

FORTUNE Prelims Precise

May 2026



FORTUNE IAS

Toppers in Top 100



Preface

Fortune IAS Academy presents '**Prelims Precise**', a monthly current affairs magazine through which we make prelims current affairs revision precise and effective.

This magazine is a comprehensive resource that condenses the significant news of each month into distinct sections such as polity and governance, economic development, science & technology, among others.

Each content is organised with the why in news context followed by its explanation.

Fortune Prelims Precise is available to all Prelims cum Mains batch students (2024) as part of the course study material. **It can be purchased from Fortune IAS Academy for Rs. 75 per issue.**



Test your preparation with
May 2026
Monthly Current Affairs
quiz here

INDEX - MAY 2026

Polity & Governance _____ 1

1. Model Code of Conduct (MCC) _____	1
2. NCRB Crime in India 2024 Report _____	1
3. Sample Registration System (SRS) Report _____	1
4. Right to Safe Travel _____	2
5. Section 69A of the IT Act _____	2
6. Unlawful Activities (Prevention) Act (UAPA) _____	2
7. Section 124A (Sedition Law) IPC _____	3
8. Supreme Court strength _____	3
9. Governor's Role in a Hung Assembly _____	4

Economy _____ 4

10. Cotton Productivity Mission _____	4
11. The National Family Health Survey-6 (NFHS-6) _____	4
12. The Insolvency and Bankruptcy Code (IBC) _____	5
13. The SARTHAK-PDS Scheme _____	5
14. PM-WANI _____	5
15. Foreign Capital Flight _____	6
16. Bond Yields _____	6
17. Zero Coupon Zero Principal Instrument (ZCZP) _____	7
18. Surplus Transfer to Central Government _____	7

International Relations _____ 8

19. The United Nations Conference on Trade and Development (UNCTAD) _____	8
20. World Migration Report 2026 _____	8
21. Abraham Accords _____	8
22. Nuclear Non-Proliferation Treaty (NPT) _____	9
23. International Organisation for Standardisation (ISO) _____	9
24. European Central Bank (ECB) _____	9
25. Asian Productivity Organization (APO) _____	10
26. Common Criteria Development Board (CCDB) _____	10
27. QUAD meeting _____	10

History & Culture _____ 11

28. Sanchi Stupa _____	11
29. Gurudev Rabindranath Tagore _____	11
30. Hanamkonda's Thousand Pillar Temple _____	11
31. Somnath Temple _____	12
32. Bhojshala Complex _____	12
33. Idu Mishmi Tribe _____	12
34. Pashupatinath Temple _____	13

Geography _____ 13

35. Mission Mausam _____	13
36. Atlantic Meridional Overturning Circulation (AMOC) _____	13
37. Andhi _____	14
38. Earth's Outer Core Is Changing _____	14

Environment & Ecology _____ 15

39. Ground-Level Ozone _____	15
40. Nagoya Protocol on ABS _____	15
41. Big Cat Alliance (IBCA) Summit, 2026 _____	15
42. Methane Alert System (MARS) _____	16
43. Ghepan Glacial Lake _____	16

Science & Technology _____ 17

44. Hantavirus _____	17
45. Paraquat _____	17
46. Tyre Pyrolysis Oil (TPO) _____	17

47. Sub-Surface water-Ice on Moon _____	18
48. India's First Indigenous Hydrogen Train _____	18
49. Babesia Infection _____	19
50. Strokes- A Public Health Priority _____	19
51. Apnoea Test _____	20
52. Ebola _____	20
53. The SMILE Mission _____	20
54. Shukrayaan Mission _____	21
55. Rumen Fluke _____	21

Defence _____ 22

56. TARA Weapon System _____	22
57. BrahMos Missile System _____	22
58. Agni-1 Missile _____	22
59. Drone Missile (ULPGM)-V3 _____	23
60. Chief of Defence Staff (CDS) _____	23
Military Exercises _____	23
61. CINBAX-II 2026 _____	23
62. PRAGATI 2026 _____	23

Miscellaneous _____ 24

63. Khet Bachao Abhiyan _____	24
64. FAO Agricola Medal _____	24
65. PM SVANidhi Scheme _____	24
66. Cell Broadcast System (CBS) _____	24
67. Central Consumer Protection Authority (CCPA) _____	25
68. Indian Cybercrime Coordination Centre (I4C) _____	25
69. Ayushman Bharat Digital Mission _____	25
70. India's first 'SkyCast' System _____	25
71. Hainan Free Trade Port _____	26

Places in News _____ 26

72. Atacama Desert _____	26
73. Salaya Port _____	26
74. Bundelkhand _____	27
75. Kopra Reservoir _____	27
76. Cyprus _____	28
77. Lake Kariba _____	28
78. Lipulekh Pass _____	28

Species in News _____ 29

79. The Conocarpus Plant _____	29
80. Asiatic Lions _____	29
81. Ganges Soft-Shell Turtle _____	29
82. Pallas's Gull _____	29
83. Red-Necked Phalarope _____	30
84. Humboldtia nairiana _____	30
85. Peacock Tarantula _____	30

Keywords _____ 31

86. Unidentified Anomalous Phenomena (UAP) _____	31
87. Robot Monk Gabi _____	31
88. 5G Network Slicing _____	31
89. RBI's Kill Switch Facility _____	31
90. Memflation _____	31
91. Schedule H1 Drugs _____	31
92. Pyrite _____	31
93. Nordic Countries _____	31
94. Cocaine hippos _____	31
95. One Case One Data initiative _____	31

Polity & Governance

Model Code of Conduct (MCC)

- The **Election Commission of India (ECI)** recently lifted the Model Code of Conduct (MCC) following the **declaration of results** of various Assembly elections.
- The MCC is a set of **guidelines issued by the ECI to ensure free and fair elections** and a level playing field for political parties and candidates.
- **First introduced during the 1960 Assembly elections in Kerala**, it comes into force from the **announcement of elections** and remains **operative until the declaration of results**.
- Though **not a statutory law**, it derives its authority from **Article 324** of the Constitution and is enforceable by the ECI.
- **During this period**, governments cannot announce new schemes or grants that may influence voters, misuse official machinery for campaigning, or exploit caste and religious sentiments for electoral gains.
- The MCC also **regulates** campaign conduct, public meetings, and electoral practices to **uphold the integrity** of the electoral process.
- To strengthen enforcement, the **ECI uses the cVIGIL app**, which enables **citizens to report** MCC violations in real time through geo-tagged photos and videos for prompt action by election authorities.

NCRB Crime in India 2024 Report

- The National Crime Records Bureau's **Crime in India 2024 report** recorded a 6% fall in overall crime but a 17% rise in cybercrime, indicating a **growing shift towards digital offences**.
- NCRB is a **specialized agency under the Ministry of Home Affairs** and serves as the national repository of crime and criminal data.
- Established in **1986** on the recommendations of the **National Police Commission** alongside the **Tandon Committee**, it was formed by

merging the Directorate of Coordination and Police Computer (DCPC), the Inter-State Criminals Data Branch of the CBI, and the Central Finger Print Bureau.

- Though **not a statutory body**, it functions under executive resolutions of the MHA and supports law enforcement through **initiatives** such as the Crime and Criminal Tracking Network and Systems, National Automated Fingerprint Identification System, the National Database of Sexual Offenders, and the Cyber Crime Reporting Portal.
- NCRB **publishes** the annual **Crime in India, Accidental Deaths and Suicides in India (ADSI)**, and **Prison Statistics India** reports.

Sample Registration System (SRS) Report

- The **Sample Registration System (SRS) Statistical Report 2024** was released by the Office of the **Registrar General of India (ORGI)** under the Ministry of Home Affairs.
- Until 1964, **India relied mainly** on the **Census** and incomplete birth and death **registration records** for demographic statistics which had inaccuracies.
- To address this gap, the **Sample Registration System (SRS)** was launched in 1964–65 under ORGI.
- SRS established a nationwide **sample-based continuous registration system** covering **thousands of sample villages and urban blocks**.
 - 📌 SRS was done through local enumerators like anganwadi workers and ORGI publishes annual SRS Statistical Reports.
- Later the **Registration of Births and Deaths Act, 1969** was enacted, providing a uniform legal framework for birth and death registration.
- This created a **Civil Registration System (CRS)** under ORGI under which the registration of all births and deaths was legally mandatory and more centralised.
- So the SRS, now while providing accurate **independent demographic estimates**, also validates the CRS.

Vital Indicator	National	Rural	Urban	Highest State / Value	Lowest State / Value
Crude Birth Rate (CBR)	18.3	20.2	14.7	Bihar (26.8)	Kerala (11.1)
Total Fertility Rate (TFR)	1.9	2.1	1.5	Bihar (2.9)	Delhi (1.2)
Crude Death Rate (CDR)	6.4	6.8	5.6	Chhattisgarh (8.4)	Delhi (4.5)
Infant Mortality Rate (IMR)	24	27	17	Chhattisgarh (36)	Kerala (8)
Sex Ratio at Birth (2022-24)	918	914	928	Chhattisgarh (978)	Uttarakhand (872)

Right to Safe Travel

- The Supreme Court recently held that **safe travel on highways and protection from road accidents** are part of the fundamental right to life under **Article 21**.
- It thereby expanded the **State's obligation** from merely preventing arbitrary deprivation of life to ensuring safe public infrastructure.
- Taking **suo motu cognizance of fatal accidents** on the **Bharatmala Expressway** in Rajasthan and Telangana, the Court highlighted that although **National Highways** constitute only about **2% of India's road network**, they account for nearly **30% of road fatalities**.
- Bharatmala Pariyojana** is the Government of India's flagship highway development programme launched in 2017 to improve road connectivity, freight movement and economic integration across the country.
- It is a **Central Sector Scheme**, implemented and fully funded by the Central Government through the Ministry of Road Transport and Highways and the National Highways Authority of India.
 -  **Phase I** of Bharatmala Pariyojana, launched in 2017 and currently ongoing, covers approximately 34,800 km of highways and expressways.

Section 69A of the IT Act

- The X (formerly Twitter) handle of the Cockroach Janta Party (CJP) was withheld under India's **Information Technology (IT) Act**.
 - Section 69A of the Information Technology (IT) Act, 2000**, which empowers the **Central Government or authorised officers** to block public access to online information.
 - It can be on **grounds** such as sovereignty and integrity of India, security of the State, public order, and prevention of incitement to cognisable offences.
- The process is governed by the **IT (Procedure and Safeguards for Blocking for Access of Information by Public) Rules, 2009**.
 - It requires **reasons** to be **recorded in writing** and makes **compliance mandatory for intermediaries (social media portals)**, with non-compliance punishable with imprisonment up to seven years and fines.
 - Under the Rules, blocking requests are examined by a **Designated Officer-led inter-ministerial committee** comprising representatives from the Ministries of Home Affairs, Law and Justice, Information and Broadcasting, and CERT-In, which hears the intermediary or originator (generally within 48 hours) before making a recommendation.
 - However, the committee's role is only recommendatory, and the **final approval lies with the Secretary, Ministry of Electronics and Information Technology (MeitY)**, who issues the binding blocking order.

Unlawful Activities (Prevention) Act (UAPA)

- The Supreme Court has referred to a larger Bench the **issue of whether prolonged incarceration and trial delay** can override the **strict bail conditions** under the Unlawful Activities (Prevention) Act, 1967 (**UAPA**).
- The UAPA is a law aimed at preventing **unlawful and terrorist activities** that threaten India's sovereignty and integrity, and provides stringent provisions including **designation of individuals as terrorists** and liability of organisations involved in such acts.
 -  **"Unlawful activity"** refers to any action (words or deeds) that supports secession or disintegrates India, while **"terrorist activity"** refers to acts intended to threaten or likely to threaten the unity, integrity, security, or sovereignty of India or to strike terror in people by use of violence or disruptive means.
- Bail under Section 43D(5) of UAPA is highly restrictive**, allowing denial if the court finds the allegations prima facie true, setting a much higher threshold than ordinary criminal law.
- However, the Supreme Court has also held in **Union of India v. K.A. Najeel (2021)** that **prolonged undertrial incarceration** without realistic prospects of trial completion can **justify bail**, as Article 21 rights to personal liberty remain paramount.

- Normally, however, bail in India is governed by general criminal law principles under the Bharatiya Nagarik Suraksha Sanhita (BNSS (earlier CrPC) where **bail is the rule and jail is the exception under Article 21**.
- In such cases, bail is a right in **bailable offences**, while in **non-bailable offences** it is granted at **judicial discretion** based on factors like gravity of offence, risk of absconding, and possibility of tampering with evidence, with different forms such as **anticipatory, regular, and interim bail** available depending on the stage of proceedings.

Section 124A (Sedition Law) IPC

- A three-judge Bench recently clarified that courts may proceed with trials and related proceedings under **Section 124A (sedition) of the IPC**, now repealed under the new criminal laws, if the accused do not object.
- The IPC, which defined criminal offenses and prescribed punishments. was originally drafted by **Thomas Babington Macaulay**, a British jurist and Member of the Governor-General's Council, and enacted in 1860.
- The sedition provision under Section 124A was later introduced in 1870 by **James Fitzjames Stephen**, a British lawyer, judge, and legal member of the Viceroy's Council.
- **Sedition under Section 124A criminalised** bringing or attempting to bring **hatred, contempt, or "disaffection"** (including disloyalty and enmity) against the **government** created by law through words, signs, or actions.
- The Supreme Court in **Kedarnath Singh v. State of Bihar (1962)** limited its application to cases involving incitement to violence or public disorder.
- In the **S.G. Vombatkere v. Union of India** case, SC in 2022 **stayed all proceedings** under section 124A and prevented from filing new cases
- Later, the Indian Penal Code (IPC) was officially replaced by the Bharatiya Nyaya Sanhita (BNS) on July 1, 2024 and the similar provision was found in Section 152 of BNS.
- However, **Section 152 has a broader** focus on acts that threaten **India's sovereignty, unity, and integrity**, shifting the emphasis from disaffection against the government (**rajdroh**) to security of India (**deshdroh**).
- Importantly, even though BNS has replaced IPC, alleged seditious acts that **happened before BNS** are still filed and tried **under IPC** since there is no retrospective application (**Article 20(1)**) of criminal laws in India.

Supreme Court strength

- President Droupadi Murmu **promulgated** the Supreme Court (Number of Judges) Amendment **Ordinance**, 2026, raising the sanctioned strength of the Supreme Court of India from 34 to 38 judges (including the Chief Justice of India).
- The move is mainly to reduce **pendency in SC**, which stood at around **92,823 cases** as of April 2026.
- **Article 124(1) of the Indian Constitution** establishes that India shall have a Supreme Court comprising the **Chief Justice of India (CJI) and up to seven other judges**.
- But it explicitly **grants Parliament the legislative power to increase** this number as needed to manage the country's judicial workload.
- Hence, **no constitutional amendment is required**, only a simple legislative amendment to the Supreme Court (Number of Judges) Act, 1956.
 - 📖 Note that in this case since the **parliament is not in session** the president had to promulgate an ordinance (article 123).
 - 📖 Ordinance will have a **validity of six months and six weeks** after the start of a session.
- Since the establishment **of the Supreme Court of India in 1950 with 8 judges**, Parliament has **periodically increased** the sanctioned strength through amendments (1956, 1960, 1978, 1986, 2009, 2019 and now proposed 2026).
- In contrast, the strength of **High Court judges is determined under Article 216**, and the **President of India has the power to appoint judges and fix sanctioned strength** in consultation with the Chief Justice of India and concerned state authorities.

Governor's Role in a Hung Assembly

- Actor-turned-politician Vijay's **reported delay** in being invited to form the Tamil Nadu government has brought focus back on the Governor's role in government formation in a **hung Assembly**.
- A **hung Assembly occurs** when no party or alliance secures a majority, making formation of government dependent on post-poll support.
- Under **Article 164 of the Constitution**, the Governor appoints the Chief Minister, but the Constitution does not lay down a fixed procedure in such situations, providing the governor with **situational discretion**.
- Hence, conventions guide the process: as per the **Sarkaria Commission (1988)**, endorsed by the Supreme Court, the Governor should first invite a **pre-poll alliance** with a majority, then the **single largest party** if it can demonstrate majority support, and may allow a "**reasonable time**" to prove majority.
- As established by the Supreme Court in the landmark **S.R. Bommai case (1994)**, a government's majority must be tested **strictly on the floor of the House** through a trust vote or no-confidence motion.
- If no stable government can be formed, the Governor may recommend **President's Rule under Article 356** as a last resort.
- Supreme Court judgments such as **B.R. Kapur (2001)** and **Rameshwar Prasad (2006)** further stress that Governors must act objectively and ensure constitutional governance while avoiding arbitrary discretion.

Who are the Kerala Toppers in Optional Subjects?

Sociology			
 ADITYA NARAYAN H AIR 68 Marks: 295 Kerala Topper	 HRIDYA S BIJU AIR 202 Marks: 273	 DIVYA S AIR 166 Marks: 271	 ANJANA B AIR 222 Marks: 270
PSIR		Malayalam	
 AMAL KAPIYAL AIR 362 Marks: 279 Kerala Topper	 ARAVIND ISWAGAN KUTTY AIR 248 Marks: 275	 SREEJA J S AIR 57 Marks: 274	 JAHANA SAREEN V P AIR 531 Marks: 275 Kerala Topper  ATHIDEHI KRISHNADEV B AIR 451 Marks: 270
Public Administration			
 KIRTHIKA M AIR 184 Marks: 281 South India Topper			

Score **270+ Marks** in your **Optional** at **Fortune IAS Academy**
Optional batches begin in June 22nd
+91 94950 15888
www.fortuneias.com

Economy

Cotton Productivity Mission

- The Central Government has approved the **Mission on Cotton (2026–27 to 2030–31)** to improve India's cotton sector.
- The mission is **jointly implemented** by the Ministry of Agriculture and Farmers Welfare and the Ministry of Textiles, aligning with the **5F vision (Farm to Fibre to Factory to Fashion to Foreign)**.
- The mission aims to **increase cotton yield** from about 440 kg/ha to 755 kg/ha and **production** to 498 lakh bales by 2031, **benefiting** around 32 lakh farmers.
- The mission also promotes the **Kasturi Cotton Bharat (KCB) brand**, a national branding and certification system introduced in 2022 that ensures quality and traceability of Indian cotton.
- This helps improve cotton quality, increase global prices, and reduce dependence on imported high-quality cotton.
 - ★ To qualify for the **KCB** tag, cotton bales must meet strict quality standards such as **low trash content (≤2%)**, **moisture ≤8%**, and **high fibre strength and staple length**, along with **end-to-end traceability using blockchain-based tracking**.
- The Mission will **reduce dependence on imports of Extra Long Staple (ELS) cotton**.
- India is the **second largest cotton** producer following China, but has low productivity.
- Gujarat, Maharashtra, and Telangana** are the top cotton-producing states in India,

The National Family Health Survey-6 (NFHS-6)

- The Ministry of Health and Family Welfare (MoHFW) has released the **National Family Health Survey-6 (NFHS-6, 2023–24)**.
- NFHS** is a large-scale health and demographic survey conducted in **periodic rounds (not annual)**, usually every **5–6 years**.

- It is implemented by the Mumbai based **International Institute for Population Sciences**, an **autonomous** Government of India institution under the **Ministry of Health and Family Welfare**.
- The recent survey shows India's **Total Fertility Rate (TFR)** has stabilised at **2.0**, below the replacement level of 2.1, alongside a **shift towards ageing** with the share of elderly (60+) rising to 12.9% and the under-15 population falling to 25.5%.
- NFHS-6 (2023–24) shows improvement in child nutrition, with **stunting** (low height for age, indicating chronic undernutrition) at ~29.3%, **wasting** (low weight for height, indicating acute malnutrition) at ~19%, and **underweight** (low weight for age, reflecting both chronic and acute undernutrition) at ~31.8%, though levels remain high.
- **Full immunisation** (complete vaccination by age 1) has **risen** to 87.1%, with most vaccines delivered through public health facilities.
- However, **exclusive breastfeeding** (only breast milk for the first 6 months) has **fallen** to ~55.8%, indicating a negative trend in early infant nutrition.

The Insolvency and Bankruptcy Code (IBC)

- The Insolvency and Bankruptcy Code (IBC), 2016 has completed a decade of implementation and provides a **time-bound, creditor-driven framework** for resolving insolvency in India's corporate sector.
- **Insolvency** refers to the inability to repay debts when due, while **bankruptcy** is its legal declaration through a court process.
- The Code, based on the **Bankruptcy Law Reforms Committee (2015)** recommendations, is implemented through the **Insolvency and Bankruptcy Board of India (IBBI)**.
- When a company defaults, insolvency is admitted by the **National Company Law Tribunal (NCLT)** created under Companies Act, 2013 and the **Corporate Insolvency Resolution Process (CIRP)** begins.
- During CIRP a **moratorium** is imposed to prevent any forceful legal actions against the company, an **Insolvency Professional** appointed by NCLT manages the company, and the **Committee of Creditors (CoC)** evaluates resolution plans using verified financial data from **Information Utilities**.

- If a resolution plan is approved within the **prescribed timeline (up to 330 days)**, the company is revived.
- Otherwise, it proceeds to **liquidation**, where assets are distributed as per the **waterfall mechanism**, prioritising insolvency costs and secured creditors before shareholders.

The SARTHAK-PDS Scheme

- The Cabinet Committee on Economic Affairs chaired by the Prime Minister recently approved the **SARTHAK Public Distribution System (PDS) scheme** for a period of five years.
- It is a **Central Sector Scheme** under the **Ministry of Consumer Affairs, Food and Public Distribution** aimed at modernising and integrating India's Public Distribution System.
- The scheme **does not replace the existing PDS** but acts as an **umbrella scheme integrating the ongoing schemes**:
 - (i) "Assistance to State Agencies for intra-State movement of foodgrains and FPS dealers' margin under NFSA" and
 - (ii) "Scheme for Modernization and Reforms through Technology in Public Distribution System (SMART PDS)" to comprehensively strengthen implementation of the **National Food Security Act, 2013 (NFSA)**.
- The scheme will provide **financial support for intra-State movement and handling of PDS goods**, and the fair price shops' dealers' margin.
- It promotes a **citizen-centric and interoperable digital PDS architecture** using advanced technologies such as AI, machine learning, blockchain, and natural language processing.
- These will enable **real-time monitoring, data analytics, grievance redressal**, and stronger oversight through State Command Control Centres.

PM-WANI

- The **Department of Telecommunications (DoT)** introduced a series of user-friendly reforms like QR authentication and flexible short duration plans under the PM-WANI (Prime Minister's Wi-Fi Access Network Interface) framework.

- **PM-WANI**, launched by the Department of Telecommunications (DoT) in 2020, provides **easy and affordable internet access** through **public Wi-Fi hotspots**.
- It allows **small shops and local businesses** to set up Wi-Fi points, so people nearby can connect to the internet using a mobile app.
- It consists of **four key components**:
 - **Public Data Office (PDO)** (e.g., kirana store, café, or local entrepreneur), which establishes, operates, and maintains Wi-Fi hotspots by purchasing internet bandwidth from telecom or internet service providers. Charges users for Wi-Fi access (can be pay-per-use or plans like 15/30/60 minutes).
 - **Public Data Office Aggregator (PDOA)**, which provides aggregation services such as authorization, accounting, and management support to multiple PDOs.
 - **App Provider**, which develops mobile applications for user registration, authentication, and discovery of nearby PM-WANI-enabled Wi-Fi hotspots.
 - **Central Registry**, maintained by C-DOT, which records all PDOs, PDOAs, and App Providers for regulatory tracking.
- Users access PM-WANI public Wi-Fi by downloading an app, getting authenticated, and connecting to nearby hotspots.
- To promote ease of doing business, **Public Data Offices (PDOs)** require no licence or registration and pay no DoT fees, while **PDO Aggregators (PDOAs)** also do not need a licence and only require free registration.
- The rising **gold prices**, with India being the second largest consumer (\$71.98 billion) after China, also weakened the rupee as it amounted to roughly 6% of import bill.
- A weaker rupee also feeds into **imported inflation**, especially in fuel, fertilisers, and electronics, further reducing the purchasing power of rupee.
- At the same time, **capital flight**—the movement of financial assets out of a country due to instability, policy concerns, or better returns abroad—has added pressure.
- This includes both **outflows by foreign investors (disinvestment)** and shifts by **domestic investors** toward safer or higher-return global assets.
- India earlier attracted **carry trade inflows**, i.e., investors borrowing in low-interest currencies (e.g. Japanese Yen) and invested in higher-return Indian assets.
- However, with **rising global uncertainty**, these short-term inflows are now **reversing**, leading to capital outflows and added pressure on the rupee.
- In this context, **PM Modi urged Indians** to postpone **non-essential international holidays** for at least a year to conserve foreign exchange reserves, as well as delay **gold purchases, economise fuel usage, work from home, and buy domestic products** amid the global oil crisis.

Foreign Capital Flight

- The Indian rupee recently fell to a record low of **95.80 against the US dollar**, becoming the worst-performing Asian currency in 2026 due to sustained dollar demand pressures.
- The decline is mainly driven by **high crude oil prices** and **foreign portfolio investor (FPI) outflows**.
- India imports about **80% of its crude oil**, so rising crude prices (benchmark Brent crude price around \$105 per barrel) increase the import bill, widen the current account deficit, and raise demand for dollars, weakening the rupee.

Bond Yields

- Indian government bond yields have risen sharply, with the benchmark 10-year yield moving from **6.66% to 7.11%**, driven by global inflation fears and domestic pressures after the West Asia conflict
- Government bonds are **sovereign debt instruments issued by the government to borrow funds and finance the fiscal deficit**, where investors receive periodic interest (coupon) and principal repayment at maturity.
- **Bond yields** (annual return an investor earns on a bond) move **inversely with bond prices**, i.e. when bond prices increase the yields fall.
 - The **bond prices** fall when there is fall in bond **demand** and rise when there is higher demand.

- The **weakened rupee, raising import costs and risks of imported inflation** (mainly oil and gold), has investors demanding higher yields to offset the expected loss in purchasing power in India.
- In such a scenario, investors anticipate **RBI tightening** (higher repo rates to rein in inflation) thereby increasing bank interest rates.
- With higher bank interest rates, the **bond investors are dumping the bonds** for higher bank deposit rates, thereby reducing bond prices and increasing its yield.
- As a result, the government must offer **higher yields on new bonds** to attract buyers, which increases its borrowing cost.

• It is getting costlier for governments to borrow

YIELDS FOR 10 YEAR GOVT BOND	DEC 24	DEC 25	MAY 2026
United States	4.581%	4.179%	4.560%
Japan	1.070%	2.079%	2.764%
United Kingdom	4.573%	4.474%	4.922%
Germany	2.362%	2.862%	3.060%
China	1.688%	1.850%	1.750%
India	6.870%	6.588%	7.085%

SOURCE: WORLDGOVERNMENTBONDS.COM

Zero Coupon Zero Principal Instrument (ZCZP)

- The **Ministry of Corporate Affairs (MCA)** has allowed companies to use part of their **Corporate Social Responsibility (CSR)** funds by buying **Zero Coupon Zero Principal (ZCZP) instruments** listed on the **Social Stock Exchange (SSE)**.
- **CSR (Corporate Social Responsibility)** is mandated under **Section 135 of the Companies Act, 2013**, which requires eligible companies (based on net worth, turnover, or profit thresholds) to spend **at least 2% of their average net profits of the last 3 years** on social and environmental activities such as education, health, sanitation, poverty alleviation, and rural development.
- **ZCZP instruments** are unique fundraising tools issued by **non-profit organisations (NPOs)** on the SSE.
- They are different from bonds because they **do not pay interest and do not return principal**, and the entire amount is used for approved social projects.
- These instruments help channel private capital into measurable social impact activities.
- Under the revised rules, companies can use up to **10% of their annual CSR expenditure** to subscribe to ZCZP instruments.
- NPOs issuing ZCZPs must complete their projects within a maximum of **three financial years**.

Surplus Transfer to Central Government

- The **Reserve Bank of India** has approved the transfer of a **record ₹2.86 lakh crore as surplus to the Central Government** for the financial year 2025-26.
- The sharp increase in dividend payouts was supported by the **RBI's strong earnings during the year**.
- At the same time, the **RBI raised the contingency risk buffer (CRB) to Rs 109,379 crore to create a safeguard** in case geopolitical tensions escalate or crude oil prices worsen.
- **CRB serves as the RBI's financial safety cushion**, consisting of funds reserved to absorb unexpected risks arising from currency volatility, interest-rate shocks, financial crises, market losses and operational risks.
- A significant contributor to **higher surplus was the central bank's large-scale sale of US dollars in the foreign exchange market** to support the rupee amid persistent depreciation pressures, leading to substantial trading gains for the RBI.
- **Surplus transfer by RBI is 90.8%** of budgeted non-tax revenue under 'dividend/surplus of Reserve Bank of India, Nationalised Banks & Financial Institutions' head for FY27 (BE).

Legal Backing of Surplus:

- The Reserve Bank of India (RBI) transfers its surplus profits to the Government of India in terms of the provisions of **Section 47 of the Reserve Bank of India Act, 1934** which is as follows:
- "After **making provision for bad and doubtful debts**, depreciation in assets, contributions to staff and superannuation funds and for all matters for which provision is to be made by or under this Act or which are usually provided for by bankers, the **balance of the profits shall be paid to the Central Government.**"

International Relations

The United Nations Conference on Trade and Development (UNCTAD)

- UNCTAD recently released a report titled **Invisible Barriers: The Costs of Non-Tariff Measures**.
- UNCTAD was **established in 1964** by the UN General Assembly as a **permanent, autonomous body within the United Nations framework** and is **headquartered in Geneva, Switzerland**.

Key Findings:

- Non-tariff measures (NTMs)** such as regulations, mandatory standards or product requirements, now drive most trade costs. They shape who trades, what is traded and to which markets.
- Double Burden:** For developing countries, this creates a **double burden**. They face **rising tariffs and high non-tariff measure costs**.
- Tariffs increased sharply in 2025:** They rose by 10% for developed countries, 16% for developing countries and 18% for least developed countries.
- Tariffs are not the main cost for most countries. **NTMs impose higher export costs than tariffs for 88% of countries**.
- They include **technical regulations, health and safety requirements**, and administrative procedures. They often involve compliance, information and procedural costs.

World Migration Report 2026

- The biennial (once in two years) **World Migration Report 2026** was released by the International Organization for Migration (IOM).
- IOM was founded in **Brussels (Belgium) in 1951** in the aftermath of World War II to help manage large-scale European refugee and displacement movements.
- It was initially created as the **Provisional Intergovernmental Committee for the Movement of Migrants from Europe (PICMME)**, later renamed and expanded globally as IOM in 1989 with current headquarters at **Geneva, Switzerland**.

- IOM became a **related organisation of the UN in 2016** and **India** officially joined as a member state of IOM in **2008**, after previously holding observer status since 1991.
- The 2026 recent report finds that by mid-2024, the number of **international migrants reached 304 million**, accounting for **3.7 per cent** of the global population.
- Report says that global remittance reached \$905 billion and India is the **world's largest recipient of remittances (since 2010)**, retaining the number one spot globally with a record-breaking influx of **\$137.67 billion**, followed by Mexico (\$67.64 billion) and Philippines (\$40.28 billion)
- The report highlights that global migration is concentrated in a few major **country-to-country migration corridors**, with the largest being **Mexico–United States (around 11 million migrants)**.
- The **India–United Arab Emirates (UAE) corridor** ranks fifth globally, and Indians form the largest expatriate group in the UAE with over 3 million migrants.

Abraham Accords

- The U.S. President** recently issued a high-stakes directive calling on several Muslim-majority nations—including Saudi Arabia, Qatar, Pakistan, Egypt, Turkey, and Jordan—to simultaneously sign the Abraham Accords.
- Abraham Accords are a series of **diplomatic agreements brokered by the United States** to formalize and **normalize diplomatic relations between Israel** and several Arab/Muslim-majority nations.
- The accords were **first brokered in 2020 during the first presidency of Donald Trump** and expanded the signatories with **United Arab Emirates (UAE) and Bahrain (2020), Morocco and Sudan (2021), Kazakhstan (2025)** etc.
- It aimed at **building a unified U.S.-backed defensive and intelligence bloc** to counter Iran's regional influence and nuclear initiatives.
- It **mandates the opening of embassies, exchange of ambassadors**, and establishment of direct commercial flights between Israel and participating nations and enables **deep military collaboration and high-value Israeli defense tech exports to Arab partner states**.

Nuclear Non-Proliferation Treaty (NPT)

- The **11th Review Conference of the Nuclear Non-Proliferation Treaty (NPT)** at the UN Headquarters in New York recently collapsed without reaching a consensus on a final declaration.
 - 📌 The **NPT** is a landmark global treaty for nuclear non-proliferation, opened for signature in 1968 and **entering into force in 1970**.
- It is the only multilateral treaty that includes a **binding commitment** by nuclear-weapon states towards nuclear disarmament.
- NPT is based on **three key goals: preventing the spread** of nuclear weapons (non-proliferation), promoting **peaceful use** of nuclear energy under safeguards (Article IV), and achieving **nuclear disarmament**.
- Under the Treaty, a **Nuclear-Weapon State** is strictly defined as any nation that manufactured and exploded a nuclear weapon or other nuclear explosive device **before January 1, 1967**.
- Exactly **five countries meet this legal definition under the NPT** (the P5: US, Russia, UK, France, and China) and all other parties are legally Non-Nuclear-Weapon States (NNWS).
- It has **nearly 190 States parties** and **India is not a signatory** because it divides the world into an exclusive group of recognized Nuclear Weapon States and Non-Nuclear Weapon States.
- **Non Party:** India, Israel, Pakistan, South Sudan, and North Korea. Of these, North Korea originally joined but formally withdrew in 2003.

International Organisation for Standardisation (ISO)

- The **Bureau of Indian Standards (BIS)** organized the 35th Plenary and Working Groups meetings of the ISO subcommittee on 'Space Systems and Operations' (ISO TC 20 / SC 14) in New Delhi.
- The **International Organization for Standardization (ISO)** was officially formed in February 1947 by delegates from 25 countries (including India) meeting in **London**.
- It works as an **independent, non-governmental body** whose primary mission was to unify industrial standards, aid post-World War II global reconstruction.

- Based in Vernier, Switzerland, today ISO has 177 national standards bodies, each representing the Standard Body in their country.
- It has published over **25,000 international standards** covering areas such as technology, manufacturing, food safety, transport, IT, agriculture, and healthcare.
- The three official languages of ISO are **English, French, and Russian**.
- **BIS is the National Standard Body of India** established under the **BIS Act 2016** for the harmonious development of the activities of standardization, marking and quality certification of goods.
- BIS has its **headquarters at New Delhi** and its 05 Regional Offices (ROs) are at Kolkata (Eastern), Chennai (Southern), Mumbai (Western), Chandigarh (Northern) and Delhi (Central).

European Central Bank (ECB)

- The Reserve Bank of India (RBI) and the European Central Bank (ECB) signed a Memorandum of Understanding (MoU) to enhance cooperation in central banking.
- ECB is the **prime monetary authority of the European Union** and the **central component of the Eurosystem** and the European System of Central Banks (ESCB).
- It was **founded on 1st June 1998, by the Maastricht Treaty** framework with headquarters in Frankfurt, Germany.
- Its primary objective is to **guarantee and maintain price stability within the Eurozone which manages the Euro** (the single currency of the EU) and works to keep consumer price inflation low and stable to support economic growth and job creation.
- It holds the **exclusive right to authorize the issuance of Euro banknotes**; also the Executive Board of ECB enforces the decisions of the Governing Council and **provides directions to national central banks across the Eurozone**.
- **Note: Eurozone** is an economic and geographic region comprising the European Union (EU) member states that have fully adopted the euro (€) as their sole official currency and Bulgaria in the latest member joined the eurozone.

Asian Productivity Organization (APO)

- India hosted the **68th Session of the Asian Productivity Organization (APO) Governing Body** at Bharat Mandapam in New Delhi.
- APO is an **intergovernmental body** established in 1961 with **headquarters at Tokyo**, its core mission is to **promote sustainable socio-economic development** across 21 member economies in the Asia-Pacific region through **productivity enhancement, mutual cooperation, and innovation-led growth**
- APO is **open to Asia-Pacific countries** that are also members of the United Nations Economic and Social Commission for Asia and the Pacific (**UN ESCAP**).
- APO provides **policy advisory services**, and undertaking **smart initiatives** in the industry, agriculture, service, and public sectors.

UN ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) is the principal regional development arm of the UN for the Asia-Pacific region, bringing together 53 member states and 9 associate members. Headquartered in **Bangkok, Thailand**, it drives sustainable economic and social cooperation



Common Criteria Development Board (CCDB)

- India has been nominated as the Chair of the Common Criteria Development Board (CCDB) for a two-year term from April 2026 to April 2028 which was confirmed during the 1st Quarter Meeting of the **Common Criteria Recognition Arrangement (CCRA)**.
- CCRA is a foundational international treaty** that allows for the **mutual recognition of IT security certificates across international borders** without the need for re-certification.

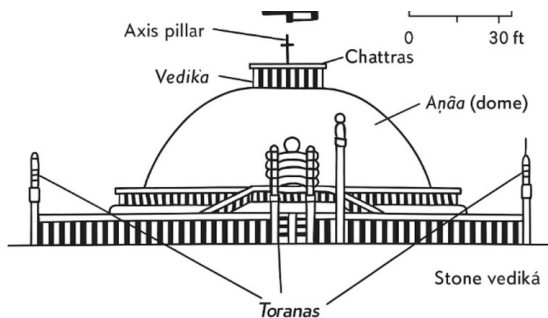
- Under the CCRA, **products are tested by independent licensed laboratories to verify specific security standards** and the **certifications issued by recognized national schemes are mutually accepted** enabling global trust in secure IT products and cybersecurity certification processes.
- CCRA currently consists of **20 certificate-authorizing nations and 18 certificate-consuming nations** and **India has been an active Certificate Authorizing Nation in the CCRA since 2013**.
- And the **CCDB functions as the technical core of the CCRA** which oversees the international work program for the Common Criteria (CC) and the Common Methodology for Information Technology Security Evaluation (CEM).

QUAD meeting

- India **hosted** the landmark **Quad Foreign Ministers' Meeting (QFMM)** at Hyderabad House in New Delhi.
- The **Quadrilateral Security Dialogue (Quad)** is a premier, non-military plurilateral strategic **coalition** of four major maritime democracies (India, the United States, Australia, and Japan) committed to upholding an **open, rules-based, and resilient international order**.
- It came together during the **2004 tsunami in the Indian Ocean region** and the first meeting of Quad officials took place on the sidelines of the ASEAN Regional Forum summit in the Philippines in **May 2007**.
- It **promotes green technologies**, clean energy supply chains, and climate-resilient infrastructure and **supports semiconductors**, quantum computing, Open RAN telecom systems, and secure technology standards.
- Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA), Quad STEM Fellowship, Unified Counter-Terrorism Grid** are other Landmark Quad Initiatives.
- Note: **IPMDA** is a critical maritime security initiative which utilizes commercial satellite tracking to provide near-real-time, integrated data to regional coast guards, allowing them to track Illegal, Unreported, and Unregulated (IUU) fishing, dark shipping, and maritime piracy.

History & Culture

Sanchi Stupa



- On a special initiative of the Prime Minister of India, the sacred relics of Lord Buddha's two most prominent disciples, **Sariputra** and **Maudgalyayana**, are being sent from the Sanchi Stupa to Mongolia.
- Sanchi Stupa (The Great Stupa) is a **globally renowned UNESCO World Heritage Site** and the oldest existing Buddhist sanctuary in the world located in the Raisen district of **Madhya Pradesh**.
- The core structure of the Great Stupa was originally commissioned in the 3rd century BCE by the **Mauryan Emperor Ashoka** and remained a flourishing, highly active center of Indian Buddhism until the 12th century A.D.
- It contains the **Great Stupa Dome**, detailed **Toranas**, **Ashokan Pillar with Lion capital**; and the **sacred relics preserved within the Sanchi ecosystem belong to Sariputra and Maudgalyayana**, who were the two closest and most prominent disciples of Lord Buddha.

Gurudev Rabindranath Tagore



- The nation paid tributes to Gurudev Rabindranath Tagore on the occasion of **Pochishe Boishakh**.
- Rabindranath Tagore (1861–1941) was a **poet, writer, philosopher, musician-composer, painter**, and visionary educationist, known as the **Bard of Bengal**, was the **first Asian to win the Nobel Prize (Literature, 1913)**.
- He grew up during the **nineteenth-century Bengal Renaissance**, a period of intense intellectual and cultural awakening and was born as the son of Maharshi Debendranath Tagore, who significantly shaped the Brahmo Samaj.
- He is the **unique composer of the national anthems of two nations: India (Jana Gana Mana) and Bangladesh (Amar Shonar Bangla)** and actively put his **philosophy of self-reliance** into practice through innovative experiments in rural development.
- He famously **renounced his Knighthood in 1919** as a protest against the Jallianwala Bagh Massacre.
- He also **founded Santiniketan (1901) and Visva-Bharati University (1921)**.
- His notable works include **Gitanjali (Song Offerings)** as well as Ghare-Baire (The Home and the World) and Gora.
- The songs written and composed by Nobel laureate Rabindranath Tagore are called **Rabindra Sangeet** which use unique **rhythmic cycles** called **Rabindra Talas**.

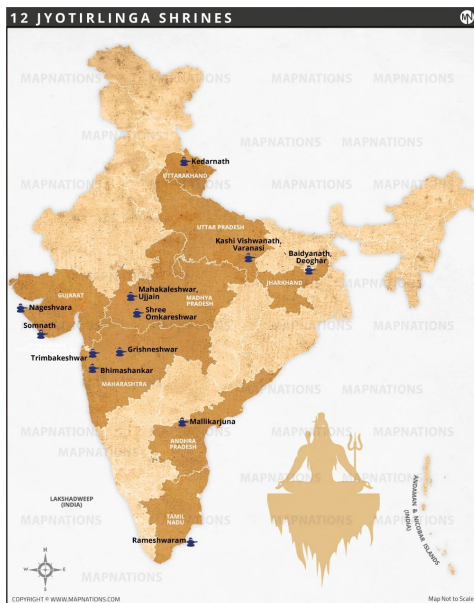
Hanamkonda's Thousand Pillar Temple



- The **Archaeological Survey of India (ASI)** has completed the **42-year-long restoration** of the 12th-century **Kalyana Mandapam (dance pavilion)** at the **Thousand Pillar Temple in Hanamkonda, Telangana**.
- The **Thousand Pillar Temple** is a 12th-century temple built in **1163 AD by Kakatiya ruler Rudra Deva**, dedicated to Shiva, Vishnu, and Surya.

- It is a fine example of **Kakatiya architecture with Chalukya influence**, known for its star-shaped design, richly carved pillars, and a large monolithic **Nandi statue made of black basalt**.
- The temple is called “Thousand Pillar” due to the intricately carved pillars that create the visual impression of multiple columns, and it also features **sandbox foundation technology**, where structures are built on sand-filled pits to absorb seismic shocks and improve durability.

Somnath Temple



- The Prime Minister recently participated in the ‘**Somnath Amrut Parv**’ in **Gujarat**, marking 75 years of the reconstruction of the Somnath Temple.
- The **Somnath Temple** is the first among the **12 Jyotirlinga shrines of Lord Shiva** and is located near Veraval in Saurashtra on the western coast of Gujarat.
- It is considered a major pilgrimage site situated at the **Triveni Sangam of the rivers Kapila, Hiran, and Saraswati**.
- Historically, the temple is believed to have been rebuilt multiple times, associated with different rulers and styles, and was notably destroyed during Mahmud of Ghazni’s invasion.
- The present structure, reconstructed in **Chalukya-style architecture**, was completed in **1951**, symbolising India’s cultural revival and heritage restoration.

Bhojshala Complex



- The Indore Bench of the **Madhya Pradesh High Court** recently delivered a 242-page verdict declaring the **Bhojshala–Kamal Maula Mosque complex** in Dhar district as a Hindu temple dedicated to Goddess Vagdevi (Saraswati).
- The site is an **11th-century protected monument** originally believed to be a major centre of Sanskrit learning and a temple built under **Raja Bhoj of the Parmar dynasty**.
- It is known for its unique **Sarpabandha inscriptions** used for Sanskrit learning and stone slabs containing Prakrit inscriptions dedicated to the **Kurma avatar of Vishnu**.
- In the 14th century, during the **Malwa Sultanate**, the structure was converted into a mosque and later associated with the Sufi saint **Shaikh Kamal Maula**, leading to its present dual religious significance and long-standing historical contestation.

Idu Mishmi Tribe



- The **Idu Mishmi tribe of Arunachal Pradesh** recently came into focus for their unique **cosmology rooted in conservation ethics**, where nature and wildlife are deeply respected in their belief system.
- The **Idu Mishmi tribe** mainly inhabit the **Dibang Valley, Lower Dibang Valley, and Lohit districts**, especially the Mishmi Hills bordering Tibet.

- Traditionally **animists**, they maintain a strong spiritual bond with nature, and notably consider **tigers as their “elder brothers,”** which plays an important role in their conservation outlook.
- Their Idu Mishmi language is officially classified as **“Definitely Endangered”** by UNESCO Atlas of the World’s Languages in Danger.
- They observe festivals like **Reh and Ke-Meh-Ha**, along with preparing local rice beer called **Ebu**.

Pashupatinath Temple



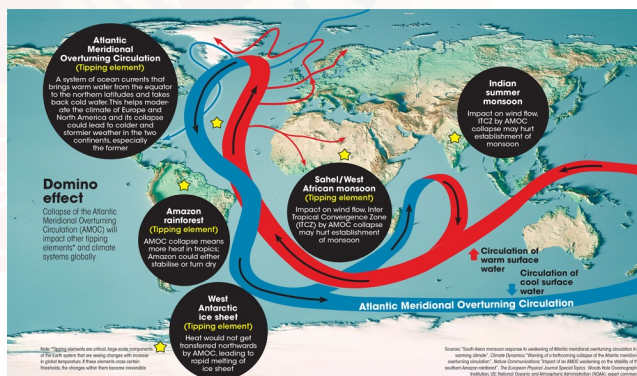
- India recently gifted a special type of sandalwood to the Government of Nepal for use in rituals at the **Pashupatinath Temple** in Kathmandu.
- The **Pashupatinath Temple** is a sacred Hindu temple dedicated to Lord Shiva in his form as **Pashupati (protector of animals)**, located on the banks of the **Bagmati River** in Kathmandu.
- Its earliest stone structure at the site is credited to the legendary 4th century CE **Licchavi King Prachanda Deva**, while **King Supuspa Deva** later expanded it.
- 🏰 The current two-tiered pagoda structure seen today was extensively renovated and **rebuilt by King Bhupatindra Malla in 1692**
- The temple was declared a **UNESCO World Heritage Site in 1979** and is built in the traditional **Nepalese pagoda architectural style**, featuring a two-tiered golden roof, silver-plated doors, and intricate wooden carvings.

Geography

Mission Mausam

- The **Indian Institute of Tropical Meteorology (IITM), Pune**, under the Mission Mausam initiative, has set up an **Urban Testbed and Aerosol Observatory** at SRM Institute of Science and Technology (SRMIST), Chennai.
- Mission Mausam**, launched by the **Ministry of Earth Sciences (MoES) in 2025** through the **India Meteorological Department (IMD)**, aims to **modernise India’s weather and climate forecasting system** using advanced radars, satellites, and high-performance computing.
- It **supports sectors** like agriculture, disaster management, aviation, defence, and health, and aligns with the **IMD Vision 2047 for climate resilience**.
- An **Urban Testbed** is a city-based setup used to **study local weather and pollution** using ground instruments and real-time observations for high-resolution analysis.
- An **Aerosol Observatory** is a specialised facility that studies tiny particles suspended in the air (aerosols) such as dust, smoke, soot, and pollution.
- It is important because **aerosols directly affect air quality, human health, cloud formation, rainfall patterns, and climate change**, helping improve weather prediction and climate models.

Atlantic Meridional Overturning Circulation (AMOC)

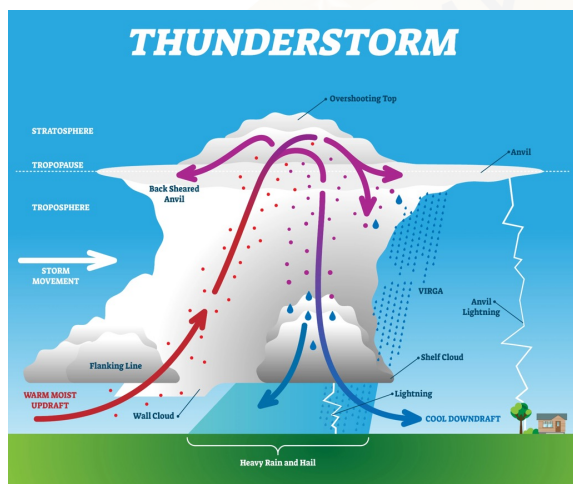


- New research suggests the **Atlantic Meridional Overturning Circulation (AMOC)** could weaken by up to **59% by 2100**, much higher than earlier estimates of about 15%.

- The **AMOC** is a large system of **Atlantic Ocean currents** that works like a global “conveyor belt,” moving warm water from the tropics to the North Atlantic and cold water back south.
- It is driven by **differences in temperature and salinity (density of seawater)** and plays a key role in regulating global climate.
- It helps keep **Europe’s climate relatively mild**, influences rainfall patterns across Africa, the Americas, and Asia, and contributes to **carbon sequestration in oceans**.
- A major weakening or collapse could cause **sea-level rise (especially in North America), disrupted monsoons and global weather systems, and more extreme El Niño events**.

- **Kalbaishakhi (Nor’westers)** are seen in **West Bengal, Odisha, Assam, Bangladesh** are highly **violent thunderstorms** born from hot land air meeting moist air from the Bay of Bengal causing **heavy rain; highly beneficial for Rice, Jute, and Assam Tea**.
- **Mango showers** are seen in **Kerala, Karnataka, Coastal Andhra Pradesh** causing **light to moderate pre-monsoon rainfall** accompanied by mild thunder that are **crucial for the early ripening of mangoes on trees**.
- **Bardoli Chheerha** are seen in **Assam** causing **Intense thunderstorms with heavy squalls**, a localized variant of Nor’westers and are **vital for the rapid growth of early-season Tea cultivation**.

Andhi

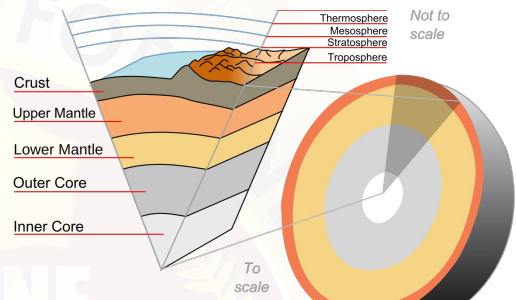


- A **powerful pre-monsoon thunderstorm (locally known as Andhi)** tore through Uttar Pradesh, claiming over 100 lives, with Prayagraj, Mirzapur, and Bhadohi being the worst-hit districts.
- Andhi is the meteorological term for **intense, convective dust storms or thunderstorms that occur predominantly during the pre-monsoon season** in Northern India primarily seen in Indo-Gangetic Plains.
- These **severe atmospheric disturbances** are characterized by a sudden drop in temperature, blinding dust clouds, torrential rain, violent lightning strikes, and destructive gusty winds.

Other Pre Monsoon Phenomena:

- **Loo** is seen in **North & Northwest India** where **continuous hot, dry afternoon wind** (no storm or rain cloud element) **causes severe heatwaves**, dehydration, and damage to standing crops.

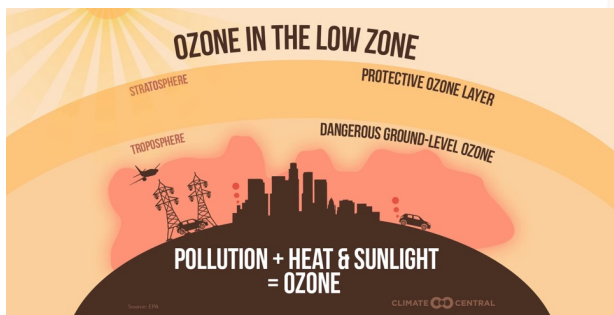
Earth’s Outer Core Is Changing



- Researchers from the University of Edinburgh and the British Geological Survey have reported that **Earth’s outer core is changing**.
- The Earth’s outer core is a massive, **voluminous liquid layer situated roughly 2,800 km beneath the planet’s surface**; unlike the solid inner core, the **outer core remains a fluid** reservoir packed with constantly churning, hot, molten **iron and nickel**.
- Because this **liquid layer moves continuously**, it functions identically to a massive mechanical generator and this motion powers the **geodynamo**, creating the **Earth’s geomagnetic field**.
- And the latest study shows that around the year 2010, the molten iron flow beneath the equatorial Pacific Ocean completely flipped its trajectory which transitioned from a historic, **slow westward crawl** into a significantly more **rapid eastward surge**.
- These observations indicate that deep-earth liquid structures can change their direction which explain geomagnetic “**jerks**”—which are sudden, sharp accelerations or changes in the rate of variation in the Earth’s magnetic field readings.

Environment & Ecology

Ground-Level Ozone



- Ground-level ozone has recently become a pollution concern in **Delhi**, where it forms near the Earth's surface through chemical reactions involving **nitrogen oxides (NOx)** and **volatile organic compounds (VOCs)** in the presence of sunlight.
- Ozone (O₃)** is a gas made of three oxygen atoms, found both in the upper atmosphere and at ground level (troposphere).
- Unlike direct pollutants, **tropospheric ozone is a secondary pollutant** with no direct emission source; it forms from human-emitted NOx and VOCs, including methane.
- It is a **short-lived climate pollutant**, lasting only hours to weeks, and is most intense on **hot, sunny days in urban areas**.
- Ground-level ozone is harmful as it causes **respiratory problems like asthma, damages lung tissue, acts as a greenhouse gas, and reduces plant growth by affecting photosynthesis**.

Nagoya Protocol on ABS



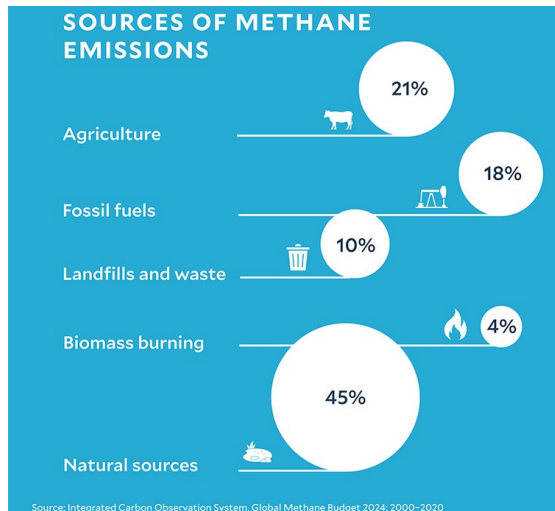
- The **Ministry of Environment, Forest and Climate Change (MoEFCC)** has released India's first national report on the **Nagoya Protocol on Access and Benefit Sharing (ABS)**.
- The **Nagoya Protocol** was **adopted in 2010** in Nagoya, Japan as a supplementary agreement to the **Convention on Biological Diversity (CBD)** and seeks to ensure **fair and equitable sharing of benefits** arising from the use of genetic resources.
- ABS (Access and Benefit Sharing)** under the Nagoya Protocol ensures that when companies or researchers use a country's biological resources (like plants, microbes, or genes), they must **take permission (access)** and then **share benefits** (money, technology, or knowledge) with that country or local communities.
- It entered into force in **2014**, and India signed it in **2011** and ratified it in **2012**, implementing it through the **Biological Diversity Act, 2002**.

Big Cat Alliance (IBCA) Summit, 2026

- The Union Environment Minister recently launched the website and logo for the **1st International Big Cat Alliance (IBCA) Summit 2026** in New Delhi.
- The **New Delhi based International Big Cat Alliance** is an intergovernmental platform launched by India in **2023** during the 50th anniversary of Project Tiger and to promote cooperation among **95 big cat range countries** for the conservation of **seven cat species**: tiger, lion, leopard, snow leopard, cheetah, jaguar, and puma.
- In India**, only tiger, lion, leopard, snow leopard, and cheetah are found (cheetah has been reintroduced), while **jaguar and puma are native to the Americas**.
- These species are called **"big cats"** in conservation terms, **though biologically** only tiger, lion, leopard, jaguar, and snow leopard belong to the **Panthera genus**, while cheetah and puma belong to other genera within the **cat family (Felidae)**.
- Most of these big cats are **threatened or vulnerable**, with tiger and snow leopard among the most endangered, lion and leopard also facing pressure in parts of their range, while **puma is the least threatened** globally.



Methane Alert System (MARS)

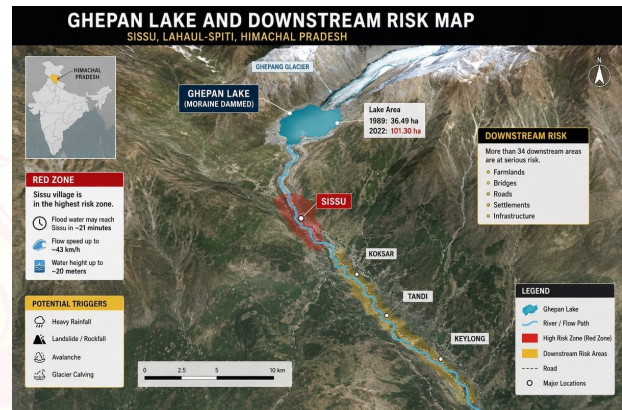


- The UN has expanded its **Methane Alert and Response System (MARS)** to include the **coal and waste sectors**.
- MARS** is the first global satellite-based system under the **United Nations Environment Programme** that detects large methane “super-emitters” and supports rapid action to reduce emissions.
- It is part of the **International Methane Emissions Observatory (IMEO)** and was launched in 2023 after being announced at COP27 United Nations Climate Change Conference at Sharm El Sheikh, Egypt to accelerate implementation of the **Global Methane Pledge**.

Global Methane Pledge is a **US and EU-led initiative** that aims to cut global human-caused methane **emissions by 30% from 2020 levels by 2030**. India is not a signatory due to concerns over rural livelihoods, as over 70% of its emissions stem from agriculture and livestock

- The system uses data from **35+ satellites** and AI-based analysis to detect methane plumes and alert governments and companies for mitigation.
- Initially focused on oil and gas, it now also covers **coal mines and waste sites**, helping track major sources of methane, a powerful greenhouse gas driving global warming.
- Data becomes **publicly viewable on the Eye on Methane Data Platform** 30 to 45 days after detection/notification to ensure accountability.

Ghepan Glacial Lake

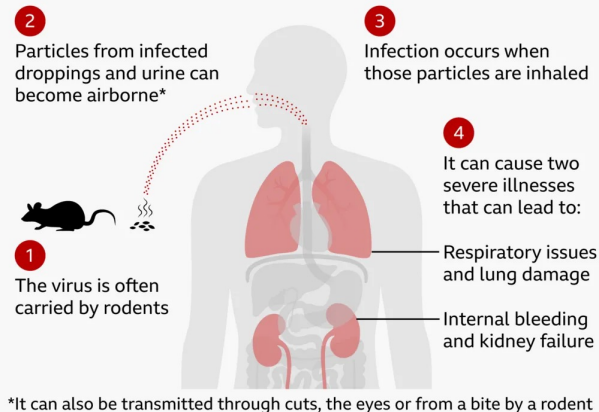


- Himachal's **Ghepan Lake** also known as **Ghepang Ghat Glacial Lake**, located above the Sissu village, is **continuously increasing** in size, leading scientists to fear a Glacial Lake Outburst Flood (GLOF).
- A **glacial lake** is a body of water formed from meltwater of a glacier. It usually develops in depressions created by **glacial erosion or behind natural dams** made of ice, rock, or glacial debris (moraine).
- Sissu village**, located on the **banks of the Chandra River**, has become one of **Himachal Pradesh's major tourist destinations** following the opening of the Atal Tunnel.
- The lake is located near the Ghepan Glacier and is named after Ghepan, the revered deity of the Lahaul region.
- The **National Disaster Management Authority (NDMA)** has classified Ghepan Lake as a “**highly vulnerable**” glacial lake.

Note :GLOF is a sudden and catastrophic flood that happens when the natural dam holding a glacial lake fails, releasing massive volumes of meltwater downstream.

Hantavirus

How hantavirus can spread to humans



- The **US** has classified a **hantavirus outbreak as a Level 3 emergency** response (lowest activation level).
- Hantaviruses are **negative-sense RNA zoonotic viruses** mainly carried by **rodents** (also some shrews and bats).
- Humans get infected** by inhaling aerosolized urine, droppings, or saliva.
- They cause two major diseases:
 - **HPS (Hantavirus Pulmonary Syndrome)** – mainly in the Americas (severe lung disease)
 - **HFRS (Hemorrhagic Fever with Renal Syndrome)** – in Europe and Asia (kidney disease)
- Each virus is linked to a specific rodent host:
 - **Sin Nombre virus (North America)** → deer mouse → HPS
 - **Andes virus (South America)** → long-tailed pygmy rice rat → HPS; only strain with limited human-to-human spread
 - **Hantaan virus (Asia)** → striped field mouse → severe HFRS
 - **Seoul virus (global/urban)** → Norway rat → HFRS
 - **Puumala virus (Europe)** → bank vole → mild HFRS

➤ **Dobrava-Belgrade virus (Europe)** → yellow-necked mouse → severe HFRS

- Andes virus (South America)** is the only hantavirus with documented **limited human-to-human transmission**, usually through very close contact.
- India** has **no locally detected** hantavirus cases or outbreaks reported on Indian soil so far.

Paraquat

- Pressure is mounting in the US to ban **paraquat herbicide** over Parkinson's fears
- Paraquat** (paraquat dichloride) is a **highly toxic herbicide** used for weed and grass control, first introduced in **1961**.
- It is **banned in over 70 countries**, including the EU.
- It causes severe **corrosive damage** to the mouth, stomach, and intestines, and after absorption spreads to organs—especially the **lungs, liver, and kidneys**—leading to life-threatening toxicity, with lung damage often being irreversible even at low doses.
- Long-term exposure has been linked in studies to **Parkinson's disease, non-Hodgkin lymphoma, and childhood leukemia**, though research is still ongoing.
- In India, it is **not banned nationally**, but some states have imposed restrictions or bans due to safety concerns.
- In 2015, there were efforts to bring paraquat under **Annex III of Rotterdam Convention** on international trade of hazardous chemicals and pesticides, that would have subjected it to **legally required Prior Informed Consent (PIC)** before export/import.
 - However, **India and other countries objected** based on the concern that paraquat is an important, affordable herbicide for agriculture

Tyre Pyrolysis Oil (TPO)

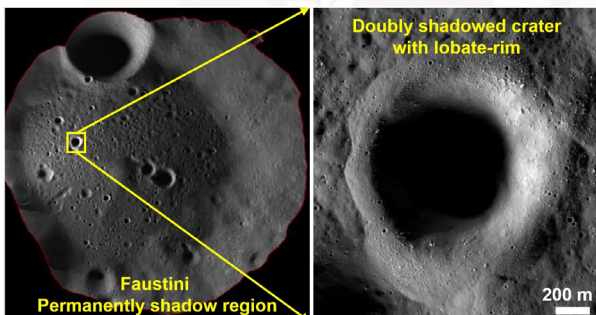
- A recent NITI Aayog conference highlighted **gaps in India's waste tyre management system**.
- India recycled about 3 million metric tonnes (MMT)** of tyres in 2024–25 (1.6 MMT domestic waste and 1.4 MMT imports), but the sector still **lacks quality standards** for outputs like **Tyre**

Pyrolysis Oil (TPO) and **recovered carbon black (rCB)**.

- **Pyrolysis** is a process that converts waste tyres into TPO (Tyre Pyrolysis Oil), pyro-gas (gaseous fuel produced during thermal decomposition), and solid char (carbon-rich residue).
- TPO is a **dark hydrocarbon-rich liquid (C5–C20 compounds)** used as **fuel** in compression ignition (CI) engines (diesel engines), industrial furnaces, and power plants, offering an alternative to petroleum fuels.
- It can help **reduce emissions** compared to open burning of tyres and supports energy recovery.
- It also contains **phenolic compounds that may act as antioxidants** when blended with **biodiesel**.



Sub-Surface water-Ice on Moon



- Scientists from the **Physical Research Laboratory (PRL)**, Ahmedabad, using **Chandrayaan-2's Dual Frequency Synthetic Aperture Radar (DFSAR)**, have found evidence suggesting possible subsurface water-ice in the Moon's South Polar Region.
- The study focused on **doubly shadowed craters** within permanently shadowed regions (PSRs), where **temperatures (~25 K)** are **extremely low**, allowing ice to persist for long periods.
- Radar polarimetric analysis identified ice-like signatures based on **Circular Polarization**

Ratio (CPR > 1) and **Degree of Polarization (DOP < 0.13)**, indicating likely subsurface ice beneath crater floors.

- One crater (~1.1 km wide) inside **Faustini crater** showed the strongest evidence, supported by radar signals and distinctive crater morphology.
- **DFSAR in Chandrayaan-2's orbiter** uses two microwave bands—**L-band** and **S-band** that helps probe different depths and surface characteristics.
- **SAR (Synthetic Aperture Radar)** works by sending signals from a moving satellite and combining the returning echoes to act like a very large antenna, giving high-resolution images.

India's First Indigenous Hydrogen Train

HOW A HYDROGEN TRAIN WORKS

These trains carry pure hydrogen in rooftop tanks and take oxygen from air to produce electricity in their fuel cells. The electrical energy is stored in batteries to power the motors because fuel cells cannot suddenly increase their output for acceleration. During braking, energy from the wheels is returned to the battery to increase mileage.



Alstom's **Coradia iLint** trains used in Lower Saxony have a top speed of 140kmph and a maximum range of 1,000km. The tanks on top of each train unit carry 130kg of hydrogen that can be filled in 15 minutes

The UK, which intends to phase out all its diesel railway engines by 2040, is using dual-mode technology called **HydroFlex** (photo left). The trains will switch from hydrogen to catenary power wherever it is available

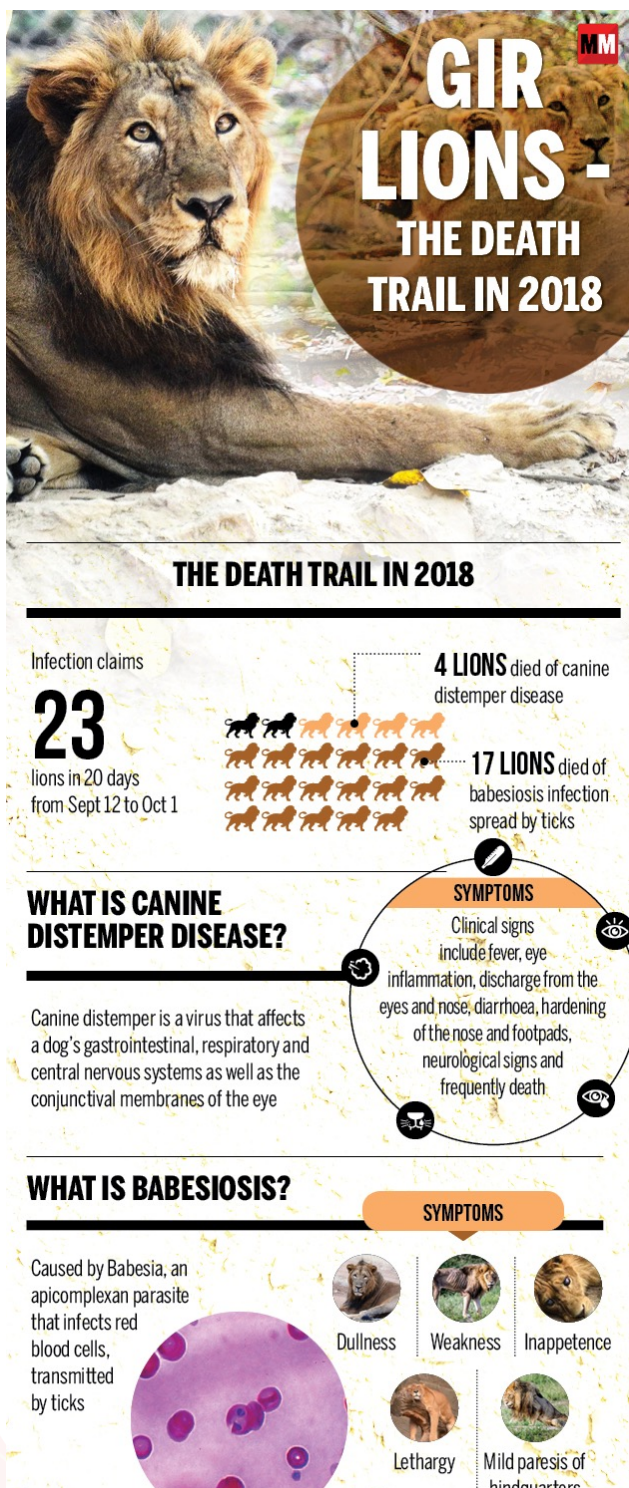
France, too, has ordered dual-mode hydrogen trains from Alstom that can also run on catenary power wherever it is available

German firm **Siemens'** hydrogen trains have a range of 600km and a top speed of 160kmph



- India's first hydrogen train is close to rollout after approval of a **10-coach hydrogen fuel cell trainset** for the **Jind-Sonipat section (Northern Railway)**.
- The train, developed by retrofitting a diesel electric multiple unit (DEMU), will run at up to **75 km/h** using a **1,200 kW hydrogen fuel cell system**. Hydrogen fuel cells generate electricity through a chemical reaction, with **water vapour as the only emission**, making it a clean transport option.
- India joins countries like Germany, Japan, China, and the US in exploring hydrogen rail technology. **Notably, Germany is currently the only country operating hydrogen trains in regular passenger service**, while France, China, and Japan are still in testing or pilot stages.
- The **Petroleum and Explosives Safety Organization (PESO)** has approved hydrogen storage and dispensing facilities for the project.

Babesia Infection

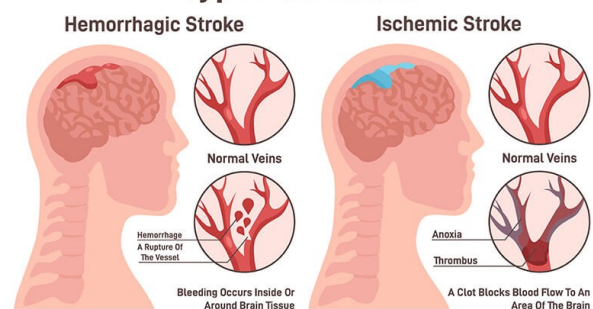


- Two lion cubs have died in Gujarat's Gir National Park due to suspected **Babesia infection**.
- Babesiosis** is a tick-borne disease caused by **Babesia protozoan parasites**.
- It destroys **red blood cells**, leading to flu-like symptoms and, in severe cases, life-threatening complications, especially in weak or immunocompromised animals. Symptoms include **fever, weakness, coughing, and nasal discharge**.

- The disease is often discussed alongside **Canine Distemper Virus (CDV)**, as both have previously caused major wildlife mortality.
- Studies show that **lions weakened by babesiosis were more vulnerable to CDV**, leading to high deaths.
- India also recorded 11 lion deaths due to CDV in 2018.
- As per the 2025 census, Gujarat has **891 Asiatic lions**, spread across Gir Somnath and 11 adjoining districts.

Strokes - A Public Health Priority

Types Of Stroke



- The **World Health Assembly (WHA)** has passed its first-ever resolution on **stroke**, urging countries to treat it as a major public health priority.
- The **World Health Assembly (WHA)** is the **decision-making body of the World Health Organization (WHO)**, where all member states meet annually to set global health policies, approve budgets, and pass resolutions.
- A **stroke** is a medical emergency caused by interruption of blood flow to the brain due to a blockage or bleeding, leading to brain cell death, disability, or death if not treated quickly.
- Globally, strokes affect about **12 million people annually**, causing over half of deaths and leaving many survivors with long-term disability.
- It is the **second leading cause of death and the third leading cause of death and disability worldwide**.
- In India, stroke incidence ranges from **108-172 per 100,000 people annually**, with a **case fatality rate of 18-42% within one month**.
- Globally, the burden is highest in **low- and middle-income countries**, which account for about **87% of deaths and 89% of disability-adjusted life years (DALYs)**.

- ➡ DALY measures the **overall loss of healthy life due to disease, combining death and disability**.

Apnoea Test

- The Supreme Court has expressed agreement with a **doctor's plea questioning the reliability of the apnoea test** as a conclusive method for determining **brain death**.
- **Brain death** means the brain has **permanently** stopped functioning without recovery possible, even though **machines may keep other organs working** temporarily like breathing.
- The Court stated that brainstem death should **ideally be confirmed using ancillary tests** such as **EEG** (electroencephalography), **CT angiography**, **four-vessel cerebral angiography**, or **radionuclide angiography**.
- The **apnoea test**, which checks **absence of spontaneous breathing**, is a mandatory but difficult and potentially risky test, with **complications** like hypoxia, hypotension, arrhythmia, and even cardiac arrest.
 - ➡ These **risks** may force early termination of the test, affecting diagnosis.
- The Court suggested that, as per **international standards**, including WHO guidelines, the apnoea test should be used **only as a confirmatory test**, not the sole basis for declaring brainstem death.

Ebola

ALL YOU NEED TO KNOW



What is Ebola?
Ebola is a deadly viral disease first identified in 1976 that spreads through direct contact with infected blood, body fluids, or contaminated surfaces. Scientists believe the virus originated in animals, most likely fruit bats, before spreading to humans.

Symptoms

- High fever
- Severe headache
- Muscle pain and weakness
- Vomiting and diarrhoea
- Stomach pain
- Unexplained bleeding or bruising

Treatment

- Early medical care improves survival
- Fluids and electrolyte support
- Oxygen therapy and medicines
- Isolation and monitoring by healthcare professionals

Precautions

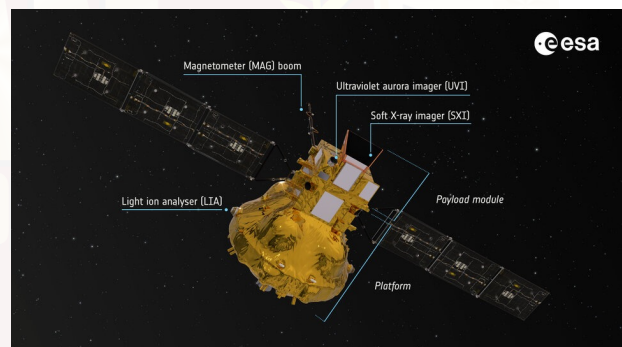
- Avoid contact with infected persons
- Wash hands regularly
- Do not touch blood or body fluids
- Use protective gear while caring for patients
- Avoid handling dead bodies without protection
- Seek medical help immediately if symptoms appear

- WHO has declared the **Ebola outbreak** in the **Democratic Republic of Congo (DRC)** and **Uganda** a Public Health Emergency of International Concern (PHEIC), calling for a coordinated global response.
- Ebola disease is caused by **orthoebolaviruses**, first identified in 1976 during two simultaneous outbreaks in separate locations: **Yambuku**

(near Ebola River), in the Democratic Republic of the Congo (then Zaire), and **Nzara**, in South Sudan.

- The main **human-infecting species** include **Ebola virus (Zaire virus)**, **Sudan virus**, **Tai Forest virus**, and **Bundibugyo virus**, each causing different forms of Ebola virus disease, while **Reston and Bombali viruses** have not caused human disease.
- The **recent outbreak** is primarily caused by the **Bundibugyo virus**, a rare Ebola strain.
- Ebola spreads through **direct contact with blood or body fluids of infected persons**, only when symptoms are present.
- It is **not airborne** and does not spread through casual contact, unlike respiratory viruses such as influenza or COVID-19.
- There is currently **no licensed vaccine for Bundibugyo virus disease**, and the existing Ebola vaccine (**Ervebo**) **protects only against the Zaire strain**.
- Current treatment is largely supportive, focusing on fluids and critical care.
- Diagnosis is done using **PCR tests** that detect viral genetic material.

The SMILE Mission



- The **European Space Agency (ESA)** and the **Chinese Academy of Sciences (CAS)** have launched **SMILE (Solar wind Magnetosphere Ionosphere Link Explorer)**, their first fully joint space mission.
- SMILE is a multi-wavelength mission designed to study how Earth's **magnetosphere (protective magnetic shield)** interacts with the **solar wind (charged particles from the Sun)**. Its main goal is to produce the first global **X-ray and ultraviolet images** of this interaction.
- It is placed in an orbit over the **Northern polar region**, allowing long-duration observation of the magnetosphere.

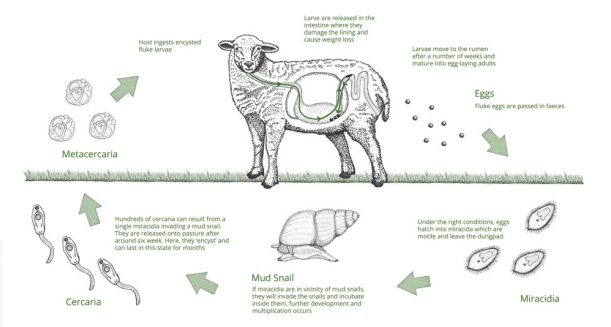
- The mission carries **four instruments**: the ESA developed **Soft X-ray Imager (SXI)** to detect X-rays from solar wind interactions while Chinese developed **Ultraviolet Aurora Imager (UVI)** to image auroras, **Light Ion Analyser (LIA)** to measure solar wind particles, and **Magnetometer (MAG)** to study Earth's magnetic field.

Shukrayaan Mission

- ISRO and the Swedish National Space Agency signed an MoU for Sweden's participation in India's **Venus Orbiter Mission (Shukrayaan/VOM)**, planned for launch in **2028** as India's first dedicated mission to Venus.
- Sweden will provide the **Venusian Neutrals Analyzer (VNA)** to study **Energetic Neutral Atoms (ENAs)**, helping understand how solar wind particles interact with Venus's ionosphere and how its atmosphere is lost to space.
- The mission will also study Venus's **surface and atmosphere**, including volcanic activity, possible subsurface structures, cloud dynamics, and clues about whether Venus once had liquid water.

Note: Energetic Neutral Atoms (ENAs) are fast-moving particles that possess no electrical charge. They are created in space when a high-speed, electrically charged ion collides with a neutral atom and steals one of its electrons.

Rumen Fluke



- Around 70 cattle have died in Odisha's Kendrapada district, with officials linking most cases to **amphistomes (rumen fluke disease)**, locally known as **Kurmi**.
- Rumen flukes are parasitic **trematodes** (parasitic flatworms) that infect ruminants like cattle, buffaloes, sheep, and goats across tropical and temperate regions.

- The disease is **common in Asia, Africa, Europe, and Australia** and causes significant livestock losses.
- Major species include **Paramphistomum cervi** and **Cotylophoron cotylophorum**.
- Key symptoms include **severe diarrhoea, rapid weight loss, reduced milk yield, and "bottle jaw"** (swelling under the jaw). Infected animals may continue eating but still lose body condition.
- The parasite has a **two-host life cycle**, involving snails as intermediate hosts.
- Infection occurs when animals **ingest larval cysts on pasture**.
- After entering the host, immature flukes first migrate through the **intestine and then settle in the rumen** (largest stomach compartment), where they mature and reproduce.
- Rumen flukes **do not typically cause disease in humans**, while other flukes like the **Liver Fluke** are highly infectious to humans through contaminated water or watercress.



FORTUNE
IAS ACADEMY

TOPPERS

Choose Wisely



RANK 1
SREEJA J S



RANK 2
ADITYA NARAYAN H



RANK 3
GOPIKA B

KERALA RANKS 1, 2, 3 CHOSE
FORTUNE MAINS MAXIMA

WILL YOU?

Scan QR to register for
Mains Test Series



FREE
INTRODUCTORY
SESSION

MAY 31

9495015888

TARA Weapon System



- The **DRDO** and the **Indian Air Force (IAF)** successfully conducted the first flight trial of the **Tactical Advanced Range Augmentation (TARA)** weapon system off the Odisha coast.
- TARA is India's first indigenous **glide weapon system**, designed to convert ordinary **gravity bombs** into precision-guided weapons.
- A **glide weapon** is a bomb fitted with wings and guidance systems that allow it to glide over long distances after being released from an aircraft, instead of simply falling straight down.
- The system can be used on multiple IAF fighter aircraft and was developed by **Research Centre Imarat (RCI)**, **Hyderabad**, along with other DRDO laboratories.

BrahMos Missile System

- India and Vietnam recently discussed the possible sale of the **BrahMos missile system** during the visit of Vietnamese President **To Lam**.
- BrahMos** is a long-range **supersonic cruise missile** that can be launched from **land, sea, submarine, and aircraft platforms**.
- It follows a **"fire-and-forget"** principle, meaning it guides itself to the target after launch, while maintaining very high speeds that make interception difficult.
- The missile is produced by **BrahMos Aerospace**, a joint venture between **Defence Research and Development Organisation (DRDO)** and Russia's **NPO Mashinostroyeniya**, established in 1998.

- The **Philippines** became the first foreign buyer of BrahMos, while export negotiations with **Indonesia** are nearing completion.

Note: Ballistic Missile is launched into the upper atmosphere and follows a fixed, sub-orbital parabolic arc and once the rocket fuel burns out, the missile's payload relies on gravity and inertia to fall back down toward its target. **While the Cruise Missile** flies entirely within the atmosphere, remaining relatively close to the Earth's surface and its flight path is parallel to the ground and can be dynamically altered mid-flight.

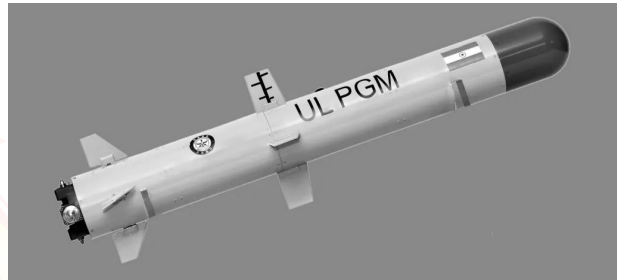
Agni-1 Missile



- India recently successfully tested the **Agni-I** missile from the **Integrated Test Range, Balasore, Odisha**.
- Agni-I** is a **short-range, surface-to-surface, nuclear-capable ballistic missile** developed by the **Defence Research and Development Organisation (DRDO)** for strategic deterrence.
- It uses a **single-stage solid-fuel propulsion system** and has a range of about **700–1,200 km**.
- The missile can carry a **1,000 kg conventional or nuclear warhead** and is launched from **road-mobile or rail-mobile platforms**, enhancing its survivability and flexibility.
- Agni-I forms an important part of India's **land-based nuclear deterrent**, bridging the gap between the shorter-range Prithvi missiles and the longer-range Agni-II.
- It is operated by the **Strategic Forces Command** and uses advanced navigation systems for high-accuracy strikes.

Drone Missile (ULPGM)-V3

- The **DRDO** has successfully completed development trials of the **Unmanned Aerial Vehicle Launched Precision Guided Missile (ULPGM)-V3** at its test range near Kurnool, Andhra Pradesh.
- ULPGM-V3 is a lightweight **fire-and-forget precision-guided missile** designed to be launched from drones (**UAVs**).
- Developed by **Research Centre Imarat (RCI), Hyderabad**, the missile weighs about **12.5 kg** and has a strike range of up to **10 km**, making it suitable for a variety of UAVs.
- It is equipped with an **Imaging Infrared (IIR) seeker** and **laser guidance**, allowing accurate target tracking and engagement in **day, night, and all-weather conditions**.



Chief of Defence Staff (CDS)

- General **N. S. Raja Subramani** has assumed charge as India's **third Chief of Defence Staff (CDS)** and Secretary, Department of Military Affairs (DMA).
- The post of Chief of Defence Staff (CDS) was created by the **Cabinet Committee on Security in 2019** to improve military advice to the political leadership through better integration of the Army, Navy, and Air Force.
- The CDS serves as the **Permanent Chairman of the Chiefs of Staff Committee** and the **Principal Military Adviser to the Defence Minister** on tri-service matters.
- The CDS **heads the Department of Military Affairs (DMA)**, oversees tri-service organizations and commands, promotes jointness in operations, training, and logistics, and helps plan defence acquisitions and reforms to improve combat effectiveness and reduce unnecessary expenditure.



Military Exercises

Exercise	Participants	Force	Description
CINBAX-II 2026	India - Cambodia	Army	The second edition of the Joint Military Exercise was held in Kampong Speu Province, Cambodia .
PRAGATI 2026	Multilateral	Army	PRAGATI stands for Partnership of Regional Armies for Growth and Transformation in the Indian Ocean Region . Apart from host India, soldiers from "12 friendly nations" including Bhutan, Cambodia, Indonesia, Laos, Malaysia, the Maldives, Myanmar, Nepal, the Philippines, Seychelles, Sri Lanka, and Vietnam participated. The military exercise was held at the Umroi Military Station in Meghalaya .

Miscellaneous

Khet Bachao Abhiyan

- The **Indian Council of Agricultural Research (ICAR)** has highlighted achievements under the **Khet Bachao Abhiyan**, a nationwide awareness and capacity-building campaign aimed at promoting **balanced fertilizer use, soil test-based nutrient management, and sustainable farming practices**.
- ICAR has also urged state governments to promote **ammonium sulphate** as an alternative to urea in paddy cultivation.
- Ammonium sulphate is a water-soluble inorganic fertilizer containing **21% nitrogen and 24% sulphur**, two essential plant nutrients.
- It is particularly useful in **alkaline soils**, where it provides nutrients while helping lower soil pH.
- With **domestic production capacity** and imports available from multiple countries, it is considered a viable option for more balanced nutrient management in agriculture.
- **The Ministry of Agriculture** has also planned a nationwide **month-long** launch of Khet Bachao Abhiyan starting June 1, 2026.

FAO Agricola Medal

- Prime Minister **Narendra Modi** was conferred the **Agricola Medal** by the **Food and Agriculture Organization (FAO)** at its headquarters in **Rome**.
- The **Agricola Medal** is the FAO's highest institutional honour, awarded to global leaders for outstanding contributions to food security, agriculture, and the achievement of **Sustainable Development Goal 2 (Zero Hunger)**.
- Established in **1977**, it is presented by the FAO Director-General to leaders demonstrating exceptional commitment to combating hunger and improving livelihoods.
- PM Modi received the award in recognition of initiatives such as the **Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)**, which provides free food grains to about 800 million people, and the **PM-KISAN** scheme.

- Before him, **Manmohan Singh** received the Agricola Medal in 2008.

PM SVANidhi Scheme

- The **PM SVANidhi (Prime Minister Street Vendor's AtmaNirbhar Nidhi)** scheme, launched in **2020**, is a **Central Sector Scheme** that supports street vendors through affordable credit, financial inclusion, and social security measures.
- It is implemented by the **Ministry of Housing and Urban Affairs** and the **Department of Financial Services**.
- The scheme provides **collateral-free working capital loans** of **₹15,000, ₹25,000, and ₹50,000** in successive tranches, along with **interest subsidies and credit guarantees**.
- Vendors who repay loans on time become eligible for **UPI-linked RuPay Credit Cards** with limits up to **₹30,000** and receive incentives for digital transactions.
- The scheme also promotes **financial and digital literacy** and links beneficiaries and their families with various Central welfare schemes to strengthen their social security net.

Cell Broadcast System (CBS)

- The **Ministry of Communications** (Department of Telecommunications) in coordination with the **National Disaster Management Authority (NDMA)** under the Ministry of Home Affairs tested Cell Broadcast System in India.
- CBS is a **disaster alert mechanism** that sends emergency messages simultaneously to all mobile phones in a defined geographic area via nearby telecom towers.
- It works on an indigenous **"broadcast" model** (not SMS), so it does not need mobile numbers, internet, or prior registration.
- It is designed for **rapid early warnings** of disasters such as cyclones, earthquakes, floods, and tsunamis, improving **last-mile disaster communication and response time**.

Central Consumer Protection Authority (CCPA)

- The **Central Consumer Protection Authority (CCPA)** recently took action against several entities for violating consumer rights and engaging in unfair trade practices in the e-commerce sector.
- Established under the **Consumer Protection Act, 2019**, the CCPA functions under the **Ministry of Consumer Affairs, Food and Public Distribution**.
- It is headed by a **Chief Commissioner** and includes two Commissioners dealing with goods- and services-related issues.
- The CCPA protects and promotes consumer rights, prevents **unfair trade practices**, and acts against **false or misleading advertisements**.
- It can order product recalls, refunds, discontinuation of unfair practices, and impose penalties on violators.
- The authority also has an **Investigation Wing**, headed by a Director-General, to conduct inquiries and investigations and enforce consumer welfare measures.

Indian Cybercrime Coordination Centre (I4C)

- The **Indian Cybercrime Coordination Centre (I4C)** recently warned of a phishing campaign targeting Apple iPhone users whose devices have been lost or stolen.
- Established in **2018** under the **Ministry of Home Affairs**, I4C serves as the national nodal agency for combating cybercrime and providing a coordinated framework for law enforcement agencies.
- Operates the **National Cyber Crime Reporting Portal (NCRP)** and the **1930 helpline** for reporting cyber frauds.
- Functions as an **early warning, coordination, and capacity-building centre** for law enforcement agencies, helping identify cybercrime trends and support investigations.
- Key platforms include **Samanvaya** (inter-state cybercrime coordination), **Pratibimb** (tracking cybercriminals), and the **Suspect Registry** (fraudster database).
- Note: Phishing** is a type of cyberattack that uses deceptive messages from seemingly reputable sources to trick victims into revealing sensitive information like login credentials, passwords, or financial data for malicious use.

Ayushman Bharat Digital Mission



- The **Ayushman Bharat Digital Mission (ABDM)** has achieved a major milestone, with over **100 crore health records** linked to **Ayushman Bharat Health Accounts (ABHA)**.
- Implemented by the **National Health Authority** under the **Ministry of Health and Family Welfare**, ABDM aims to create an **integrated and interoperable digital health ecosystem** for India.
- Its key component is the **ABHA**, a unique **14-digit digital health ID** that enables individuals to securely store, access, and share their medical records across healthcare providers.
- Other components include the **Healthcare Professionals Registry (HPR)**, a national database of licensed healthcare professionals, and the **Health Facility Registry (HFR)**, a registry of hospitals, clinics, and other healthcare facilities.

India's first 'SkyCast' System

- India's **first SkyCast system** was inaugurated at Indira Gandhi International Airport by Jitendra Singh.
- Developed under **Mission Mausam** by the Ministry of Earth Sciences.
- It is an **advanced aviation weather monitoring system** that provides real-time data on fog, aerosols, turbulence, moisture, and winds.

- Aims to **reduce** flight delays, cancellations, and diversions caused by bad weather and enable weather-smart aviation.
- Uses **instruments** such as Radar Wind Profiler, SODAR, Microwave Radiometer, GFAS, and Lidar-based Ceilometer.
- Monitors boundary-layer conditions, wind speed, wind direction, and turbulence up to **about 3 km altitude**.
- With SkyCast, India joins **only 19 countries worldwide** having such advanced aviation weather infrastructure.

Hainan Free Trade Port

- **China** has announced a Free-Trade Port at **Hainan** to make it a global trade, shipping, and manufacturing hub.
- A **Free Trade Port** is a **pecially designated area where goods, capital, and services move with minimal or zero customs duties** under a special customs regime, with taxation applied only when goods enter the mainland economy.
- **Hainan is a southernmost island province of China**, located in the South China Sea off the southern coast near Vietnam.
- **India does not have a full Free Trade Port**, but it has **Special Economic Zones (SEZs) and International Financial Services Centre (IFSC) at GIFT City (Gujarat)** which offer similar trade and investment incentives, though on a more limited scale.

Places in News

Atacama Desert



- Researchers from the **Center of Astrobiology** recently discovered an underground “oasis” of microorganisms about **2 metres below the surface** of the **Atacama Desert**.
- The **Atacama Desert**, located in northern **Chile**, is one of the driest places on Earth and stretches about **1,000–1,100 km** along the Pacific coast.
- It lies between the **Cordillera de la Costa** in the west and the **Andes Mountains** in the east.
- The desert is characterized by **extreme aridity, salt flats, alluvial fans, dunes, and extensive pebble-covered terrain**.
- Its harsh conditions make it an important natural laboratory for studying life in extreme environments and for astrobiology research related to Mars-like conditions.

Salaya Port

- Due to escalating Middle East tensions and the approaching monsoon season, the Union Government **temporarily designated Porbandar as an Immigration Check Post (ICP)** for the non-notified ports of **Salaya and**

Okha in Gujarat.

- An ICP is a designated point where **immigration clearance** is provided for international travelers.
- Salaya and Okha are **non-notified ports**, meaning they do not have permanent immigration facilities; therefore, a nearby ICP is required to process international arrivals and departures when necessary.
- Salaya Port, operated by Essar Ports, is a **dry bulk cargo** port in Gujarat that handles unpackaged solid commodities such as coal, bauxite, and petroleum coke (pet coke).
- Operational since 2017, the port is naturally protected by **Kalubhar Tapu and Dhani Be islands**.



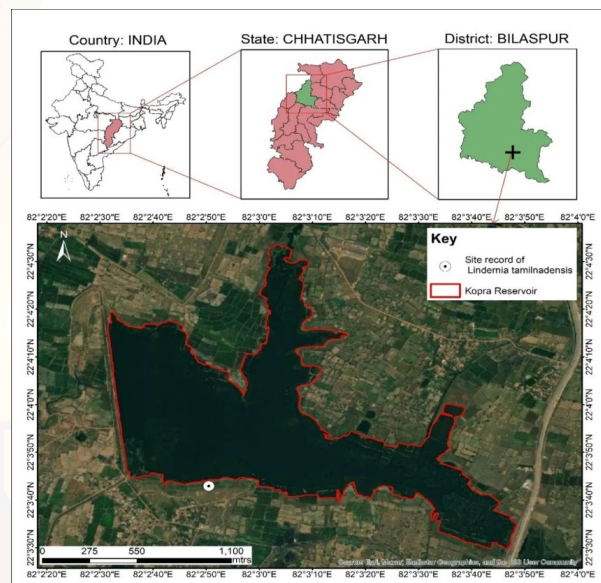
Bundelkhand



- **Banda**, a city in **Uttar Pradesh's Bundelkhand region**, recently topped global temperature charts during an intense north Indian **heatwave**, earning the label "**world's hottest city**."
- Temperatures reached 48.2°C, while its all-time record is 49.2°C (2019).

- Banda is located on the banks of the **Ken River** in the drought-prone Bundelkhand region.
- **Bundelkhand** spans about 69,000 sq km, covering 7 districts of Uttar Pradesh and 6 districts of Madhya Pradesh.
- The region is **characterized** by Vindhyan hills, plateaus, ravines, and plains, and is prone to soil erosion due to rapid runoff into rivers such as the Ken River, Betwa River, Dhasan River, and Yamuna.

Kopra Reservoir



- Kopra Reservoir in **Chhattisgarh** has been highlighted as a biodiversity model under the 2026 International Day for Biological Diversity theme, "**Local Action, Global Impact**."
- It is Chhattisgarh's first **Ramsar Site**, located in **Bilaspur District**.
- Situated in the upper catchment of the **Mahanadi River**, it was built in 1993 to address water scarcity.
- The wetland provides **freshwater** to local communities and supports over 60 migratory bird species along with many resident birds.
- Major **threats** include siltation, invasive species, and intensive agriculture in surrounding areas.

Cyprus



- The President of **Cyprus** recently visited India for bilateral talks.
- Cyprus is an island country in the **eastern Mediterranean Sea**, located south of Turkey, west of Syria, and southeast of Greece.
- The island is politically divided:
 - 🏳️ The internationally recognised **Republic of Cyprus**
 - 🏳️ The Turkish Republic of **Northern Cyprus** (recognized only by Turkey)
- The capital city, **Nicosia**, is also divided between the two communities.
- It is the **third-largest Mediterranean** island, after Sicily and Sardinia.
- Major **ethnic groups**: Greek Cypriots (majority) and Turkish Cypriots..

Lake Kariba



- After years of drought, heatwaves, and erratic rainfall, rising inflows from the **upper Zambezi River** are helping restore water levels in Lake Kariba.
- Lake Kariba lies between **Zambia** and **Zimbabwe** and was created in the 1950s by damming the Zambezi River at the Kariba Gorge.
- Built primarily for **hydroelectric** power generation, it also supports **tourism**, fisheries, and conservation.
- It is the **world's largest human-made lake by volume**, stretching about 223 km long and 40 km wide.
- The lake experiences **seasonal fluctuations** in water levels depending on rainfall in the Zambezi basin

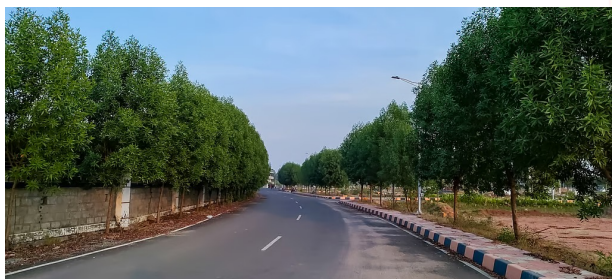
Lipulekh Pass



- **Nepal** has **objected** to the India–China plan to conduct the **Kailash Mansarovar Yatra** via Lipulekh Pass, claiming it violates its sovereignty.
- Lipulekh Pass is a high-altitude Himalayan pass in **Uttarakhand**, near the **tri-junction** of India, Nepal, and China, linking Uttarakhand with Tibet.
- It is an **ancient trade route** connecting the Indian subcontinent with the Tibetan Plateau.
- Located in the **Vyas Valley** of Pithoragarh District, it is a key route for the Kailash Mansarovar Yatra.
- The Kailash Mansarovar Yatra, organized **annually** by India's Ministry of External Affairs, is a pilgrimage to **Mount Kailash** and **Lake Manasarovar**, both revered in Hinduism.

Species in News

The Conocarpus Plant



- Reports show that *Conocarpus erectus*, an **invasive tree** native to the **Americas**, is being planted in some Indian highway and urban greening projects despite concerns.
- Some states like Gujarat and Telangana have **banned** or **restricted** its plantation.
- Concerns include **damage to infrastructure** (drains, cables, pipelines) and health impacts due to pollen causing allergies and asthma.
- India regulates invasive species under the **Wildlife (Protection) Act, 1972 (amended 2022)**, but lacks a dedicated invasive species law.
- Experts recommend **replacing** it with native trees like Neem, Peepal, Pongam, and Banyan for ecological balance.

Asiatic Lions



- The '**Lion Species Spotlight Programme**' was recently inaugurated at **Gir National Park** and Wildlife Sanctuary, Gujarat.

- The Asiatic Lion (*Panthera leo persica*) is the **only wild lion population outside Africa** and is Endangered (IUCN).
- It is a **keystone species** of the dry deciduous forests and scrublands of the Saurashtra region.
- Today, its only **natural habitat** is Gir, while Barda Wildlife Sanctuary is being developed as a second habitat for dispersal and conservation.
- Asiatic lions are **slightly smaller** than African lions and live in smaller, less social prides.

Ganges Soft-Shell Turtle



- India's **first satellite-tagged Ganges soft-shell turtle** was recently released in **Kaziranga National Park and Tiger Reserve**, along the Brahmaputra River in Assam.
- The Ganges soft-shell turtle (*Nilssonina gangetica*) is a **large freshwater turtle** and an **Endangered** (IUCN) species.
- It acts as a **river scavenger** and **apex predator**, helping clean aquatic ecosystems by feeding on dead organic matter.
- **Habitat:** Deep rivers, streams, lakes, canals, and wetlands with sandy or muddy bottoms; distributed across India, Bangladesh, Pakistan, and Afghanistan.
- Features a **soft shell**, tube-like snout for submerged breathing, and an omnivorous diet.

Pallas's Gull

- The first **confirmed sighting** of Pallas's Gull in **Spiti Valley** was recorded at **Chandratal Lake**, a Ramsar wetland.
- Pallas's Gull (*Ichthyophaga ichthyophaga*), also called the **great black-headed gull**, is a rare migratory bird.

- It breeds in colonies across marshes and islands from **southern Russia to Mongolia** and **migrates** to the eastern Mediterranean, Arabia, and India in winter.
- It nests on the **ground**, laying 2–4 eggs, and occasionally appears outside its normal range as a vagrant.
- The sighting highlights the **importance of Trans-Himalayan wetlands** as key stopover habitats for migratory birds..



Red-Necked Phalarope



- The **Chandu Budhera Wetland** has recently become a migratory stopover for the Red-necked Phalarope.
- The Red-necked Phalarope (*Phalaropus lobatus*) is a tiny **Arctic-breeding shorebird**, also called the rufous-necked phalarope.
- It undertakes **long migrations** from the Arctic to the Southern Hemisphere/Southeast Asia for wintering.
- It feeds on **plankton** by spinning on water surfaces and is adapted to an open-ocean lifestyle despite being a shorebird.
- **Females are more brightly coloured** than males and may mate with multiple partners, with males mainly incubating eggs.

Humboldtia nairiana



- Scientists have discovered a **new tree species named Humboldtia nairiana**.
- It is an **evergreen legume** tree found in riparian (riverbank) forests of Shendurney Wildlife Sanctuary.
- The species is **endemic** to Kerala, currently known only from the Agasthyamala Biosphere Reserve.
- It shows unique vegetative and **reproductive traits** distinguishing it from other Humboldtia species.

Peacock Tarantula



- A conservation status survey of the Peacock Tarantula has been launched in the **Nagarjunasagar–Srisaillam Tiger Reserve**.
- Peacock Tarantula (*Poecilotheria metallica*) is one of the **world's rarest spiders**, known for its metallic blue colour and belongs to the Theraphosidae family.
- It is **endemic to India**, mainly restricted to limited forest areas of Andhra Pradesh, making it highly vulnerable to habitat loss.
- **Features** include a bright blue body with yellow-white markings and a leg span of up to 6–8 inches.
- It is a **nocturnal**, active predator that hunts using speed and venom rather than webs.

Keywords

1. **Unidentified Anomalous Phenomena (UAP):** It is the official terminology used by global defense and space agencies—most notably the U.S. Department of Defense and NASA—to describe **objects or events** in the air, sea, or space that **cannot be immediately identified as aircraft** or known natural phenomena.
2. **Robot Monk Gabi:** Robot Monk Gabi is a 130-centimeter-tall **humanoid** robot ordained as an **honorary monk by the Jogye Order of Korean Buddhism** at Seoul's Jogyesa Temple, created as a way to modernize Buddhism and **connect with younger generations**, Gabi participates in temple rituals and lantern parades.
3. **5G Network Slicing:** It is a technique that divides a **single shared physical network into multiple, independent virtual networks**. Each slice is uniquely configured for specific performance requirements—such as speed, latency, and reliability—to efficiently **support distinct applications** like autonomous driving, IoT devices, or premium mobile broadband.
4. **RBI's Kill Switch Facility:** It is a centralized emergency security feature that allows **bank customers to instantly freeze all outbound financial operations** across all digital payment channels with a single action. It acts as a **universal “panic button”** to prevent fraudsters from siphoning funds..
5. **Memflation:** It is the severe, **AI-driven price surge in semiconductor memory and flash storage components** like DRAM and NAND flash memory. It occurs because global chipmakers are **prioritizing the production of High-Bandwidth Memory (HBM)** required for AI servers and data centers.
6. **Schedule H1 Drugs:** Under the Drugs & Cosmetics Rules 1945, drugs specified under Schedule H are required to be **sold by retail on the prescription of a Registered Medical Practitioner (RMP) only**. At present, Schedule H contains 510 drugs. These drugs shall be **labelled** with the **symbol “Rx”** which shall be in **red** and conspicuously displayed on the left top corner of the label.
7. **Pyrite:** Widely known as **“fool’s gold,”** is an **abundant iron sulfide mineral** with the chemical formula FeS_2 . Its brassy-yellow color and metallic luster often cause it to be **mistaken for real gold**. The name originates from the Greek word pyr, meaning “fire,” because it **produces sparks** when struck against steel or hard rock.
8. **Nordic Countries:** They comprise a geographic region in **Northern Europe and the North Atlantic**, encompassing **Denmark, Finland, Iceland, Norway, and Sweden**. This region also includes three **autonomous territories: Greenland, the Faroe Islands, and the Åland Islands**. Recently, the **3rd India-Nordic Summit** took place in Oslo, Norway, where the nations officially elevated their relationship to the **India-Nordic Green Technology and Innovation Strategic Partnership**.
9. **Cocaine hippos:** They refer to a **non-native** population of hippopotamuses in **Colombia** that originated from animals illegally imported by Pablo Escobar in the 1980s. They are native to **sub-Saharan Africa**, but outside Africa they exist only in Colombia's Magdalena River basin and are not found in the wild in India or any other continent. They are listed as **Vulnerable** by the IUCN due to declining populations caused by habitat loss, poaching for meat and ivory, and human–wildlife.
10. **One Case One Data initiative:** It is a **Supreme Court** of India digital reform that creates a single **unified digital identity and database for each case across all levels of the judiciary** (taluka, district, High Courts, and Supreme Court) to improve case tracking, reduce duplication, and enhance efficiency and transparency in the justice system.

Record Breaking Results

20 Selections from Fortune IAS
Prelims-cum-Mains (PCM) Classroom Program.
Highest ever by an IAS Academy in
Kerala



Kerala Rank 1
SREEJA J S
AIR 57
First Attempt Topper



DIVYA S
AIR 166



HRIDYA S BIJU
AIR 202



ANJANA B
AIR 222



**ARAVIND
ISWARANKUTTY**
AIR 248



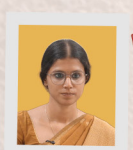
RAJATH R
AIR 348



AMAL KAMPTIYL
AIR 362
First Attempt
Topper



**HARSHIDAA S
NAIR**
AIR 372



SANDHRA S
AIR 380



**ATHIDHI
KRISHNADEV B**
AIR 451
First Attempt
Topper



**SHEIK MOHAMED
NISHATH M**
AIR 497



**JAHANA
SAREEN V P**
AIR 511



ARUNIMA M S
AIR 558



ASNA ANWAR
AIR 576
First Attempt
Topper



NIDHIN R H
AIR 699



FAIRUZ FATHIMA M
AIR 708



**MOHAMED
HASHIM K**
AIR 713



**MUHAMMED
SUHAIL**
AIR 718



SHIYAD
AIR 743



NANDANA J S
AIR 745



**FORTUNE
IAS ACADEMY**