbh Mela
- ❖ **Khangchendzonga National Park** is the **only mixed site** in India, but it is one among 41 mixed World Heritage Sites in the world

37) UAE EXIT FROM OPEC**Why in News?**

The United Arab Emirates announced its exit from the Organization of the Petroleum Exporting Countries (OPEC) and OPEC+ amid disagreements over production quotas and plans to expand oil output.

About OPEC (Organization of the Petroleum Exporting Countries)

- The **Organization of the Petroleum Exporting Countries (OPEC)** is a permanent intergovernmental organization founded in **September 1960** at the **Baghdad Conference** by five founding nations: Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.
- Headquartered in **Vienna, Austria** since 1965, its central mandate is to coordinate petroleum policies among member states to stabilize international oil prices and ensure a steady supply to global consumers.
- Current members: Algeria, Republic of the Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia and Venezuela.
- OPEC Conference meetings are generally biannual (held at least twice a year, with flexibility for additional meetings).
- The current Secretary General of Organization of the Petroleum Exporting Countries is Haitham Al Ghais from Kuwait.

Function

- Coordinate and unify petroleum policies of member countries
- Stabilise global oil prices
- Ensure steady income for producers and stable supply for consumers
- Balance global oil supply and demand

Initiatives of OPEC

1. **Green-Blue Connect initiative** of the OPEC Fund for International Development commits US\$3 billion by 2030 to support climate adaptation and mitigation by linking water resilience with energy decarbonization.
2. **Island Resilience Facility** of the OPEC Fund for International Development provides tailored financing and technical support to strengthen climate resilience in Small Island Developing States.
3. **Climate Finance and Energy Innovation Hub** of the OPEC Fund for International Development, United Nations Capital Development Fund and Sustainable Energy for All promotes clean energy access by mobilizing innovative finance for sustainable energy investment.

About OPEC+

- OPEC+ is a cooperation framework between OPEC and major non-OPEC oil producers, led by Russia, formed in 2016 to coordinate crude oil production.
- It was created to address the 2014–2016 oil price collapse, which was driven by excess global oil supply, including rising U.S. shale oil production, and weak demand.
- OPEC+ members include all OPEC countries plus major non-OPEC oil producers such as Russia, Kazakhstan, Azerbaijan, Mexico, Malaysia, Brunei, Oman, Bahrain, South Sudan, and Sudan.
- OPEC+ meetings are convened irregularly, as and when required, without any fixed annual or biannual schedule.

38) INDIA-NEW ZEALAND FREE TRADE AGREEMENT (FTA)

Why in News?

India and New Zealand signed a Free Trade Agreement (FTA) in New Delhi to strengthen trade and investment ties, **pending ratification by New Zealand's Parliament.**

Key Features

- New Zealand will provide zero tariffs on all **Indian goods**, while **India will reduce or remove tariffs on around 95% of imports** from New Zealand.
- The agreement also covers **trade in services, investment facilitation, agriculture cooperation, and mobility of professionals and students.**

Economic Significance

- The FTA is expected to **boost bilateral trade and attract investment**, including New Zealand's planned **\$20 billion investment in India over 15 years**, supporting **infrastructure, manufacturing, and innovation.**
- In 2024-25, India's **exports to New Zealand were valued at US\$711.1 million**, while its **imports from New Zealand stood at US\$587.1 million.**

Sectoral Coverage & Safeguards

It benefits sectors like **textiles, pharmaceuticals, IT, engineering, healthcare, and education**, while **India protects sensitive sectors such as dairy, agriculture, sugar, edible oils, metals, and arms.**

39) INDIA-MOZAMBIQUE DEFENCE COOPERATION

Why in News?

India and Mozambique held the 5th Joint Defence Working Group (JDWG) meeting in Maputo (1-2 April 2026) to enhance bilateral defence cooperation.

Defence Cooperation

The discussions focused on:

- structured military exchanges
- joint training opportunities
- maritime domain awareness,
- military exercises
- collaboration in the supply of defence equipment.

Significance for India

The meeting reflects India's expanding defence engagement in Africa and its maritime outreach in the Indian Ocean Region under the SAGAR vision, reinforcing regional peace and security.



40) EXERCISE DUSTLIK (INDIA-UZBEKISTAN)

Why in News?

The 7th edition of India-Uzbekistan joint military exercise **DUSTLIK** is being held from 12-25 April 2026 in Namangan, Uzbekistan.

About

DUSTLIK is an annual bilateral military exercise conducted alternately in India and Uzbekistan to strengthen defence cooperation.

Aim

- Enhance interoperability and joint operational capability
- Improve coordination in semi-mountainous terrain
- Share tactics, techniques, and procedures (TTPs)
- Conduct joint counter-terror operations (validation exercise)

Participants

Around 60 personnel from each side, including the Indian Army (MAHAR Regiment) and Indian Air Force, and Uzbekistan Army and Air Force.

Significance

Strengthens India–Central Asia defence ties, builds mutual trust, and improves joint capability for counter-terror and tactical operations.

41) IN–SLN DIVEX 2026 (India–Sri Lanka Diving Exercise)

Why in News?

India and Sri Lanka conducted the 4th edition of the bilateral diving exercise **IN–SLN DIVEX 2026** in Colombo (21–28 April 2026) to strengthen maritime cooperation in the Indian Ocean Region.



About

A bilateral diving exercise between the Indian Navy and Sri Lanka Navy focused on enhancing

interoperability in underwater operations like search, rescue, salvage, and deep-sea diving.

Key Activities

- Deep-sea and mixed gas diving drills
- Open-sea diving beyond 55 metres
- Operations on World War-era wrecks
- Participation of INS Nireekshak (diving support vessel)

Humanitarian Aspect

Included beach clean-ups, yoga, sports activities, and support under the BHISM initiative (medical response support).

Significance

Strengthens maritime partnership, improves underwater operational readiness, and enhances disaster response and search-rescue capability in line with India's MAHASAGAR vision.

PLACES IN NEWS

42) TUTI ISLAND (SUDAN)

Why in News?

Tuti Island is in news due to the ongoing civil war in Sudan (since April 2023) between the Sudanese Armed Forces and the RSF, leading to siege conditions and a humanitarian crisis.

Location

Crescent-shaped river island in Khartoum at the confluence of the White Nile (from Uganda) and Blue Nile (from Ethiopia), forming the Nile.



Key Features

- Historically an agricultural hub supplying produce to Khartoum
- Accessible mainly via bridges and river routes
- Dense community with strong local and cultural ties

43) SOMALIA DROUGHT CRISIS

Why in News?

Somalia is witnessing large-scale drought-induced displacement, with the International Organization for Migration reporting mass migration due to worsening food insecurity and failed rainfall.

Location

Located in the Horn of Africa along the Indian Ocean and Gulf of Aden, making it highly vulnerable to drought and climate variability.



Humanitarian crisis

In Somalia, severe drought has displaced thousands of people in districts such as Baidoa, Dayniile, Kahda, Diinsoor, and Doolow due to crop failure, water scarcity, and loss of livelihoods; the total displacement may reach nearly 3 lakh people, with risks expected to rise during the Gu rainy season (April–June). Around 6.5 million people face crisis-level hunger, while over 1.8 million children are at risk of acute malnutrition.

GEOGRAPHY

44) HEAT WAVES

Why in News?

A recent study by the **Council on Energy, Environment and Water (CEEW)** has found that 57% of Indian districts, accounting for nearly 76% of the country's population, are facing high to very high heat risk.

About

- A heatwave is a **prolonged period of abnormally high temperatures** over a region that significantly exceeds its historical climatic normal
- The India Meteorological Department (IMD) classifies **heat waves based on geographic location** (Plains, Hills, Coastal) and the **departure of the maximum temperature from normal limits** or absolute threshold temperatures.
- A heat wave is officially declared if the stipulated criteria are met across at least two weather monitoring stations **for two consecutive days**.

Classification of heat waves based on region

Plains & Hilly Regions:

- **Base Thresholds:** A heatwave requires a maximum temperature of $\geq 40^{\circ}\text{C}$ in plains and $\geq 30^{\circ}$ in hills.
- **Temperature Departures:** It is classified by a departure from normal of 4.5°C to 6.4°C (Severe: $> 6.4^{\circ}\text{C}$),
- **Absolute Maximum rule for plains:** A heatwave can also be declared if the actual maximum temperature reaches $\geq 45^{\circ}\text{C}$ (Severe: $\geq 47^{\circ}\text{C}$).

Coastal Areas:

- A heatwave is declared when the maximum temperature departure is $\geq 4.5^{\circ}\text{C}$ from normal, provided the actual maximum temperature reaches **at least 37°C** .

Council on Energy, Environment and Water (CEEW)

- It is a New Delhi-based **not-for-profit policy research institution** and think tank established in 2010.
- It was founded to provide independent, **research-driven policy inputs** for promoting sustainable and balanced development in India.
- CEEW works across a **wide range of areas**, including energy security and efficiency, power sector reforms, industrial decarbonisation, sustainable mobility and cooling, food systems, climate adaptation, air quality, water management, sustainability finance, and climate governance.

45) INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES (INCOIS)

Why in news?

INCOIS recently unveiled three cutting-edge digital initiatives - **SAMUDRA 2.0 Mobile App, JellyAIIP, SIVAS** to improve ocean monitoring, strengthen coastal safety, and protect marine ecosystems.

About

- INCOIS plays a key role in providing ocean-related **information and advisory services** to the public, government agencies, scientific institutions, and maritime industries.
- INCOIS was established as an **autonomous organization in 1999** in Hyderabad, Telangana.
- It functions under the **Ministry of Earth Sciences (MoES)**.
- It is a permanent member of **UNESCO's Intergovernmental Oceanographic Commission (IOC)**.

Key flagship safety initiatives managed by INCOIS

- **Indian Tsunami Early Warning Centre (ITEWC):** A critical facility providing rapid tsunami alerts within 10 minutes of a **major undersea earthquake/tsunami-triggering** event to India and 28 other Indian Ocean nations.
- **Search and Rescue Aid Tool (SARAT):** A specialized system designed to help the Indian Coast Guard, Navy, and Coastal Security Police **quickly locate missing persons** or objects at sea.
- **SynOPS Visualization Platform:** A tool that **integrates real-time data** to streamline and strengthen emergency response coordination during extreme marine events.

Recent Digital Initiatives

1. SAMUDRA 2.0 Mobile App:

- An upgraded, multilingual mobile application engineered for maritime users. It delivers real-time ocean intelligence, critical early warnings, and practical advice on potential fishing zones.

2. Jellyfish Aggregation Information Interactive Portal (JellyAIIP):

- A specialized, multilingual web portal dedicated to **tracking jellyfish behavior**. It maps and monitors jellyfish swarming and stranding events along the Indian coastline, while offering vital **first-aid guidance** for stings.

3. Swell-surge Inundation Vulnerability Advisory System (SIVAS):

- A focused coastal **inundation early warning system** built specifically to predict and issue alerts for swell-surge flooding events (providing up to a 3-day lead time).

- It is **currently operational** for the **Kerala coast** to mitigate the impacts of sudden low-lying coastal flooding.

46) ATOMIC MINERALS DIRECTORATE FOR EXPLORATION AND RESEARCH (AMD)

Why in news?

The Atomic Minerals Directorate for Exploration and Research (AMD) has established a total **in-situ Rare Earth Element (REE) resource** base of over 8.5 million tonnes, primarily comprising **coastal monazite and hard rock deposits**.

About

- The primary mandate of AMD for Exploration and Research is to carry out surveys, exploration, and **assessment of atomic and critical mineral resources** essential for India's nuclear energy programme.
- It is one of the constituent units of the **Department of Atomic Energy (DAE)**, which functions under the Prime Minister's Office.
- It was established in **1948** and is headquartered in Hyderabad, Telangana.
- AMD utilizes a multi-disciplinary approach to map minerals. This involves **cutting-edge airborne geophysical surveys** (such as heliborne time-domain electromagnetics), state-of-the-art radiometric and magnetic mapping, deep core drilling, and sophisticated geochemical analysis.



In-situ rare earth elements (REEs) refer to rare earth minerals left undisturbed in their original geological formations or deposits while extraction/leaching agents are pumped directly into the ground to dissolve and recover the target metals. This process bypasses traditional, highly destructive open-pit mining.

47) HELIUM

Why in news?

The West Asia crisis **disrupts nearly 50% of India's helium imports** from Qatar, triggering supply concerns and price surge.

About

- Helium is a colorless, odorless, tasteless, and **non-flammable noble gas**.
- It is the **second lightest and second most abundant element** in the universe, though relatively rare on Earth due to its **low density**, which allows it to escape the atmosphere.
- It possesses the lowest boiling and melting points of all elements, enabling it to **remain in a liquid state** even near absolute zero (0 K or -273.15°C).
- It **cannot be manufactured synthetically**. Instead, it is commercially recovered strictly as a **by-product** during the cryogenic processing of natural gas into Liquefied Natural Gas (LNG).
- Supply is **highly geographically concentrated**. Qatar is a major global exporter (after the US), commanding approximately 34% of global helium exports.

India is 100% import-dependent for its helium requirements, with domestic production being negligible. Qatar alone fulfils 50% of India's total helium imports.

Key Applications

- **Cryogenics & Healthcare**- MRI Machines.
- **Aerospace & Rocketry**- Fuel Tank Pressurization, System Purging.
- **High-Tech Manufacturing**- Semiconductors, Fiber Optics.

- **Deep-Sea Diving**- Heliox breathing mixtures, Mitigating Nitrogen Narcosis, Reduced Breathing Resistance.
- **Scientific Research & Advanced Detection**- Particle Accelerators, Microscopic Leak Detection.

48) ALUMINIUM

Why in news?

The '**Aluminium Bharat**' initiative was officially launched in New Delhi by the Aluminium Extrusion Manufacturers Association of India (ALEMAI) and formally unveiled by Union Minister of State for Commerce and Industry, Jitin Prasada.

About

- Aluminium is the **third most abundant element** in the Earth's crust (approximately 8%), after oxygen and silicon.
- It is **highly reactive** and does not exist in its free or pure state in nature. It occurs primarily in the form of oxides, silicates, and aluminosilicates. The primary commercial ore of aluminium is **bauxite**.
- Since aluminium is a **highly electropositive metal**, carbon reduction is chemically and economically unviable for its extraction. Instead, a two-step metallurgical process is utilized:
 - **Bayer process** for the purification of bauxite ore into alumina, followed by,
 - **Hall-Héroult process** for the electrolytic reduction of alumina into pure aluminium.

Properties

- **Lightweight**: It is approximately one-third the weight of steel, giving it a superior **strength-to-weight ratio**.
- **Corrosion Resistance**: When exposed to air, it rapidly develops a microscopic, invisible layer of aluminium oxide that prevents further oxidation and corrosion.

- **Conductivity:** It is an excellent conductor of both heat and electricity (often preferred over copper for **long-distance power transmission** because it is lighter and cheaper).
- **Malleability and Ductility:** It is highly malleable (can be hammered into thin foils) and ductile (can be drawn into wires).
- **Alloy Formation:** It readily forms alloys with copper, magnesium, manganese, silicon, and zinc to significantly improve its mechanical properties.
- **Recyclability:** It is infinitely recyclable without any loss of its original properties and requires only 5% of the energy needed for primary production.

Applications

- **Transportation:** Essential for the aerospace (aircraft, spacecraft components), automobile, and railway industries.
- **Electrical Industry:** Used in manufacturing overhead power transmission cables, transformers, and electronic device casings.
- **Construction & Infrastructure:** Used for building cladding, window frames, doors, and bridges due to its durability and weather resistance.
- **Packaging:** Used to make food-grade containers, aerosol cans, and aluminium foil.
- **Chemical & Strategic Industries:** Used as a strong reducing agent in pyrometallurgical processes (e.g., in the thermite process) and plays important roles in the defence and nuclear industries.

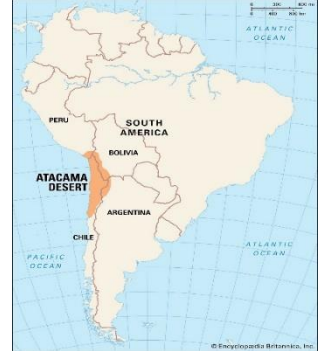
49) ATACAMA DESERT

Why in news?

Rising **light pollution** and expanding **industrial development** are increasingly threatening the pristine dark skies of Chile's Atacama Desert, one of the world's most important regions for astronomical observation.

About

- The Atacama Desert is located along the Pacific coast of northern Chile between the **Andes Mountains** and the **Chilean Coast Range**.
- It is globally recognised as the **driest and cold non-polar desert on Earth**, and is characterised by extreme aridity, very low humidity, and minimal rainfall.
- Its unique geographical conditions, including high altitude regions often exceeding 3,000 metres, exceptionally dry climate, and minimal cloud cover, provide **more than 300 clear nights annually**.



Why is the Atacama a Cold Desert Despite Its Tropical Latitude?

Geographical Factors: The desert lies in the extreme rain shadow of the Andes Mountains, which effectively block moisture-laden air masses blowing from the east (the Amazon basin). Additionally, a significant portion of the Atacama is located on high-altitude plateaus exceeding 3,000 meters above sea level, where the thin atmosphere naturally leads to much cooler ambient temperatures.

Climatic Factors: The cold Humboldt Current (or Peru Current) flows northward along the Pacific coast, chilling the overlaying marine air mass. This cold air cannot hold sufficient moisture and stabilizes the atmosphere, suppressing precipitation and keeping the region exceptionally dry and cool despite its sub-tropical location.

- The desert's remote location results in extremely **low light pollution and stable atmospheric conditions**, making it one of

the world's most suitable regions for astronomical observation and deep-space imaging.

- The Atacama is also strategically important for mineral resources, as it forms part of the "**Lithium Triangle**" shared by Chile, Bolivia, and Argentina, which contains some of the world's largest lithium reserves.

Important Observatories in Atacama

The Paranal Observatory:

- It is one of the most advanced astronomical observatory sites in the world, operated by the **European Southern Observatory**.

The Atacama Large Millimeter/submillimeter Array (ALMA):

- It is a major **international radio astronomy project** designed to study the universe through millimetre and submillimetre wavelengths.

The Extremely Large Telescope (ELT):

- Once operational, the telescope is expected to be one of the world's most powerful ground-based observatories and will deliver an image resolution about **15 times sharper than that of the Hubble Space Telescope**.
- The telescope will feature a highly advanced mirror system comprising 798 mirrors.
- It is currently under construction by the **European Southern Observatory (ESO)** and is a nearly \$1.5 billion project expected to be completed by 2030.

50) FLOODS IN NORTH-WESTERN INDIA

Why in news?

Scientists have reported a significant **rise in the frequency and intensity** of floods across northwestern India in recent years.

About

- Flood frequency and intensity are increasing due to **evolving atmospheric and climatic conditions**.
 - Changing atmospheric circulation patterns and rising extreme rainfall events are major drivers of the growing flood risk in the region.

1. The Clash of Two Major Weather Systems

The increasing overlap of **Western Disturbances and monsoon low-pressure systems** is a major factor behind rising flood events.

- **Western Disturbances** are moisture-laden storm systems originating over the Mediterranean Sea that typically only affect North India during winter.
- Due to changing atmospheric conditions, these systems are now frequently overlapping with **summer monsoon currents or pre-monsoon cyclonic circulations** moving up from the Arabian Sea.
- When they collide over Northwest India, it triggers a massive, rapid dumping of precipitation (**cloudbursts**) rather than a distributed rainfall pattern.

2. Westward Shift of the Core Monsoon Belt

- Climate change is altering the traditional circulation patterns of the Indian Summer Monsoon.
- As a result, monsoon systems are **shifting westward** from Northeastern and Central India towards the semi-arid regions of Northwest India, bringing heavier rainfall and increasing flood risk.

3. Thermodynamic Effect (The 7% Rule)

- A warming atmosphere can hold more moisture. According to the Clausius–Clapeyron relation, **atmospheric moisture-holding capacity increases** by about 7% for every 1°C rise in temperature.

- As a result, rainfall events in Northwest India are becoming more intense and concentrated, increasing the risk of flash floods.

4. Topographical Vulnerability and Orographic Amplification

- When these heavily moisture-laden air masses push into the northwestern plains, they eventually crash directly into the steep topography of the Western Himalayas.
- The mountains force the warm, wet air to rise rapidly (**orographic lift**), causing rapid cooling and condensation into intense localised rainfall. The resulting runoff flows directly down the mountain river basins, rapidly inundating the low-lying plains of Punjab and Haryana downstream.

SCHEMES & INITIATIVES

51) INSPIRE SCHEME

Why in News?

Parliament updates on performance, funding and outreach of the Scheme and highlighted the increased participation of government schools & rural students.

About

- The INSPIRE Programme (Innovation in Science Pursuit for Inspired Research) is an initiative of the **Department of Science and Technology under the Ministry of Science and Technology**.
- It aims to build a **strong scientific human resource base by strengthening the science and technology ecosystem** and expanding India's R&D capacity.
- The programme seeks to attract talented students towards science and encourage research as a long-term career.
- It targets meritorious students at the school, college, and university levels who show aptitude for science and research.
- **INSPIRE Internship:** The INSPIRE Internship targets top-performing Class X students (top ~1%) through science camps held during summer or winter vacations. It aims to spark scientific curiosity, encourage innovative thinking, and motivate students aged 16–17 to pursue science in higher education.
- **Scholarship for Higher Education (SHE):** The SHE component supports meritorious undergraduate students in basic and natural sciences.
- **INSPIRE Fellowship:** The INSPIRE Fellowship provides support to bright students in the age group of 22–27 years who are pursuing Ph.D. in basic and applied sciences, including engineering, medicine, agriculture, and veterinary sciences.

- **INSPIRE Faculty Fellowship:** The INSPIRE Faculty Fellowship targets young researchers aged 27–32 years who have completed their Ph.D. It provides opportunities to about 100 selected individuals each year to undertake independent research in both basic and applied sciences. The fellowship is awarded for a duration of five years and is intended to help young scientists establish themselves as independent researchers in India's scientific ecosystem.

52) SEED SCHEME

Why in News?

The Development and Welfare Board for Denotified, Nomadic and Semi-Nomadic Communities (DWBDNC) reported notable progress under the SEED Scheme in FY 2025–26, reflecting improved outreach and stronger implementation outcomes.

About

The Scheme for Economic Empowerment of DNTs (SEED) is a **central sector scheme launched in 2022** by the **Ministry of Social Justice & Empowerment** for economic empowerment of **DNT, NT and SNT communities**.

National Scheduled Castes Finance and Development Corporation is an implementing agency of Development and Welfare Board for Denotified, Nomadic and Semi-Nomadic Communities (DWBDNC), MoSJ&E, Govt. of India for the livelihood component of Scheme of Economic Empowerment of DNT's (SEED).

Components:

- Free coaching for competitive exams and professional courses
- Health insurance coverage through PMJAY
- Livelihood support for income generation

- Housing assistance through schemes like PMAY

De-Notified Tribes

- The term **De-notified Tribes** refers to communities that were once classified under the **Criminal Tribes Acts, 1871** that were implemented by the British Government.
- The Government of India **abolished** the Acts in 1952, leading to the De-Notification of these communities.
- While most DNTs are spread across the SC, ST and OBC categories, **some DNTs are not covered in any of the SC, ST or OBC categories.**
- **Kaka Kalelkar Commission, Mandal Commission, NCRWC** have highlighted their historical marginalization, stigma and need for targeted welfare measures.

53) NAMASTE SCHEME

Why in News?

The Union Ministry of Social Justice and Empowerment announced major progress under the NAMASTE Scheme, highlighting large-scale profiling, PPE distribution, health insurance coverage, and financial assistance for sanitation workers.

About

- It is a Central Sector Scheme, fully funded and implemented by the Central Government, aimed at creating a mechanized, safe, and regulated sanitation ecosystem.
- The NAMASTE Scheme (National Action for Mechanized Sanitation Ecosystem) seeks to eliminate hazardous manual scavenging and shift towards sustainable sanitation practices through mechanization and worker rehabilitation.
- It completely replaces the erstwhile **SRMS (Self-Employment Scheme for Rehabilitation of Manual Scavengers)**, which had been operational since 2007.
- The primarily targets **Sewer and Septic Tank Workers (SSWs)** engaged in hazardous

sanitation work. It covers workers employed by **Urban Local Bodies (ULBs)**, parastatal agencies like Jal Boards, as well as those hired through private sanitation service organizations and contractors.

- From **FY 2024–25**, the scheme was expanded to include informal waste pickers, collectors, and sorters in solid waste management.
 - Eligibility requires at least **6 months** of experience in waste recovery or recycling activities.
 - All benefits, including skill training and enterprise support, are restricted to individuals above **18 years of age.**
- **Ministry:** The Ministry of **Social Justice and Empowerment (MoSJE)** and Ministry of **Housing and Urban Affairs (MoHUA).**
- **Implementing Agency:** The **National Safai Karamcharis Finance and Development Corporation (NSKFDC)** acts as the nodal implementing agency at the ground level.
- The policy targets specific United Nations Sustainable Development Goals: **SDG 6** (Clean Water and Sanitation), **SDG 8** (Decent Work and Economic Growth), and **SDG 10** (Reduced Inequalities).
- **Constitutional Backbone:** The scheme acts as a legislative fulfillment of **Article 21** (Right to Life with Dignity) and **Article 17** (Abolition of Untouchability), countering the historical social stratification tied to sanitation work.

PM-DAKSH PORTAL: It serves as a key **training delivery platform for sanitation workers, especially Sewer and Septic Tank Workers (SSWs)** and other sanitation-related workers. Through PM-DAKSH, workers receive structured occupational safety training, mechanized sanitation skills, and certification in collaboration with Sector Skill Councils.

54) PRADHAN MANTRI MUDRA YOJANA (PMMY)

Why in News?

The **Pradhan Mantri MUDRA Yojana (PMMY)**, launched on **April 8, 2015**, has completed **11 years** of operations as a cornerstone of India's financial inclusion and micro-entrepreneurship strategy.

About

- The **Pradhan Mantri Mudra Yojana (PMMY)** is a flagship credit scheme launched by the Government of India to provide **collateral-free loans to micro and small non-farm income-generating enterprises**.
- To promote **self-employment and entrepreneurship** by providing easy access to institutional credit for small businesses that are often outside the formal banking system.
- MUDRA is a subsidiary of **SIDBI (Small Industries Development Bank of India)**.
- Targets **MSMEs, small entrepreneurs, and informal sector workers**.
- Nodal Ministry Department of Financial Services, **Ministry of Finance**
- Refinance Mechanism MUDRA does not lend directly to individuals; it **refinances commercial banks, RRBs, SFBs, and NBFCs**.
- Collateral Status **100% Collateral-Free**; backed by the Credit Guarantee Fund for Micro Units (CGFMU).

Three Pillars of MUDRA

- **Shishu**: Covers loans up to **₹50,000**. This category targets nano-entrepreneurs, start-ups, and initial business set-ups (e.g., street vendors, small artisans).
- **Kishor**: Covers loans above **₹50,000 and up to ₹5 lakh**. This is designed for entrepreneurs who have already established their business

but require capital for expansion or buying equipment.

- **Tarun**: Covers loans above **₹5 lakh and up to ₹10 lakh**. This targets mature micro-enterprises requiring higher capital infusions for scaling operations.

PMMY (MUDRA Yojana) - Macro-Economic Impact (11 Years)

- **Women empowerment**: Around **65-70% of loans** have gone to women,
- **Social inclusion**: Over **50% of accounts** belong to **SC, ST, and OBC** beneficiaries, supporting socio-economic mobility.

SOCIAL ISSUES

55) NATIONAL SCHEDULED TRIBES FINANCE AND DEVELOPMENT CORPORATION (NSTFDC)

Why in News?

The National Scheduled Tribes Finance and Development Corporation (NSTFDC) is celebrating its 25th Foundation Day in New Delhi to mark a quarter-century of tribal empowerment.

About

- National Scheduled Tribes Finance and Development Corporation (NSTFDC) was set up in **2001 under the Ministry of Tribal Affairs**.
- The main objects of the Corporation is to work for **socio-economic and educational upliftment of Scheduled Tribes(STs)**, to provide better self-employment avenues so that they can become economically independent and self-reliant.
- **NSTFDC does not extend retail loans directly to individuals.** Instead, it operates through a two-tier refinance structure:
 - **State Channelizing Agencies (SCAs):** It designates specific state-level corporations (such as State Tribal Development Corporations) as its primary delivery arms.
 - **Financial Institutions:** It partners with Regional Rural Banks (RRBs), Public Sector Banks, and National Cooperative Development Corporation (NCDC) to expand its rural credit outreach.

Flagship Concessional Schemes

NSTFDC designs tailored financial schemes with highly subsidized interest rates to meet the credit needs of tribal individuals, self-help groups, and cooperatives:

- Adivasi Mahila Sashaktikaran Yojana (AMSY)
- Micro Credit Scheme for Self Help Groups (SHGs)
- Adivasi Shiksha Rrinn Yojana (Education Loan)

Term Loan Scheme

- **Target:** Viable income-generating projects across agriculture, services, or manufacturing sectors.
- **Financial Cap:** Loans up to **₹50,00,000 per unit**.
- **Concessional Interest:** Scaled between **6% to 8% per annum** depending on the total cost of the project.

ART AND CULTURE

56) MAHATMA JYOTIBA PHULE

Why in News?

The Government of India today marked the 200th Birth Anniversary of Mahatma Jyotiba Phule with solemn tributes at the Parliament House Complex, signifying the nation's highest institutional recognition of one of its greatest social reformers.

About

- Jyotiba Govindrao Phule, also known as Jyotirao Phule, was a **revolutionary social reformer who dedicated his life to fighting against caste discrimination and advocating for the rights of marginalized communities.**
- Born on 11th April 1827 in Poona (present-day Pune) into the Mali caste, which was considered a low caste in the social hierarchy, **Phule emerged as a beacon of hope for the oppressed.**
- Phule's perspective transformed after reading Thomas Paine's "Rights of Man," which inspired his lifelong commitment to social justice and equality.

Prominent Contributions of Jyotirao Phule

Anti-Caste Movement

- Founded the **Satyashodhak Samaj** in 1873 to oppose caste discrimination and Brahmanical dominance.
- Spread social reform ideas through folk dramas and the newspaper *Deenbandhu*.

Educational Reforms

- In 1848, along with Savitribai Phule, established India's first school for girls in Pune.
- Promoted education for women and marginalized communities.

Women's Welfare

- Supported widow remarriage and established shelters for widows and orphans.
- Organized a barbers' strike against the practice of shaving widows' heads.

Literary Contributions

- *Gulamgiri* — compared caste oppression with slavery.
- *Shetkaryacha Asud* — highlighted peasant exploitation.
- *Sarvajanik Satya Dharma* — promoted rational religious thought.
- *Tritiya Ratna* — criticized Brahmanical orthodoxy.
- *Chhatrapati Shivaji Raje Bhosale Yanche Powada* — portrayed Shivaji as a non-Brahmin leader.

Ideological Views

- Criticized the Revolt of 1857 as an upper-caste power struggle.
- Viewed British rule as a means to weaken rigid caste hierarchies.
- Supported social and economic empowerment of oppressed communities.

Legacy: He was bestowed the **title of Mahatma in 1888 by social activist Vithalrao Krishnaji Vandekar** for his extraordinary contributions, inspiring future leaders like Dr BR Ambedkar and laying the foundation for anti-caste movements in India.

57) ARCHAEOLOGICAL SURVEY OF INDIA (ASI)

Why in News?

The Archaeological Survey of India (ASI) has embarked on a nationwide programme to modernise site museums and develop 15 major archaeological destinations, with an estimated outlay of over Rs 1,171 crore.

About

- **Established in 1861**, the Archaeological Survey of India under the **Ministry of Culture** is the premier authority responsible for the exploration, excavation, conservation, and protection of India's cultural and archaeological heritage.
- **Today, the ASI manages 3,696 centrally protected monuments**, positioning itself at the vital intersection of national identity, historical research, and modern administrative governance.

The ASI's operational mandate is realized through five core functional pillars:

- **Conservation**, which involves specialized chemical preservation of stone and metal;
- **Excavation**, utilizing advanced non-invasive technologies like LiDAR and Ground Penetrating Radar (GPR);
- **Statutory regulation**, enforcing the *AMASR Act, 1958* to protect heritage sites from urban encroachment;
- **Epigraphical research**, focusing on the decipherment of ancient inscriptions;
- **Museum management**, curating site-specific collections.

Heritage Conservation & Digital Preservation Initiatives

- The **Adopt a Heritage 2.0** initiative promotes the use of CSR funds to improve visitor amenities at heritage sites without affecting their structural integrity.
- The **NMMA** and **JATAN** platform are developing an AI-enabled digital registry and 3D documentation system for monuments and antiquities.
- The **PRASHAD Scheme** links heritage conservation with spiritual tourism development.
- **Project Dharohar (2026)** aims to rationalize monument management by prioritizing historically significant sites for efficient resource allocation.

58) CLASSICAL DANCES IN INDIA

Why in News?

Union ministry of Culture recently proposed to include Classical dances of India in school curriculum.

About

India recognizes **eight classical dance forms**, each rooted in the **Natyashastra of Bharata Muni** (c. 200 BCE – 200 CE) — the foundational Sanskrit treatise on performing arts. All eight forms are recognized by the **Sangeet Natak Akademi**, India's national academy for music, dance, and drama. These dance forms evolved in different regions, shaped by local culture, religious traditions, and court patronage, but all share the common framework of:

- **Nritta** — Pure rhythmic dance; abstract movements without narrative content; focuses on rhythm, speed, and pattern
- **Nritya** — Expressional/interpretive dance; combines rhythm with emotion (*rasa*) and gesture (*abhinaya*) to convey meaning
- **Natya** — Dramatic storytelling; full-fledged dance-drama with plot, dialogue, and characters.

Classical Dance	State	Key Features	Prominent Personalities
Bharatanatyam	Tamil Nadu	One of the oldest classical dances; rooted in <i>Natyashastra</i> and <i>Abhinaya Darpana</i> ; emphasis on geometric precision, adavus, mudras, and expressive abhinaya; follows the traditional <i>margam</i> sequence	Balasaraswati, Yamini Krishnamurthy, Padma Subrahmanyam, Rukmini Devi Arundale
Kathak	Uttar Pradesh	Derived from <i>Katha</i> (storytelling); known for tatkar (footwork), chakkars (spins), ghungroos, and association with Hindustani music; flourished under Mughal patronage	Birju Maharaj, Sitara Devi, Shambhu Maharaj, Lady Leela Sokhey (Menaka)
Kathakali	Kerala	Highly stylized dance-drama; elaborate costumes and facial makeup; themes from epics and Puranas; intense facial expressions and mudras	Kalamandalam Gopi, Ramankutty Nair
Mohiniyattam	Kerala	Graceful solo dance dedicated to the feminine <i>Lasya</i> style; gentle circular movements; white-gold Kasavu costume; lyrics in Manipravala	Kalamandalam Kalyanikutty Amma, Sunanda Nair, Pallavi Krishnan
Odissi	Odisha	Temple-origin dance focused on Vaishnavite themes; known for Tribhanga and Chowk postures; lyrical and sculptural style	Kelucharan Mohapatra, Sanjukta Panigrahi, Sonal Mansingh
Kuchipudi	Andhra Pradesh	Originated as a dance-drama tradition; brisk movements, expressive storytelling, Carnatic music accompaniment	Raja Reddy, Radha Reddy, Yamini Krishnamurthy
Manipuri	Manipur	Ancient ritualistic dance form; associated with Ras Leela and Lai Haraoba; soft and fluid movements; avoids ankle bells	King Bhagyachandra, Jhaveri Sisters
Sattriya	Assam	Introduced by Srimanta Sankaradeva; evolved in Vaishnava monasteries (Sattras); combines dance, drama, and devotional music	Srimanta Sankaradeva, Jatin Goswami

59) YUVA SANGAM UNDER EK BHARAH SHESHTRA BHARAT

Why in News?

The Ministry of Education today launched the online registration portal for **Yuva Sangam – Phase VI** under the *Ek Bharat Shreshtha Bharat (EBSB)* initiative.

About

- Yuva Sangam is a youth exchange programme aimed at strengthening cultural integration and national unity by connecting young people from different regions of India.
- Targets individuals aged 18–30 years, including students, NSS volunteers, NYKS members, and young professionals.
- Implemented by Higher Education Institutions under the aegis of the Ministry of Education.
- Launched as part of the Ek Bharat Shreshtha Bharat initiative of the Government of India.
- Promotes experiential learning in line with the objectives of the National Education Policy 2020 by encouraging exposure beyond classroom settings.
- Provides a structured platform for inter-regional interaction, cultural exchange, and mutual understanding among youth.
- Organized around the “5 Ps” framework:
 - **Paryatan** – Tourism
 - **Parampara** – Traditions and Culture
 - **Pragati** – Development and Governance

- **Paraspar Sampark** – People-to-People Connect
- **Prodyogiki** – Technology and Innovation

Ek Bharat Shreshtha Bharat programme aims to enhance interaction & promote mutual understanding between people of different states/UTs through the concept of state/UT pairing. The states carry out activities to promote a sustained and structured cultural connect in the areas of language learning, culture, traditions & music, tourism & cuisine, sports and sharing of best practices, etc.