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Monthly Current Affairs Compilation

September 2026

UPSC Civil Services · National & International

22 daily editions · 237 topics · 138 rapid-fire facts · 46 MCQs

Month at a glance

- **Saturday, 5 September 2026** — EOS-05 becomes India's first imaging satellite in geosynchronous orbit; August GST crosses ₹1.99 lakh crore; 31-member JPC to scrutinise the FCRA Amendment Bill
- **Sunday, 6 September 2026** — India and China open first eastern-sector Corps Commander talks at Wacha; UNGA votes 164-1 to 'correct the map' with India's backing; EOS-05 becomes India's first imaging satellite bound for geostationary orbit.
- **Monday, 7 September 2026** — ISRO refutes 'privatisation'; the IN-SPACe remark explained; Japan's JCR upgrades India to 'A-' after 35 years; UNEP: breaching 1.5°C is now unavoidable
- **Tuesday, 8 September 2026** — Western Dedicated Freight Corridor goes fully operational as PM dedicates ₹35,000 crore Gujarat package; Defence Acquisition Council clears ₹1.10 lakh crore buys; New Delhi readies for the 11-nation BRICS Summit
- **Wednesday, 9 September 2026** — UK recognises India's carbon credit scheme under its CBAM, the Defence Acquisition Council clears ₹1.10 lakh crore with 98% from Indian industry, and New Delhi readies the 18th BRICS Summit
- **Thursday, 10 September 2026** — Brent crude tops $100 a barrel, MHA floats a new Article 371(K) for Ladakh, and New Delhi readies the 18th BRICS Summit
- **Friday, 11 September 2026** — New Delhi readies for the 18th BRICS Summit, the Centre tightens e-commerce rules, and the Home Ministry floats an Article 371(K) route for Ladakh.
- **Saturday, 12 September 2026** — 18th BRICS Summit opens in New Delhi, ISRO uprates the CE20 cryogenic engine to 220 kN, and India's forex reserves hit a record USD 785.7 billion.
- **Tuesday, 15 September 2026** — Centre bars charges on UPI up to ₹2,000; wholesale inflation jumps to 9.92% while retail holds at 4.82%; the BRICS New Delhi Declaration closes India's presidency
- **Wednesday, 16 September 2026** — PM Modi meets global chip CEOs on the eve of SEMICON India 2026; Supreme Court dismisses 271 government appeals on armed-forces disability pension; World Ozone Day marks 10 years of the Kigali Amendment
- **Thursday, 17 September 2026** — PM inaugurates SEMICON India 2026 as Semiconductor Mission 2.0 scales to ₹1,27,500 crore; EPFO wage ceiling doubles to ₹25,000 from today; Supreme Court orders RBI to end forcible vehicle repossession
- **Friday, 18 September 2026** — Semiconductor Mission 2.0 launched with a ₹1,27,500 crore outlay, RBI drains ₹2.25 lakh crore through a VRRR auction, and the UPI merchant discount rate returns for large payments from 15 October 2026.
- **Saturday, 19 September 2026** — Semicon 2.0 unveiled with a ₹1,27,500 crore outlay, the US Federal Reserve raises rates for the first time in three years, and six states sign the Kishau Multipurpose Project agreement on the Tons river.
- **Sunday, 20 September 2026** — Coal India commits about **Rs 50,000 crore** to gasification, critical minerals and renewables; PM opens the green tribunal's global climate conference; India's software services exports touch **USD 221.4 billion** in FY26.
- **Monday, 21 September 2026** — FPIs pull ₹20,974 crore in September; US Russia-Iran sanctions law puts India's oil trade on notice; SC seeks a law on court deposits
- **Tuesday, 22 September 2026** — KAL attack drone clears Pokhran trials, Moody's lifts India's FY27 growth forecast to 7%, and a push for UCC in all 21 NDA-ruled States
- **Wednesday, 23 September 2026** — ADB lifts India's FY27 growth forecast to 7%, Supreme Court says no criminal consequence for refusing to sing the national song, and the India-New Zealand FTA gets an entry-into-force date

- **Thursday, 24 September 2026** — Edible oil import duties slashed from today, Supreme Court sends the CEC appointment law to a Constitution Bench, and India showcases its health record at UNGA-81
- **Friday, 25 September 2026** — Make in India completes 12 years with PLI investment at **Rs 2.40 lakh crore**, RBI drains surplus liquidity of **Rs 4.92 lakh crore** through **Rs 1 lakh crore** of OMO sales, and India-France Exercise **VARUNA** begins its **24th** edition at Toulon
- **Monday, 28 September 2026** — Mega ports notified, DRDO's 30-kW laser, Russia backs India's UNSC bid & Census 2027 phase-1 nears completion
- **Tuesday, 29 September 2026** — Brent crosses $107 as Hormuz stays choked; SC refuses to stay UPI MDR; RBI completes ₹1 lakh crore OMO sale
- **Wednesday, 30 September 2026** — Centre cuts edible-oil import duty; net FDI hits 5-year high; Supreme Court flags 10x mark-ups on cancer drugs

All topics — key facts for revision

Saturday, 5 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-05.html

SCI-TECH EOS-05 Launched: India's First Imaging Satellite in Geosynchronous Orbit

- **19th flight of the GSLV**, flown with a **4-metre diameter ogive composite payload fairing**; the vehicle is nicknamed the **'Naughty Boy'** for its patchy early record.
- EOS-05 carries a **multispectral VNIR imager (6 bands, 42 m resolution)**, a **hyperspectral VNIR sensor (158 bands, 318 m)** and a **hyperspectral SWIR sensor (256 bands, 191 m)**.
- Designed to image a **selected field every 5 minutes** and the **entire Indian landmass every 30 minutes** at **42 m** resolution under cloud-free conditions.
- From a **geosynchronous perch (~36,000 km)** it gives **persistent, near-real-time** coverage — unlike **sun-synchronous LEO** satellites that revisit only once in days.

Concept: Geosynchronous orbit: period equals one sidereal day (~23h 56m); **geostationary** is the special case with 0° inclination so the satellite appears fixed. **Hyperspectral imaging** captures hundreds of narrow contiguous bands, allowing chemical/material 'fingerprinting'; **multispectral** uses a few broad bands. **Sub-GTO** is a lower-energy transfer orbit from which the satellite raises itself using onboard propulsion.

ECONOMY Services PMI Rises to 54.1; Composite Output Index Steady at 54.3

- A PMI reading **above 50 signals expansion**; below 50 signals contraction. It is a **diffusion index** built from a monthly survey of purchasing managers.
- Services PMI at **54.1** remains **below its long-run average of 54.5** — growth is positive but sub-trend.
- **Job creation hit a 15-month high**, with about **11% of surveyed firms** adding staff; aggregate employment grew at the fastest pace in **14 months**.
- **Output prices rose at the fastest pace since March** as firms passed on higher costs of digital platforms, electricity, labour and marketing.

Concept: PMI is a leading indicator (survey-based, released within days of month-end); **IIP** and **GVA** are lagging, production-based. A **composite PMI** weights manufacturing and services output. **Cost-push inflation** arises from rising input costs rather than excess demand — relevant to **RBI's flexible inflation-targeting** framework (CPI target **4% ± 2%**).

SCI-TECH BIO-NIVESH Launched to Channel Private Capital into Biotech Start-ups

- The inaugural edition brought together **20 high-potential biotech/deep-tech start-ups** and about **50 curated investors**.
- **BIRAC** (Biotechnology Industry Research Assistance Council) acts as the **Second-Level Fund Manager** for biotechnology under the **₹1 lakh crore Research, Development and Innovation (RDI) Fund**.
- The RDI Fund is designed to supply **long-term 'patient capital'** for strategic, high-risk projects that conventional venture capital avoids.
- **BIO-NIVESH will be a recurring platform**, with subsequent editions planned in other cities to link regional biotech clusters to capital.

Concept: BioE3 Policy — 'Biotechnology for Economy, Environment and Employment' — targets high-performance bio-manufacturing and a **bio-based circular economy**. **Patient capital** tolerates long gestation. **Deep tech** denotes ventures built on substantive scientific or engineering advances rather than business-model innovation.

DEFENCE IAF Successfully Tests Indigenous Khagantak-243 Long-Range Glide Bomb

- A **glide bomb** is an unpowered munition released from an aircraft that **glides to the target** using deployable wings and a guidance kit — no rocket motor.
- Range of **140+ km** places it firmly in the **stand-off** class, letting aircraft strike **without entering enemy air-defence envelopes**.
- Represents **private-sector + PSU + armed-forces co-development**, the model pushed under **Make-in-India** and **iDEX**.
- Officials cautioned that the trial is **one developmental step**, not induction into operational service.

Concept: Stand-off weapon: launched at a distance sufficient to avoid defensive fire. **Glide bomb vs cruise missile:** the glide bomb is unpowered and cheaper, the cruise missile is self-propelled with longer reach. India's defence indigenisation rests on the **positive indigenisation lists**, **Defence Acquisition Procedure**, and **defence industrial corridors in Uttar Pradesh and Tamil Nadu**.

ECONOMY GeM and Textiles Committee Sign MoU for a 'Waste-to-Value-to-Market' Ecosystem

- Signed by **Ajit B. Chavan (CEO, GeM)** and **Kartikay Dhanda (Secretary, Textiles Committee)**.
- **GeM** is the national **public procurement portal** under the **Ministry of Commerce and Industry**, mandatory for central government buying.
- The **Textiles Committee** is a statutory body under the **Textiles Committee Act, 1963**, tasked with quality assurance of textiles.
- Creates **guaranteed demand** for recycled textile products — the key missing link in India's circular-economy value chains.

Concept: Circular economy replaces 'take-make-dispose' with **reduce-reuse-recycle-recover** loops. **EPR** places post-consumer waste responsibility on producers. **Public procurement as industrial policy** — government demand used to seed markets — also underlies **Make in India** and **MSE procurement targets** under the Public Procurement Policy.

SOCIETY President Confers National Teachers' Awards on 69 Educators

- The **48 school teachers** were drawn from **27 States, 7 Union Territories and 6 Central Government organisations**.
- The higher-education set covered **12 faculty from central institutions, 5 from State universities (3 government, 2 private) and 4 from polytechnics**.
- Selection follows a **three-tier online, self-nomination based** process — district, State/ organisation and national jury — designed to remove discretion.
- The President urged teachers to **update knowledge continuously, embrace technology** and build classrooms where students **question, explore and think independently**.

Concept: NEP 2020 on teachers: merit-based recruitment, **4-year Integrated B.Ed. by 2030** as the minimum qualification, **NPST** to be developed by the **National Council for Teacher Education (NCTE)**, and continuous professional development of **50 hours a year**. **Article 21A** and the **RTE Act, 2009** provide the constitutional and statutory backdrop.

POLITY 31-Member Joint Parliamentary Committee Constituted on the FCRA (Amendment) Bill, 2026

- Composition: **21 members from the Lok Sabha and 10 from the Rajya Sabha**, reflecting the ratio of strength between the Houses.
- The Committee must submit its report by the **last day of the Winter Session (November–December 2026)**.
- The parent law is the **Foreign Contribution (Regulation) Act, 2010**, administered by the **Ministry of Home Affairs**; it was last substantially amended in **2020**.
- Core tension: **national security and transparency in foreign funding** versus the **freedom of association under Article 19(1)(c)** and the space for civil society.

Concept: Types of committees: Standing (permanent, e.g. **Department-Related Standing Committees**, PAC, Estimates, Public Undertakings) and Ad hoc (**Select Committee** — one House; **Joint Committee** — both Houses). Committees are the **'mini-legislatures'** that compensate for limited floor time. **Article 19(1)(c)** guarantees freedom of association, subject to **reasonable restrictions under Article 19(4)** on sovereignty, integrity and public order.

IR 'RAKSHA': India Unveils a 10-Year Defence Diplomacy Roadmap

- Built on **four pillars: Strategic Partnerships, Capacity Building, Indigenous Defence Exports, and Maritime Security**.
- **Capacity building** covers joint exercises, training slots for friendly foreign countries and knowledge-sharing.
- Positions India as a **'Net Security Provider' in the Indian Ocean Region (IOR)** and as an anchor of a **rules-based order**.
- Frames **defence exports** as an instrument of diplomacy, not merely commerce — exports create long-term strategic dependencies and goodwill.

Concept: Defence diplomacy is the peacetime use of armed forces and defence assets — exercises, port calls, training, HADR, equipment transfers — to build influence. **Net Security Provider:** a state that supplies public security goods (anti-piracy, HADR, maritime domain awareness) beyond its borders. Related IOR frameworks: **SAGAR/MAHASAGAR vision**, **IONS**, **Indian Ocean Rim Association (IORA)**, **Colombo Security Conclave**.

ENVIRONMENT **India and Germany Sign Joint Declaration on Wetland Conservation**

- Focus areas: **scientific cooperation**, knowledge-sharing on wetland management, **climate adaptation**, **biodiversity conservation** and joint projects.
- The **IGEF has been the bilateral environmental policy platform since 2008**; this is its **fourth edition**.
- '**Wise use**' is the operative principle of the **Ramsar Convention on Wetlands (1971, Ramsar, Iran)**, which India joined in **1982**.
- India has the **largest network of Ramsar sites in Asia**; wetlands act as **carbon sinks, flood buffers, groundwater rechargers and biodiversity refugia**.

Concept: Ramsar Convention (1971) — intergovernmental treaty for wetland conservation and **wise use**; the **Montreux Record** lists Ramsar sites facing ecological change (India: **Keoladeo** and **Loktak**). Domestic law: **Wetlands (Conservation and Management) Rules, 2017**, plus missions such as **Amrit Dharohar**. Wetlands are among the most productive ecosystems on Earth.

Sunday, 6 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-06.html

SCI-TECH **EOS-05 lifts off on GSLV-F17: India's first imaging satellite bound for geostationary orbit**

- **GSLV-F17** lifted off at **2:55 am IST** from the **Satish Dhawan Space Centre, Sriharikota**, with separation **18 minutes** after launch.
- The **51.7 m** tall, **420.5 tonne** three-stage vehicle used an **indigenous cryogenic upper stage**; **EOS-05** is the **heaviest payload ever flown on a GSLV**.
- The satellite will raise itself to about **36,000 km**, where its orbital period matches Earth's rotation — giving a continuous '**stare**' over the Indian landmass.
- It was the **107th launch from Sriharikota** and the **19th GSLV flight**, redeeming the **2021 GSLV-F10 / EOS-03 failure**.
- Imagery will feed **agriculture, disaster management and strategic needs**; unlike low-earth-orbit satellites, the revisit is continuous rather than periodic.

Concept: A **geostationary orbit** is a circular equatorial orbit at about **35,786 km** with a **24-hour period**, so the satellite appears fixed over one spot. A **Sun-synchronous polar orbit** (600-800 km) gives finer resolution but only periodic revisits. **GTO** is the elliptical transfer orbit used to climb to GEO.

SCI-TECH India Semiconductor Mission 2.0 shifts focus from fabs to equipment, materials and chip IP

- **ISM 1.0** was approved in **December 2021** with a **₹76,000 crore** incentive corpus; **10 projects across 6 states** had been sanctioned by **December 2025**.
- Approved units span **silicon fabs**, a **silicon-carbide (compound semiconductor)** facility, **advanced packaging** and **ATMP/OSAT** plants.
- **ISM 2.0** rests on three pillars: **semiconductor equipment and materials made in India**, **full-stack Indian semiconductor IP**, and **supply-chain resilience**.
- **Budget 2026-27** provides **₹1,000 crore** for ISM 2.0 within an **₹8,000 crore** modified programme outlay for the year.
- FY27 targets include **₹4,000 crore** of fab investment, **₹11,000 crore** in ATMP/OSAT, support for **30 design companies** and **10 semiconductor IP cores**.

Concept: **ATMP** (Assembly, Testing, Marking and Packaging) and **OSAT** (Outsourced Semiconductor Assembly and Test) form the **back-end** of chipmaking; a **fab** is the **front-end** wafer fabrication plant. Fabless design houses are supported through the **Design-Linked Incentive** scheme.

ECONOMY RBI to drain ₹7 lakh crore as banking liquidity surplus hits a record

- Banking system liquidity surplus stood at about **₹10.32 lakh crore** as on **3 September 2026** — a record high.
- The auction **reverses on 7 October 2026**; banks may seek **premature or partial reversal** through the **e-Kuber** portal.
- The RBI had already absorbed **₹6.02 lakh crore** through two VRRR auctions, and ran **32 VRRR operations** between August and early September.
- Special forex measures mobilised about **$136.38 billion** by **31 August**, of which the **FCNR(B)** window alone brought in **$127.23 billion**.
- Excess liquidity drags the **weighted average call rate** below the **repo rate**, weakening **monetary transmission**.

Concept: Under the **Liquidity Adjustment Facility**, the **Standing Deposit Facility** is the floor and the **Marginal Standing Facility** the ceiling of the corridor, with the **repo rate** in between. A **VRRR** is an auction-based absorption of surplus liquidity at market-determined rates.

ECONOMY Current account deficit widens to $4.2 billion in Q1 FY27

- The **merchandise trade deficit** widened sharply to **$86.1 billion** from **$68.9 billion** a year ago.
- **Net services receipts** rose to **$51.6 billion** from **$47.9 billion**, led by **computer services**, other business services and transport.
- **Private transfer receipts** — largely **remittances** — jumped to **$42.9 billion** from **$33.2 billion**.
- **Net FDI inflow** improved to **$6.1 billion** against **$5.2 billion** in the year-ago quarter.
- A CAD near **0.5% of GDP** stays comfortably below the **2.5-3%** band generally treated as the stress threshold for India.

Concept: The **current account** covers trade in goods and services, primary income and transfers; the **capital and financial account** covers **FDI, FPI, ECBs and NRI deposits**. A deficit financed by **FDI** is considered higher quality than one financed by **FPI**, which can reverse quickly.

POLITY Special NIA court convicts all ten accused in the 2013 Jhiram Ghati ambush

- The ambush took place on **25 May 2013** in **Jhiram Valley, Bastar district, Chhattisgarh**, on a convoy returning from a political rally.
- **29 people were killed**, among them **Nand Kumar Patel**, **Mahendra Karma**, **Vidya Charan Shukla** and **Uday Mudliyar**.
- The case moved from state police to the **National Investigation Agency**, which filed its charge sheet in **September 2014**; **101 witnesses** were examined.
- The **NIA**, created under the **NIA Act, 2008**, is India's central counter-terror agency and can investigate **scheduled offences** across states without prior state consent.
- **LWE violence** has contracted to a small cluster of districts, with the government working to a target of ending Maoist violence by **31 March 2026**.

Concept: The **Unlawful Activities (Prevention) Act, 1967** permits designation of **individuals** as terrorists and makes bail harder for scheduled offences. **SAMADHAN** is the doctrine guiding anti-LWE operations, running from smart leadership and actionable intelligence to choking terror financing.

IR India and China hold their first Corps Commander talks in the eastern sector

- The Indian side was led by **Lieutenant General Girish Kalia**, commander of **3 Corps**.
- **3 Corps** and **4 Corps (Tezpur)** together hold responsibility for the **LAC in the eastern sector**.
- The meeting follows the **National Security Adviser's visit to China** and understandings on maintaining **peace and tranquillity** along the LAC.
- The core difficulty remains **differing perceptions of the alignment of the LAC**, which is not a delimited boundary.

Concept: The **Line of Actual Control** runs about **3,488 km** across the **western, middle and eastern sectors**. **Border Personnel Meeting points** include **Chushul** and **Daulat Beg Oldi** in Ladakh, **Nathu La** in Sikkim, and **Bum La** and **Kibithu** in Arunachal Pradesh. The **Working Mechanism for Consultation and Coordination (WMCC)**, set up in **2012**, is the diplomatic channel.

IR UNGA votes 164-1 to 'correct the map'; India backs equal-area projections

- The resolution was adopted on **5 September 2026** by **164 votes to 1**, with the **Equal Earth projection** promoted as the alternative.
- India's representative argued the text should endorse the **equal-area principle** rather than any single projection, leaving states free to choose.
- India also stressed that its **sovereign territory, including Jammu and Kashmir**, must be depicted accurately on UN maps.
- Mercator makes **Greenland (2.16 million sq km)** look as large as **Africa (30.37 million sq km)** — a roughly **14-fold** error.

Concept: No flat map can preserve **area, shape, distance and direction** at once. **Mercator** is **conformal** — it preserves angles and straight rhumb lines but inflates high latitudes. **Equal Earth, Gall-Peters and Mollweide** are **equal-area**: they preserve relative size while distorting shape.

IR New Delhi readies for the 18th BRICS Summit on 12-13 September

- Theme of India's chairship: **'Building for Resilience, Innovation, Cooperation and Sustainability'**.
- Priorities include **climate action, clean energy, digital public infrastructure, innovation, supply-chain resilience and reformed multilateralism**.
- An inaugural **iBRICS investor summit** runs alongside, drawing more than **500 investors and finance leaders**.
- The grouping now spans **Brazil, Russia, India, China and South Africa** along with **Egypt, Ethiopia, Iran, the UAE and Indonesia**, besides a set of partner countries.

> **Concept:** The **New Development Bank**, headquartered in **Shanghai**, and the **Contingent Reserve Arrangement**, a **$100 billion** currency-swap safety net, are the two financial pillars of BRICS. Decisions are taken by **consensus** and the **chairship rotates annually**.

SOCIETY Vibrant Villages Programme reframes the border hamlet as the 'first village'

- India shares more than **15,000 km** of land border with **seven neighbours**; the longest stretches are with **Bangladesh (4,096.7 km)**, **China (3,488 km)** and **Pakistan (3,323 km)**.
- **VVP-I**, launched in **April 2023**, is a **Centrally Sponsored Scheme** covering northern border villages in **Arunachal Pradesh, Sikkim, Himachal Pradesh, Uttarakhand and Ladakh**.
- **VVP-II** extends coverage to blocks along the **other international borders** and is a **Central Sector Scheme funded fully by the Union**; it was launched from **Cachar, Assam**.
- Interventions cover **all-weather road connectivity, electricity including renewables, telecom, housing, health, education, tourism circuits and cooperative livelihoods**.

> **Concept:** A **Centrally Sponsored Scheme** is cost-shared with States and implemented by them; a **Central Sector Scheme** is funded and implemented entirely by the Union. Depopulated border villages weaken both the local economy and the **first line of surveillance** — the idea behind treating residents as **'eyes and ears' of the border**.

ENVIRONMENT Vulture conservation moves 'from crisis to recovery' on Vulture Awareness Day

- India hosts **nine vulture species**; **four are Critically Endangered** — **White-rumped, Indian (Long-billed), Slender-billed and Red-headed** — and the **Egyptian Vulture is Endangered**.
- **Gyps** vulture populations crashed by more than **97%** from the 1990s, driven by the veterinary anti-inflammatory **diclofenac** in cattle carcasses; its **veterinary use was banned in 2006**.
- **Melghat** and **Pench** tiger reserves have emerged as the most successful reintroduction sites — **29 birds released between December 2025 and January 2026** with a **78% survival rate**.
- A **Vulture Safe Zone** is a landscape of roughly **100 km radius** around a colony kept free of vulture-toxic drugs — **diclofenac, aceclofenac, ketoprofen, nimesulide**; **meloxicam** is the safe substitute.

> **Concept:** Vultures are listed in **Schedule I of the Wild Life (Protection) Act, 1972**. They are **obligate scavengers** and a **keystone species**; their collapse set off a **trophic cascade** of feral dog population growth. Recovery rests on three legs — **conservation breeding**, **safe zones free of toxic NSAIDs**, and **monitored release into prey-rich, inviolate habitat**.

REPORT India's Vinaya Prakash Singh re-elected Secretary-General of the Asian-Pacific Postal Union

- The **APPU** is a **Restricted Union** of the **Universal Postal Union** under **Article 8** of the UPU Constitution, and the only such body in the **Asia-Pacific**.
- It traces its origins to **1961** and took its present form on **1 July 1982**; it is headquartered in **Bangkok, Thailand**, with **32 member countries**.
- The **UPU**, established in **1874** and headquartered in **Berne, Switzerland**, is the **specialised agency of the United Nations** for postal cooperation — the second-oldest international organisation.
- India has held the APPU Secretary-General's office since **2022**, the first time an Indian occupies the post.

> **Concept:** **Restricted unions** are regional groupings permitted under the **UPU Constitution** to deepen cooperation among members of a region without diluting the **universal service obligation**. Such leadership posts count towards a country's **soft power** and its presence in **technical multilateralism**.

Monday, 7 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-07.html

SCI-TECH ISRO refutes 'privatisation'; the IN-SPACe remark explained

- The associations asked about **Space Commission approval**, sanctioned strength and recruitment over a 5-10 year horizon.
- IN-SPACe clarified the direction is **'not a smaller ISRO but a larger ecosystem'**.
- Division of labour: **industry** scales mature vehicles and satellites; **ISRO** keeps advanced R&D, scientific and strategic missions.
- Department of Space staff are outside the statutory definition of 'industry' and organise as **service associations** under CCS (Recognition of Service Associations) Rules, 1993.

Concept: IN-SPACe authorises and regulates non-government space activity; **NSIL** is the commercial arm that markets mature ISRO technology. Both were created by the **2020 space reforms**.

ECONOMY Japan's JCR upgrades India to 'A-' after 35 years

- JCR cites GDP growth projected **above 6%** for 2026-27.
- Central **fiscal deficit** improved from **4.7% of GDP in FY25 to 4.4% in FY26**.
- Banking health: **gross NPA ratio fell to 1.8%** by March 2026.
- A higher rating lowers **external borrowing costs** for the sovereign and for Indian corporates raising funds abroad.

Concept: A **country ceiling** caps the rating most domestic issuers can receive, since few borrowers are considered safer than their sovereign. Ratings assess **default risk**, not growth.

ENVIRONMENT UNEP: breaching 1.5°C is now unavoidable

- Every five years of sustained emissions at present levels could add about **0.1°C**.
- The report maps a **narrow return pathway** below 1.5°C after overshoot.
- Return requires large-scale **carbon dioxide removal**, whose scalability remains unproven.
- Some overshoot effects - **ice-sheet loss, coral die-off** - are effectively irreversible on human timescales.

Concept: Overshoot means temporarily exceeding a temperature limit before returning below it. The **Paris Agreement (2015)** targets 'well below 2°C' while pursuing 1.5°C.

SCI-TECH DRDO and UoH patent BAM-H24 rocket propellant

- Key properties: **high thermal stability** and **reduced ignition delay**.
- **Boron-rich** formulations offer high **volumetric energy density**, valuable where volume is constrained.
- Useful for **compact tactical missiles** and boosters where storage life matters.
- Developed by Dr Muddamarri Hanumantha Rao and Prof. Muralidharan Krishnamurthi.

Concept: Solid propellants cast fuel and oxidiser into a single grain - simple, storable and instantly ready, but they cannot be throttled or shut down once ignited, unlike liquid engines.

DISASTER Bihar floods: Ganga crosses its record flood level

- **Gandhi Ghat, Patna: 50.57 m**, above the August 2016 record of 50.52 m.
- **Pandarak: 43.92 m**, above the 2021 record of 43.73 m.
- Districts hit include Patna, Bhojpur, Saran, Vaishali, Bhagalpur, Begusarai and Buxar.
- Response: **110 community kitchens, 1,345 boats, 27 SDRF and 10 NDRF teams**.

Concept: About **73% of Bihar's area is flood-prone**. Himalayan rivers carry heavy **silt loads** onto a low-gradient plain, raising riverbeds and reducing the carrying capacity behind embankments.

SECURITY Three-year roadmap for a drug-free India by 2029

- Four pillars: **intelligence-led enforcement**, **precursor and synthetic drug control**, **demand reduction**, and **institutional capacity**.
- Seizures rose from **26 lakh kg (Rs 40,000 cr)** in 2004-14 to over **1.19 crore kg (Rs 1.89 lakh cr)** in 2014-26.
- **De-addiction centres to triple to 1,751**; 10,000 volunteers for community outreach.
- **274 fugitives extradited** from 36 countries (2019-July 2026); assets worth **Rs 17,874 crore** seized.

Concept: The **NDPS Act, 1985** is the parent statute. **NCORD** gives four-tier Centre-State coordination and the **Narcotics Control Bureau** is the apex enforcement agency.

ECONOMY SEBI and ESMA renew cooperation on clearing houses

- Signed by SEBI chairman **Tuhin Kanta Pandey** and ESMA chair **Verena Ross**.
- A **central counterparty** sits between buyer and seller in a trade, guaranteeing settlement if one side defaults.
- EU recognition matters because European banks face **higher capital charges** when clearing through unrecognised CCPs.
- The 2017 MoU had lapsed amid a **supervisory access** dispute between the two regulators.

Concept: EMIR (European Market Infrastructure Regulation) governs derivatives clearing in the EU. Regulatory **deference** - recognising another jurisdiction's supervision as equivalent - is what avoids duplicate compliance.

POLITY Judicial accountability row reaches the CJI

- The Rajasthan HC functioned **without a regular Chief Justice for about 11 months**.
- The Collegium recommended a new Chief Justice on **31 August 2026**.
- **K. Veeraswami (1991):** prior permission of the CJI is needed to register an **FIR** against a higher judiciary judge.
- The **Judicial Standards and Accountability Bill** passed the Lok Sabha in 2012 but lapsed in 2014.

Concept: Removal is governed by **Articles 124(4)** (SC) and **217(1)(b)** (HC) read with the **Judges (Inquiry) Act, 1968**. **No impeachment has ever succeeded** in India - making the in-house mechanism the only working check.

POLITY SIR: 1.85 lakh names deleted in Manipur and Sikkim

- **Manipur:** 20,93,076 to **19,60,620** - a deletion of **1,32,456** names (about 6.3%).
- **Sikkim:** about 4,71,081 to **4,18,467** - a deletion of **52,614** names (about 11.2%).
- Deletion heads: **shifted, deceased, absent and duplicate** entries.
- Manipur's final roll sex ratio: **1,056 women per 1,000 men**.

Concept: Section 21(3), RP Act 1950 lets the ECI order a special revision at any time for reasons recorded in writing. **Intensive** revision means fresh house-to-house enumeration; **summary** revision only invites claims and objections against the existing roll.

GOVERNANCE 'FRA has no gram sabha consent clause', says Ministry

- Environment Ministry circulars since **2009** make FRA compliance and a gram sabha **NOC** a precondition for **Stage-II** forest clearance.
- A Standing Committee report (**3 August**) found forest clearance for NHPC projects averaged **106 months**.
- NHPC proposed a **'qualified super-majority'** of 70-75% of affected gram sabhas for national-importance projects.
- **Teesta-IV** hydro project remains stalled awaiting gram sabha consent.

Concept: Section 5, FRA empowers the gram sabha to protect forests and biodiversity. **Niyamgiri (2013)** held gram sabha consent decisive on community and religious forest claims. **PESA, 1996** mandates consultation in Fifth Schedule areas.

SOCIETY ST classification criteria and the Lokur legacy

- **Lokur Committee (1965)** criteria: primitive traits, distinctive culture, geographical isolation, **shyness of contact** and backwardness - widely called obsolete.
- **Article 342:** the President specifies STs; only **Parliament by law** can include or exclude a community.
- Unlike Scheduled Castes, **ST status carries no religion condition** - the delisting campaign seeks to change this.
- The convention also sought Adivasi languages in the **Eighth Schedule**, which now has **22** languages.

Concept: Article 366(25) defines STs with reference to Article 342. **Article 338A** (89th Amendment, 2003) created the **National Commission for Scheduled Tribes**.

IR Hasina interview strains India-Bangladesh ties

- She has been **convicted in Bangladesh** over the 2024 crackdown on student protesters.
- India has **no domestic refugee or asylum law** and is not party to the **1951 Refugee Convention**.
- The **2013 extradition treaty** (amended 2016) exempts offences of a **political character**.
- Pending files: **Teesta** water sharing and renewal of the **Ganga Waters Treaty, 1996**.

Concept: The relationship rests on the **1971 Liberation War** legacy, the **1972 Treaty of Friendship**, the **2015 Land Boundary Agreement** settling enclaves, and the **2014 UN maritime boundary award**.

IR US-Iran war enters sixth month; Hormuz still unsafe

- The strait is about **21 nautical miles** at its narrowest; usable shipping lanes are only kilometres wide.
- Bordered by **Iran** to the north and **Oman's Musandam exclave and the UAE** to the south.
- It is the world's most critical **oil chokepoint**, carrying a large share of traded crude and LNG.
- India has run **Operation Sankalp** escort deployments in the Gulf since **2019**.

Concept: Transit passage under UNCLOS allows continuous and expeditious passage through international straits. Iran **signed but never ratified** UNCLOS and is bound by the customary rule.

GOVERNANCE Chhattisgarh tops Jal Sanchay Jan Bhagidari 3.0

- **Five districts** feature in India's top ten - Surajpur, Mahasamund, Balod, Balodabazar-Bhatapara and Kabirdham.
- Koriya district's **'5 Per Cent Model'** asks farmers to set aside 5% of farmland for **groundwater recharge**.
- The scheme sits under the **Jal Shakti Abhiyan: Catch the Rain** campaign of the Jal Shakti Ministry.
- It works through **panchayat and community** participation rather than pure departmental construction.

Concept: Jal Shakti Abhiyan: Catch the Rain is a time-bound campaign promoting rainwater harvesting and **aquifer recharge**, with the tagline 'catch the rain, where it falls, when it falls'.

GOVERNANCE Punjab's 'Pehchaan' portal for unidentified dead

- Photographs and identification marks are uploaded **within 48 hours** of a body being found.
- The portal integrates with **CCTNS**, the national police crime and criminal records network.
- It lets families search across districts instead of visiting individual police stations or morgues.
- **MedLEaPR** digitises post-mortem and medico-legal reports, linking hospitals with police.

Concept: CCTNS (Crime and Criminal Tracking Network and Systems) is a Mission Mode Project under the **National e-Governance Plan**, linking police stations into a common database.

Tuesday, 8 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-08.html

ECONOMY Western Dedicated Freight Corridor fully operational; ₹35,000 crore Gujarat package dedicated

- Three sections totalling **326 route km** commissioned at over **₹20,700 crore** — **Sanand (North)-Makarpura**, **New Umbergaon-New Saphale** and **New Saphale-JNPA**.
- The last link gives the corridor direct freight access to **Jawaharlal Nehru Port Authority (JNPA)**, Maharashtra.
- Foundation stones laid for **three rail projects covering 329 km** worth over **₹9,700 crore**, including the **Vadodara-Ratlam** third and fourth lines and **Vishwamitri-Dabhoi** doubling.
- **Three national highway projects worth ₹1,780 crore** cleared, including six-laning of **Kamrej-Chalthan on NH-48** with major bridges over the **Tapi** and **Narmada**.
- State-sector works of **₹2,600 crore** include **Vadodara Ring Road Phase-II** and a **110 MW floating solar plant at Kadana Dam**.

Concept: Dedicated Freight Corridor Corporation of India Ltd (DFCCIL) is a Special Purpose Vehicle under the Ministry of Railways. DFCs allow **double-stack container trains**, higher axle loads and speeds of **100 kmph**, and are a core pillar of **PM GatiShakti** and the **National Logistics Policy**, which targets cutting logistics cost as a share of GDP.

DEFENCE Defence Acquisition Council clears ₹1.10 lakh crore of capital acquisitions

- Total value approximately **₹1,10,000 crore**, with about **98% of the value to be sourced from Indian industry**.
- **Army**: **CBRN Reconnaissance Vehicles**, High Mobility Vehicles, Self-Propelled Mechanical Mine Layers, **Advanced Light Helicopters**, Trawl Tanks and the **Sarvatra Bridge System**.
- **Navy**: **Arudhra radars** and design and development of **indigenous Marine Gas Turbines**.
- **Air Force**: fighter, transport and helicopter upgrades, a **Ground-Based Multi-Purpose Jammer** and the **DEFSAC** smart-card access system.
- **Acceptance of Necessity (AoN)** is only the first administrative stage under the **Defence Acquisition Procedure (DAP) 2020**; tendering, trials and contract signature follow.

Concept: The **DAC** is the apex body for capital procurement in the Ministry of Defence, headed by the **Raksha Mantri**. Categories under DAP 2020 run from **Buy (Indian-IDDM)** — the most preferred, requiring indigenous design, development and manufacture — down to **Buy (Global)**. **CBRN** stands for Chemical, Biological, Radiological and Nuclear.

SCI-TECH EOS-05: India's first imaging satellite in geosynchronous orbit

- Launched on **4 September 2026** by **GSLV-F17**, the **19th flight** of the GSLV, from **Satish Dhawan Space Centre-SHAR, Sriharikota**.
- Payload mass about **2,367 kg**; injected into a **sub-Geosynchronous Transfer Orbit** with perigee **170 km**, apogee **28,934 km** and inclination **19.28 degrees**.
- It is **India's first imaging satellite operating from geosynchronous orbit**, roughly **36,000 km** above the equator.
- Persistent staring capability supports **disaster management**, **agriculture monitoring**, **maritime domain awareness** and border surveillance.
- Carries a **hyperspectral earth-surface imager**, allowing discrimination of crops, water bodies and surface materials by spectral signature.

Concept: A **geosynchronous orbit** has an orbital period equal to earth's rotation (about **24 hours**) at roughly **35,786 km**; a **geostationary orbit** is the special case with **zero inclination**, appearing fixed over a point on the equator. **GSLV** uses an indigenous **cryogenic upper stage** burning liquid hydrogen and liquid oxygen.

ENVIRONMENT NITI Aayog launches PACT and ZET Marketplace for zero-emission freight

- **PACT** aggregates freight demand from shippers and logistics providers and channels it into deployment along identified corridors.
- The **ZET Marketplace** links e-truck manufacturers, logistics firms, **charge point operators**, financiers and technology providers.
- Electric medium and heavy-duty truck deployments rose from **201 units in FY25** to **826 units in FY26** — roughly a **four-fold** increase.
- About **3,000 e-MHD trucks** are estimated to be operating nationwide at present.
- Partner ministries are the **Ministry of Road Transport and Highways** and the **Ministry of Heavy Industries**; the model is market coordination and financing linkage, **not direct subsidy**.

Concept: Road freight is among the hardest-to-abate segments: heavy-duty trucks are a small share of the vehicle fleet but a disproportionate share of transport emissions and diesel demand. This feeds India's **net-zero by 2070** pledge and the **Nationally Determined Contributions** under the Paris Agreement.

SCI-TECH Bodhan AI releases four open multilingual education models as Digital Public Goods

- **Four models** released — automatic speech recognition covering **27 Indian languages**, and **OCR** and **text-to-speech** covering **23 languages** each.
- A **machine translation** model covers **22 languages**, aligned to the **Eighth Schedule** of the Constitution.
- Applications include a **Student Tutor Bot for Classes 6-12** and a **Teacher Assistant Bot**.
- Models are released as **open weights** and designated **Digital Public Goods**, allowing free reuse by states and edtech developers.
- Positioned as the education layer of India's **Digital Public Infrastructure**, alongside identity and payments layers.

> **Concept:** **Digital Public Goods** are open-source software, open data, open AI models, open standards and open content that adhere to privacy and applicable laws and help attain the **Sustainable Development Goals**. India's **DPI** model — identity, payments and data exchange — is now being extended to education under **NEP 2020**'s mother-tongue instruction goal.

POLITY Centre notifies Chief Justices for eight High Courts

- Appointments cover the **Patna**, **Calcutta**, **Rajasthan**, **Bombay**, **Punjab & Haryana**, **Chhattisgarh**, **Madhya Pradesh** and **Jammu & Kashmir and Ladakh** High Courts.
- **Article 217** governs the appointment of High Court judges by the **President**, after consultation with the **Chief Justice of India**, the **Governor** of the state and, for a puisne judge, the Chief Justice of that High Court.
- **Article 216** provides that a High Court shall consist of a Chief Justice and such other judges as the President may appoint.
- The **collegium** for High Court Chief Justices comprises the **CJI and the two senior-most Supreme Court judges**.
- The process operates under the **Memorandum of Procedure**, a document still not finalised between the executive and the judiciary.

> **Concept:** The **collegium system** evolved through the **Three Judges Cases (1981, 1993, 1998)**. The **99th Constitutional Amendment** and the **NJAC Act, 2014** sought to replace it but were struck down in **2015** for violating **judicial independence**, part of the **basic structure**. **Article 222** allows the President to transfer a judge from one High Court to another.

IR India to host expanded 11-nation BRICS Summit at Bharat Mandapam

- Scheduled for **12-13 September 2026** at **Bharat Mandapam, New Delhi**; theme is '**Building for resilience, innovation, cooperation and sustainability**'.
- This is India's **fourth BRICS chairmanship**, supported by around **350 preparatory meetings** across more than **25 Indian cities**.
- Membership stands at **11 countries** — **Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran, Saudi Arabia and the UAE**.
- India's stated priorities include **more balanced intra-BRICS trade**, **trade in services**, **resilient global value chains** and **improved access to finance for small businesses**.
- BRICS institutions include the **New Development Bank (NDB)**, headquartered in **Shanghai**, and the **Contingent Reserve Arrangement (CRA)**.

> **Concept:** **BRIC** was coined in **2001**; the first summit was held in **2009** at **Yekaterinburg**, with **South Africa** joining in **2010** to form BRICS. The **NDB** was created by the **Fortaleza Declaration (2014)**. Chairmanship rotates annually and the summit is the apex of a year-long **sherpa** and ministerial track.

IR UN General Assembly declares 27 November as day against child, early and forced marriage

- Resolution **A/RES/80/309** was adopted **without a vote** during the **80th session** of the UN General Assembly.
- All **193 UN Member States** supported it; more than **70 countries** co-sponsored, including **India**.
- The observance date is **27 November**, with the first observance in **2026**.
- UNGA resolutions on such observances are **recommendatory, not legally binding** on member states.
- In India the governing law is the **Prohibition of Child Marriage Act, 2006**, which sets **18 years** for women and **21 years** for men.

> **Concept:** **SDG Target 5.3** seeks to eliminate all harmful practices including child, early and forced marriage by **2030**. India is a party to the **CEDAW** and the **Convention on the Rights of the Child**. The UNGA is the only UN organ with **universal membership**, where each state has **one vote**.

ECONOMY India-US trade agreement said to be in final legal drafting stage

- The agreement is described as **'in principle almost done'**, with only final legal scrubbing pending.
- The **United States** has been among India's **largest trading partners** and a major destination for Indian **services exports**.
- Sensitive Indian red lines have historically included **agriculture**, **dairy** and **genetically modified** products.
- A **Bilateral Trade Agreement (BTA)** differs from a comprehensive **Free Trade Agreement** in coverage and depth of tariff elimination.
- Trade agreements must be consistent with **WTO Article XXIV** on customs unions and free-trade areas.

Concept: **Most Favoured Nation (MFN)** treatment requires equal tariff treatment for all WTO members; **National Treatment** requires no discrimination between imported and domestic goods once inside the market. **Reciprocal tariffs** depart from MFN and are a key point of contention in current global trade practice.

REPORT State of India's Environment 2026 flags changing tiger behaviour and invasive spread

- **43 people** were killed near tiger reserves between **January and June 2025**, against **44** in the same period of **2024**.
- Tigers are present in **20 states**; about **60 million people** share nearly **40%** of tiger-occupied landscape.
- **Lantana camara**, an ornamental introduced in the **1800s**, now covers about **50%** of India's forest and scrubland area.
- Lantana creates **predator-friendly structure in prey-poor landscapes**, making livestock an easier target for tigers.
- Reserves at **saturation capacity** push dispersing tigers into buffer and human-use areas, raising conflict.

Concept: **Project Tiger** was launched in **1973**; the **National Tiger Conservation Authority (NTCA)** is a statutory body under the **Wildlife (Protection) Act, 1972**, as amended in **2006**. Tiger reserves have a **core or critical tiger habitat** and a **buffer zone**. **Invasive alien species** are a recognised direct driver of biodiversity loss.

ENVIRONMENT **Botanical Survey of India records new plant species in Agasthyamala Biosphere Reserve**

- The species is named **Osbeckia ulotricha**, belonging to the family **Melastomataceae**.
- It was recorded at elevations of **1,200 to 1,500 metres** in the **Kerala-Tamil Nadu** stretch of the reserve.
- The description was published in the international taxonomic journal **Lilloa**.
- **Agasthyamala** was designated a **UNESCO Biosphere Reserve in 2016** and lies in the southern **Western Ghats**.
- The **Western Ghats** are one of the world's **biodiversity hotspots** and a **UNESCO World Heritage Site**.

Concept: A **biosphere reserve** under the **UNESCO Man and the Biosphere (MAB) Programme** has three zones — **core**, **buffer** and **transition**. **Endemic** species occur naturally in one geographic area only. India's **Botanical Survey of India (1890)** and **Zoological Survey of India (1916)** are the nodal taxonomic organisations.

Wednesday, 9 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-09.html

ECONOMY **Indian crude basket tops $100 a barrel; external sector back under watch**

- **Indian crude basket at $101.07/barrel** (4 September 2026); **Brent near $97/barrel**, a six-week high.
- The **current account deficit could widen to 1.7% of GDP (about $71 billion)** in **H2 FY27** if crude stays above **$90/barrel**.
- **Q1 FY27 CAD** stood at **$4.2 billion (0.5% of GDP)** on a merchandise trade deficit of **$86.1 billion**.
- Domestic **LPG under-recovery is about ₹200 per cylinder**; the **19-kg commercial cylinder in Delhi costs ₹2,747.5**.
- **August 2026 fuel consumption fell 2.8% year-on-year to 18.61 million tonnes**, even as petrol and diesel sales rose.

Concept: **Indian Basket** = weighted average of **Oman-Dubai (sour)** and **Brent (sweet)** crude in the ratio of India's actual import mix, computed by the **Petroleum Planning & Analysis Cell (PPAC)** under MoPNG. **CAD** = trade deficit + net invisibles. Rule of thumb: every **$10/barrel** rise adds roughly **0.4-0.5% of GDP** to the oil import bill and about **30 basis points** to headline CPI.

ECONOMY Food inflation set to stay elevated; global food price index at a four-year high

- **CPI headline inflation was 4.45% in July 2026 — a 19-month high**; **food inflation 5.52%**, up from just **2.13% in January 2026**.
- Year-on-year retail rises as on **7 September 2026**: **onion +93%**, **soybean oil +12%**, **groundnut oil +11.64%**, **rice +11.06%**, **tur dal +9.07%**, **sugar +4.92%**.
- **FAO Food Price Index, August 2026 = 133.3 points**, **up 1.9% over July** — **sugar +11.9%**, **cereals +2.2%**, **vegetable oils +0.6%**.
- FAO cut its **2026 world cereal production forecast to 2.980 billion tonnes**, a **2% annual fall** — the steepest since 2018.
- **Southwest monsoon rainfall deficit is about 14%** and **kharif acreage 1.7% below** last year; **El Nino** is expected to intensify over September-October.

Concept: CPI (Combined) is compiled by **NSO/MoSPI**, base **2012 = 100**, with **food and beverages weighted 45.86%** — which is why food shocks dominate headline prints. RBI's **flexible inflation targeting** mandate under **Section 45ZA, RBI Act 1934** is **4% plus or minus 2%**; the **MPC** has **6 members** (3 RBI + 3 external), with the Governor holding a casting vote. The **FAO Food Price Index** is trade-weighted across five commodity groups, base **2014-2016 = 100**.

ENVIRONMENT UK recognises India's Carbon Credit Trading Scheme under its CBAM

- Recognition covers Indian exports of **steel, aluminium, fertilisers and cement**; UK importers must furnish documentation and meet verification requirements to claim the relief.
- The **UK CBAM takes effect in 2027**; the **EU CBAM's definitive financial phase began in January 2026**.
- It builds on the **India-UK Comprehensive Economic and Trade Agreement (CETA), signed 15 July 2026**; merchandise trade is about **$25.1 billion** and services trade **$35.4 billion (2024-25)**.
- **CCTS was notified in June 2023** under the **Energy Conservation (Amendment) Act, 2022**, administered by the **Bureau of Energy Efficiency (BEE)**; the traded unit is the **Carbon Credit Certificate**, denominated in **tonnes of CO2 equivalent**.
- Pressure point: India's **steel sector accounts for about 12% of national greenhouse gas emissions** with emissions intensity roughly **32% above the global average**.

Concept: CBAM is a carbon border tariff designed to prevent **carbon leakage** — the shifting of emission-intensive production to jurisdictions with weaker carbon prices. **CCTS** succeeds the **Perform, Achieve and Trade (PAT)** scheme and its **ESCerts** under the **National Mission for Enhanced Energy Efficiency (NMEEE)** of the **NAPCC**; it combines a **compliance mechanism** for obligated energy-intensive entities with a **voluntary offset mechanism**. India has argued that unilateral CBAMs sit uneasily with **Common But Differentiated Responsibilities (CBDR-RC)** under the **UNFCCC, 1992**.

DEFENCE Defence Acquisition Council clears ₹1.10 lakh crore, 98% from Indian industry

- **Army: CBRN Reconnaissance Vehicles (Tracked) Mk-II**, **High Mobility Vehicles**, **Self-Propelled Mechanical Mine Layers**, **Advanced Light Helicopters**, Trawl Tanks and the **Sarvatra** multi-span mobile bridge.
- **Sarvatra** spans up to **75 metres in 15-metre steps** and can be deployed in about **100 minutes**.
- **Navy: Arudhra** medium-power air surveillance radars, and **design and development of indigenous Marine Gas Turbines** for warship propulsion — currently an import-dependent segment.
- **Air Force:** fighter, transport and helicopter fleet upgrades, **Ground-Based Multi-Purpose Jammers** and the **DEFSAC** secure access card system.
- **AoN is only the first stage** of the procurement cycle under **DAP 2020** — it is not a signed contract, and conversion typically takes years.

Concept: The **DAC** is the apex decision-making body of the Ministry of Defence for capital acquisition, constituted in **2001** on the recommendation of the **Group of Ministers** report after the **Kargil Review Committee**; it is chaired by the Raksha Mantri. **DAP 2020** ranks categories in descending order of indigenisation: **Buy (Indian-IDDM)**, Buy (Indian), Buy and Make (Indian), Buy (Global - Manufacture in India), Buy (Global). **IDDM** = Indigenously Designed, Developed and Manufactured. **CBRN** defence links to the **Chemical Weapons Convention, 1993 (OPCW, The Hague)** and the **Biological Weapons Convention, 1972**.

SCI-TECH India becomes the 26th country in the 6G 'Call to Action' on secure networks

- The Call to Action was launched in **July 2026** by the **National Telecommunications and Information Administration (NTIA)**, US Department of Commerce; signatories include the **UK, Germany and Japan**.
- India's accession was announced around a meeting between US Commerce Secretary **Howard Lutnick** and Minister of State for Commerce & Industry **Jitin Prasada** at **Chapel Hill, North Carolina**, on the sidelines of the **G20 Innovation Ministerial**.
- The US framing traces to a **December 2025 Presidential Memorandum**, 'Winning the 6G Race', designating 6G as foundational to national security.
- **6G is expected to begin displacing 5G in the 2030s**, using **terahertz-band spectrum**, sub-millisecond latency and AI-native air interfaces.
- India's own track: the **Bharat 6G Vision document was released on 22 March 2023**, with the **Bharat 6G Alliance** and a goal of becoming a **global 6G hub by 2030**.

Concept: Global mobile standardisation runs through **3GPP** and the **ITU-R IMT-2030** framework; the **ITU**, headquartered in **Geneva** and founded in **1865**, is the oldest UN specialised agency. India's telecom standards body **TSDSI** earlier piloted the indigenous **5Gi / Low Mobility Large Cell** standard. Domestic law and institutions: the **Telecommunications Act, 2023** and **C-DOT**.

ENVIRONMENT NITI Aayog launches PACT and ZET Marketplace to electrify road freight

- **PACT** aggregates fragmented freight demand along identified corridors and converts it into deployable e-truck projects; the **ZET Marketplace** matches OEMs, fleet operators, charge point operators, financiers and technology providers.
- **Heavy trucks are only 3-4% of India's vehicle fleet but generate over one-third of transport-sector CO2**; about **70% of India's freight moves by road**.
- **E-freight vehicle deployments rose from 201 units in FY25 to 826 in FY26** — more than fourfold; only about **800 heavy-duty electric trucks were sold in 2025**.
- Barriers flagged: **fragmentation of logistics operators, high cost of financing and the absence of corridor-based charging plans**; remedies proposed include **blended finance and leasing models**.
- **e-FAST India** — the Electric Freight Accelerator for Sustainable Transport — was launched by NITI Aayog on **8 September 2022** as India's first national electric-freight platform. **PACT and ZET are coordination platforms, not subsidy schemes.**

Concept: The programme serves India's updated **Nationally Determined Contributions** under the **Paris Agreement** — cutting the **emissions intensity of GDP by 45% from 2005 levels by 2030**, reaching **50% of installed power capacity from non-fossil sources by 2030**, and **net zero by 2070**, announced as **Panchamrit** at **COP26, Glasgow (2021)** alongside the **LiFE** mission. It also links to the **National Logistics Policy, 2022** and **PM GatiShakti**. **NITI Aayog** was constituted on **1 January 2015**, replacing the Planning Commission, with the Prime Minister as ex-officio Chairperson.

ECONOMY $1 billion IFC facility routed through SIDBI for long-tenure MSME credit

- **$500 million has been extended from IFC's own account** to SIDBI; the balance **$500 million will be syndicated** through SIDBI's lender consortium.
- **Tenure of up to 7 years with a moratorium**, aimed at machinery purchase, modernisation, expansion and project finance rather than working capital.
- The dollar facility has been **swapped into rupees through the RBI's special swap window**, insulating SIDBI and borrowers from currency risk.
- Target sectors: **auto components, engineering goods, electronics, textiles, food processing and logistics**, with emphasis on **micro enterprises and first-time borrowers**.
- **SIDBI** was established under the **SIDBI Act, 1989** (operational **2 April 1990**), is headquartered at **Lucknow**, and will both lend directly and **refinance MSME loans through NBFCs**.

Concept: **IFC** is the private-sector arm of the **World Bank Group** (established **1956**); the Group's five institutions are **IBRD, IDA, IFC, MIGA and ICSID**. **MSME classification** (effective **1 April 2025**): **Micro** — investment up to **₹2.5 crore** and turnover up to **₹10 crore**; **Small** — up to **₹25 crore** and **₹100 crore**; **Medium** — up to **₹125 crore** and **₹500 crore**. Related instruments: **CGTMSE**, **PMEGP**, **RAMP**, **Udyam Registration** and **TReDS**.

IR New Delhi readies the 18th BRICS Summit; India's bloc trade is an import story

- This is **India's fourth BRICS chairship** (after **2012, 2016 and 2021**); India hosted **over 350 meetings in 25+ cities** through the chairship year.
- BRICS now has **11 full members** — Brazil, Russia, India, China, South Africa, **Egypt, Ethiopia, Iran, the UAE, Saudi Arabia and Indonesia** — together about **45% of world population** and **30% of global nominal GDP**.
- In **FY26 BRICS members supplied about 42% of India's merchandise imports but took only 22% of its exports**: imports **$321.8 billion** against exports **$95.7 billion**, a **deficit of $226.1 billion**.
- That is roughly **68% of India's entire merchandise trade deficit**. Country-wise: **China -$112.2 billion**, **Russia -$50.9 billion**, **UAE -$26.5 billion** — together **84% of the BRICS deficit**.
- India ran a **trade surplus with only three BRICS members — Egypt, Ethiopia and Iran**. A curtain-raiser **BRICS Chief Justices' Forum** was held in New Delhi on **4-6 September 2026**.

Concept: The term **BRIC** was coined by **Jim O'Neill (2001)**; the first standalone summit was at **Yekaterinburg in 2009**, with **South Africa joining in 2010**. Expansion took effect from **1 January 2024**. Institutions: the **New Development Bank (NDB)**, headquartered at **Shanghai**, agreed at the **Fortaleza Summit (2014)** with first President **K.V. Kamath**, and the **Contingent Reserve Arrangement (CRA)**, a **$100 billion** currency-swap safety net. Chairship rotates alphabetically.

DEFENCE India-Japan air exercise Veer Guardian 2026 opens at Jodhpur today

- The **first edition was held in Japan at Hyakuri Air Base in January 2023**; this is the **first time the exercise is hosted in India**.
- The JASDF contingent has **three F-2A fighter aircraft** from the **8th Air Wing, Tsuiki Air Base**, with about **110 personnel**, ferried by **two C-2 transport aircraft**.
- Focus areas: **air combat manoeuvring, tactical proficiency, interoperability and operational coordination**.
- Wider track: agreement in principle on the **UNICORN (Unified Complex Radio Antenna)** stealth mast for warships, to be co-developed with **Bharat Electronics Limited**, and Japan's relaxation of **defence export restrictions**.
- Other India-Japan exercises: **Dharma Guardian** (Army), **JIMEX** (Navy) and **Malabar** (with the US and Australia). A **2+2 Foreign and Defence Ministerial Dialogue** is expected by end-2026.

Concept: India-Japan ties are a **'Special Strategic and Global Partnership'** (elevated **2014**). Enabling agreements include the **Acquisition and Cross-Servicing Agreement (ACSA), 2020** for reciprocal logistics and the **2+2 dialogue** format (first held **2019**). Both are **QUAD** members (revived **2017**, at leaders' level since **2021**) and partners in the **Supply Chain Resilience Initiative** with Australia. The **Free and Open Indo-Pacific** concept traces to Shinzo Abe's **2007 'Confluence of the Two Seas'** address to the Indian Parliament.

POLITY Supreme Court bars appointment of teachers without prescribed qualifications

- The case is **Rajesh Chauhan and Another v. Union of India, W.P.(C) No. 1102/2026**.
- The direction covers **both fresh appointments and the continuation** of serving teachers who lack the mandated qualifications, in **schools and higher education institutions alike**.
- The underlying petition challenges the constitutional validity of statutory **'provincialisation' schemes** that allow teachers and institutional employees to enter substantive government service **without open, competitive recruitment**.
- Minimum teacher qualifications are laid down by the **academic authority — the NCTE — under Section 23 of the RTE Act, 2009**.
- The same bench separately backed the idea of a **National Legal Education Commission**, observing that legal education needs an expert body, in a petition seeking a **four-year LL.B** in line with **NEP 2020**.

Concept: **Article 21A**, inserted by the **86th Constitutional Amendment Act, 2002**, makes free and compulsory education for children aged **6 to 14** a fundamental right; **Article 45** now covers **early childhood care and education below six**, and **Article 51A(k)** places a corresponding duty on parents. On back-door regularisation the leading authority is **Secretary, State of Karnataka v. Umadevi (2006)**. Institutions: **NCTE Act, 1993** and **UGC Act, 1956**.

ENVIRONMENT Supreme Court holds Aravalli panel to its 30 November delineation deadline

- The committee was **constituted by the Supreme Court on 25 May 2026**; a compliance report was filed on **31 August 2026** and the next hearing is on **2 December 2026**.
- The exercise covers **64 districts across Gujarat, Rajasthan and Haryana**.
- The definition must encompass **geological features, watershed systems, forests, biodiversity, sacred groves, archaeological sites and traditional pasture lands (orans)**.
- Mining-linked harms under review include **silicosis**, dust-washing operations, stone crushing and water-intensive activity in a water-scarce belt.
- Citizens' groups warn that only about **two months** remain between report submission and the deadline — too little for scientific review and consultation across the affected districts.

Concept: The **Aravallis are the world's oldest fold mountain range** (Proterozoic), running about **692 km** from Delhi to Gujarat; the highest peak is **Guru Shikhar (1,722 m)** at Mount Abu. They act as a barrier to the eastward spread of the **Thar Desert** and recharge NCR aquifers. Legal architecture: the **Aravalli Notification, 1992** under the **Environment (Protection) Act, 1986**; the **Forest (Conservation) Act, 1980**; and the **T.N. Godavarman (1996)** 'dictionary meaning' test for forest. India hosted **UNCCD COP14 in 2019** and pledged to restore **26 million hectares of degraded land by 2030**.

Thursday, 10 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-10.html

ECONOMY Brent crude tops $100 a barrel as West Asia tensions bite

- **Brent November futures at $101.55 a barrel**; **WTI at $96.44**; the **Indian basket touched $108.91 a barrel** on **8 September 2026**.
- Estimated oil marketing company under-recovery: **₹5 a litre on petrol**, **₹23 a litre on diesel** and **₹200 a cylinder on LPG**.
- India's diesel exports ran at about **1,20,000 barrels a day** in **August 2026**.
- The rupee weakened **25 paise to 95.33 against the US dollar** in early trade on **10 September**, adding to the import bill.
- The **Indian basket** is a trade-weighted average of **Oman, Dubai (sour)** and **Brent (sweet)** crude — the benchmark used for domestic pricing.

Concept: **Under-recovery** is the gap between the cost of supplying a fuel and the price at which it is actually sold — distinct from a **subsidy**, which is a budgeted transfer. Higher crude widens the **Current Account Deficit (CAD)** and feeds **imported inflation** through the **WPI** fuel-and-power group.

ECONOMY Equity mutual fund inflows jump 19% to a four-month high in August

- **Equity net inflow ₹29,328.62 crore in August 2026**, up about **19%** from **₹24,697 crore in July** — the highest in **four months**.
- **Industry assets under management reached ₹87.07 lakh crore** at end-August, up over **1%** month on month; total industry net inflow was **₹41,353 crore**.
- **Debt funds saw an outflow of ₹8,127 crore**, against an inflow of about **₹1.88 lakh crore in July**.
- Category leaders: **smallcap ₹7,973 crore**, **midcap ₹6,989 crore**, **flexicap ₹5,059 crore**; **large-cap saw an outflow of ₹1,147 crore**.
- **Net SIP inflows crossed a record ₹2 lakh crore in FY26**, the anchor of retail participation.

Concept: A **mutual fund** pools savings into a professionally managed portfolio regulated by **SEBI** under the **SEBI (Mutual Funds) Regulations, 1996**. **AUM** measures the total market value managed; a **Systematic Investment Plan (SIP)** enforces rupee-cost averaging. Rising domestic institutional flows reduce the market's dependence on **FPI** money.

SCI-TECH ORV Sagar Manthan launched — India's first advanced indigenous ocean research vessel

- Built by **Garden Reach Shipbuilders and Engineers (GRSE), Kolkata** at a cost of about **₹840 crore** for the **Ministry of Earth Sciences**.
- **Designed service life of 30 years**; **commissioning expected in 2028**.
- Timeline: contract **July 2024**, first steel cut **29 November 2024**, **keel laid 8 April 2026**.
- Capabilities include **dynamic positioning**, **multibeam bathymetry**, **multichannel seismic survey**, **sub-bottom profiling** and **ROV/AUV deployment**.
- Supports the **Deep Ocean Mission**, approved with an outlay of about **₹4,077 crore**, which also covers the manned submersible **Matsya-6000**.

Concept: The **blue economy** is the sustainable use of ocean resources for growth, livelihoods and ocean-ecosystem health. India's **Exclusive Economic Zone** extends **200 nautical miles** under **UNCLOS 1982**, and polymetallic-nodule exploration in the **Central Indian Ocean Basin** is licensed by the **International Seabed Authority**.

DEFENCE **India and Sri Lanka sign three defence pacts on a landmark Colombo visit**

- The three MoUs cover **upgradation of L70 anti-aircraft guns**, **NCC-to-NCC youth exchange**, and **National Defence College academic collaboration**.
- The **L70** is a **40 mm** air-defence gun licence-manufactured in India; India gifted **24 guns between 2000 and 2006**, of which **18 have been serviced**.
- Upgrades will be carried out by **Bharat Electronics Limited (BEL)** under **Government of India grant funding**.
- India has committed about **₹3,750 crore** in reconstruction aid after **Cyclone Ditwah**; **three Bailey bridges** were inaugurated virtually.
- The visit followed the **Defence Acquisition Council clearing about ₹1.10 lakh crore** in proposals on **7 September 2026**, with roughly **98% sourced from Indian industry**.

Concept: India's **Neighbourhood First** policy and its self-description as a **net security provider and first responder in the Indian Ocean Region** frame this engagement. Sri Lanka sits astride the **Indian Ocean sea lanes of communication**, making its strategic alignment central to India's maritime security calculus.

ENVIRONMENT **Open waste burning in Indian cities runs about three times higher in winter**

- Burning incidents are **about three times higher in winter than in summer** across all city tiers.
- Winter incidence ranges from **39.4 to 49.6 incidents per sq km per day**; it reaches about **84 incidents per sq km per day** in **low-income areas of tier-2 cities**.
- **Tier-2 cities** burn about **20.9 tonnes a day in summer**, rising to **41 tonnes a day in winter**.
- Per-capita waste burned each year: **6.9 kg in tier-3**, **4 kg in tier-2** and **0.63 kg in tier-1** cities.
- Annual per-capita **PM2.5** from open waste burning: **0.09 kg (tier-3)**, **0.05 kg (tier-2)**, **0.008 kg (tier-1)**; **plastics and paper form about one quarter** of the burned material.

Concept: The **National Clean Air Programme (NCAP)**, launched in **2019**, targets particulate reduction in **non-attainment cities** — cities that failed the **National Ambient Air Quality Standards** for five consecutive years. **PM2.5** is particulate matter of diameter **2.5 micrometres or less**, small enough to enter the bloodstream through the alveoli.

ENVIRONMENT UK recognises India's Carbon Credit Trading Scheme under its CBAM

- The **UK CBAM begins in 2027** and covers **steel, aluminium, fertilisers and cement**.
- India's **CCTS** operates through **Carbon Credit Certificates** issued to obligated entities against emission-intensity targets.
- Implementation of the CCTS is financed by the **Bureau of Energy Efficiency** through fees levied on **obligated entities**.
- Relief is **not automatic** — exporters must furnish documentation and verification of the carbon price already paid in India.
- The move follows the **India-UK Comprehensive Economic and Trade Agreement**, and is the first such recognition of India's carbon market by a CBAM jurisdiction.

Concept: A **Carbon Border Adjustment Mechanism** charges imports for their embedded carbon so that domestic producers facing a carbon price are not undercut — the stated aim is to prevent **carbon leakage**. Developing countries argue it conflicts with **Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)** under the **UNFCCC** and the **Paris Agreement**.

POLITY Home Ministry proposes a new Article 371(K) for Ladakh

- **Article 371 currently runs from clause A to clause J and covers 12 States**; a clause **K** for a Union Territory would be a first.
- Proposed legislative competence covers **land, culture, language, forest, environment and natural resources**, to operate **concurrently with regulations made under Article 240**.
- The model is drawn from **Article 371A (Nagaland)** and **Article 371G (Mizoram)**, which protect customary law and land ownership.
- The Ladakh administration described it as a **sui generis model**; LAB representatives objected that **no draft text** was shared at the meeting.
- Background: the **24 September 2025 Leh violence** in which **four people died** in police firing, with about **80 criminal cases** still pending.

Concept: **Article 371 and its clauses** are **special provisions** — not exceptions to the Constitution but constitutionally sanctioned asymmetry, upheld as part of India's **asymmetric federalism**. **Article 240** empowers the **President** to make regulations for certain Union Territories, including **Ladakh** after the **Jammu and Kashmir Reorganisation Act, 2019**.

POLITY Supreme Court: removing the marital rape exception is for the legislature

- The matter is before a bench of the **Chief Justice of India** and **Justice Joymalya Bagchi**.
- **Exception 2 to Section 375 of the Indian Penal Code** exempted non-consensual intercourse by a husband where the wife was **aged 15 or above**.
- **Section 63 of the Bharatiya Nyaya Sanhita** retains the exception but raises the threshold to **18 years**.
- The **Justice J.S. Verma Committee (2013)**, set up after the December 2012 Delhi case, had recommended **removal of the exception**.
- The petitioner wife was represented by **Senior Advocate Indira Jaising**; the Union was represented by the **Solicitor General**.

Concept: **Judicial restraint** holds that courts should not enter the legislature's policy domain, especially in defining crimes — a corollary of the **separation of powers** in the **basic structure doctrine**. Against it stands the argument that the exception violates **Article 14 (equality)** and **Article 21 (dignity and bodily autonomy)**.

IR India readies the 18th BRICS Summit at Bharat Mandapam

- **BRICS now has 10 members**: **Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran and the UAE**.
- The four summit pillars are **Resilience, Innovation, Cooperation and Sustainability**; over **350 meetings** were held during India's year-long chairship.
- The bloc accounts for about **27% of world output**, **24-25% of global merchandise exports** and **22% of FDI inflows**.
- The **New Development Bank**, headquartered in **Shanghai**, has approved over **$40 billion** in financing since inception.
- Day one holds a closed session on **Inclusive Global Governance and Strengthening Multilateralism**; day two opens to **partner and outreach countries**.

> **Concept: BRICS** is a plurilateral grouping without a treaty or permanent secretariat, chaired on rotation. Its financial architecture rests on the **New Development Bank** and the **Contingent Reserve Arrangement**. For India it is an instrument of **multi-alignment** — engaging the Global South while retaining Western partnerships.

HEALTH India reports a 177% rise in MBBS seats to the WHO South-East Asia Regional Committee

- **Medical colleges rose from 387 to 858**, an increase of **121.71%**.
- **MBBS seats rose from 51,348 to 1,42,464**, an increase of **177.45%**.
- **Postgraduate seats rose from 31,185 to 86,287**, an increase of **176.69%**.
- Targets announced: **10,000 additional PG seats by 2028-29**, **157 new nursing colleges** adding about **15,700 nursing graduates a year**, and **1,00,000 allied healthcare professionals over five years**.
- Digital health enablers cited were **eSanjeevani** teleconsultation and **ABHA**-linked health records.

> **Concept:** The **WHO** works through **six regional offices**; India belongs to the **South-East Asia Region (SEARO)**, headquartered in **New Delhi**. Each region's **Regional Committee** is its governing body and meets annually. Medical education in India is regulated by the **National Medical Commission**, which replaced the **Medical Council of India** in **2020**.

Friday, 11 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-11.html

ECONOMY Centre Notifies Consumer Protection (E-Commerce) Amendment Rules, 2026

- Notified **10 September 2026**; effective **1 January 2027**; amends the **Consumer Protection (E-Commerce) Rules, 2020** framed under the **Consumer Protection Act, 2019**.
- Any discount claim must disclose the **lowest price at which the item was offered in the preceding 30 days** (prior price disclosure).
- **Sponsored or paid listings** must be clearly and prominently labelled; manipulation of search results that reduces relevance to the consumer's query is barred.
- Platforms must comply with the **2023 Dark Patterns Guidelines**, conduct an **annual self-audit** and display a **compliance certificate**; **bundled charges** for unrelated services are prohibited.
- **Explicit consent** is mandatory before using consumer personal data; integration with the **National Consumer Helpline** is compulsory.
- The **National Consumer Helpline** logged **17,71,622 grievances in 2025**, of which about **29%** concerned e-commerce.

Concept: Dark patterns are deceptive interface designs — false urgency, basket sneaking, drip pricing, confirm-shaming, subscription traps — that push consumers into unintended choices. The **Central Consumer Protection Authority (CCPA)**, created under **Section 10** of the Consumer Protection Act, 2019, regulates unfair trade practices and misleading advertisements.

ECONOMY PM Matsya Sampada Yojana Completes Six Years; Fish Output at 197.75 Lakh Tonnes

- Launched in **September 2020** with a total outlay of **₹20,750 crore**; the **2026-27 allocation is ₹2,500 crore**.
- Fish production rose from **141.64 lakh tonnes (2019-20)** to **197.75 lakh tonnes (2024-25)**.
- Seafood exports climbed from **₹46,663 crore** to **₹73,890 crore** over the same period.
- About **58 lakh** people supported with employment; **2,195 Fish Farmer Producer Organisations (FFPOs)** formed.
- The **National Fisheries Digital Platform** crossed **37 lakh registrations** as on **8 September 2026**.
- Sub-scheme **PM-MKSSY** drives formalisation and institutional credit; **100 climate-resilient coastal villages** identified; **Biofloc** and **Recirculatory Aquaculture Systems (RAS)** promoted.

Concept: Blue Economy = sustainable use of ocean resources for growth, livelihoods and ocean health. India is the world's **second-largest fish producer**; the sector aligns with **SDG-14 (Life Below Water)**. **Biofloc** recycles waste nitrogen into microbial protein; **RAS** reuses water in closed tanks.

DEFENCE DAC Clears ₹1.10 Lakh Crore Acquisitions; 98% to Come From Indian Industry

- Total AoN value about **₹1.10 lakh crore**; roughly **98% of the procurement** is to be sourced from **Indian industry**.
- **Army**: **CBRN reconnaissance vehicles**, High Mobility Vehicles, Self-Propelled Mechanical Mine Layers, **Advanced Light Helicopter (Dhruv)**, Trawl Tanks and **Sarvatra Bridge Systems**.
- **Navy**: **Arudhra radars** and **marine gas turbines** for warship propulsion.
- **Air Force**: fighter and transport aircraft enhancements, **Ground-Based Multi-Purpose Jammers** and **DEFSAC** secure access cards.
- **AoN** is in-principle administrative approval — the first formal step, preceding the Request for Proposal and contract negotiation stages.

Concept: The **DAC** is the apex body for capital acquisitions in the Ministry of Defence, chaired by the Defence Minister. Procurement follows the **Defence Acquisition Procedure (DAP), 2020**, whose most preferred category is **Buy (Indian-IDDM)** — Indigenously Designed, Developed and Manufactured. **CBRN** stands for Chemical, Biological, Radiological and Nuclear.

SCI-TECH CosmoCube: A Suitcase-Sized Lunar Radio Telescope to Listen to the Cosmic Dark Ages

- Target: the **21-cm (1420 MHz) hydrogen line** emitted more than **13.5 billion years** ago, before the first stars lit up.
- The Moon's **far side** is the quietest radio location in near-Earth space because the lunar body blocks terrestrial transmissions.
- The spacecraft would get roughly **40 minutes of shielding in each 2-hour orbit**.
- Proposed mission life of about **two years**, yielding an estimated **1,000 hours** of usable data; launch is projected to be about **five years** away.
- Payload is **CubeSat-class** — low cost, low mass, standardised — making deep-space radio cosmology affordable.

Concept: The **cosmic dark ages** is the era after recombination and before the first stars, when the universe held mostly neutral hydrogen. The **21-cm line** arises from the hyperfine 'spin-flip' transition of neutral hydrogen and is redshifted to low radio frequencies — the only practical probe of that era.

SCI-TECH Mercury Has Shrunk About 23 km — 30% More Than Earlier Estimates

- Diameter contraction of about **23 km (≈14 miles)** over roughly **4.5 billion years**.
- Cause: cooling and contraction of Mercury's **disproportionately large iron core**, which occupies about **85%** of the planet's radius.
- Evidence comes from **lobate scarps** — cliff-like thrust faults created as the crust crumpled over the shrinking interior.
- Earlier data came from **Mariner 10** (1970s) and **MESSENGER** (2010s); the **ESA-JAXA BepiColombo** mission is to enter Mercury orbit in **November 2026**.
- Mercury is the **smallest planet**, closest to the Sun, has only a thin **exosphere** and a weak global magnetic field.

Concept: **Lobate scarps** are compressional thrust-fault landforms unique in scale to Mercury, formed by **global contraction** as the interior cools. Contrast with Earth's **plate tectonics**: Mercury is a **one-plate (stagnant-lid) planet**.

ENVIRONMENT Aravalli Green Wall in Focus as Land Degradation Debate Sharpens

- Launched on **21 March 2023** (**International Day of Forests**) by the Union Environment Ministry.
- Envisages a green belt **1,400 km long and 5 km wide**, running broadly from **Porbandar to Panipat**.
- Covers four states/UT — **Gujarat, Rajasthan, Haryana and Delhi**.
- First-phase target includes rejuvenation of **75 water bodies**, at **five per district** in the Aravalli landscape.
- Modelled on Africa's **Great Green Wall** — about **8,000 km** across **11 Sahel countries**, aiming to restore **100 million hectares**.
- Space-agency mapping shows about **97.85 million hectares — 29.7%** of India's geographical area — under degradation (2018-19).

> **Concept: Desertification** is land degradation in arid, semi-arid and dry sub-humid areas. The **UNCCD** (1994) is the parent convention; **Land Degradation Neutrality (LDN)** is SDG target **15.3**. India has pledged to restore **26 million hectares** of degraded land by **2030** under the **Bonn Challenge**.

ENVIRONMENT Dwarf Lilyturf Recorded in India for the First Time, From Arunachal Pradesh

- Species: **Ophiopogon japonicus**, family **Asparagaceae**; common names dwarf lilyturf, mondo grass.
- Recorded at about **2,185 metres** elevation in **West Kameng district, Arunachal Pradesh**.
- Native range so far known: **China, Japan, Korea and Nepal** — India is a new distribution record.
- Its tuberous roots, called **Maidong**, are used in traditional East Asian medicine for anti-inflammatory properties.
- The find reinforces the **Eastern Himalaya** as one of the world's biodiversity hotspots and an under-surveyed floristic region.

> **Concept:** A **new record** means a species already known to science is reported from a new geography; a **new species** is one described for the first time. India hosts **four biodiversity hotspots**: the **Himalaya**, **Indo-Burma**, **Western Ghats-Sri Lanka** and **Sundaland (Nicobar Islands)**.

IR New Delhi Hosts the 18th BRICS Summit on 12-13 September; India Chairs for the Fourth Time

- **18th BRICS Summit**, **Bharat Mandapam, New Delhi**, **12-13 September 2026**; theme '**Building for Resilience, Innovation, Cooperation and Sustainability**'.
- India assumed the rotating chairship on **1 January 2026** — its **fourth** time, after **2012, 2016 and 2021**; over **350 meetings** were held through the year.
- **Eleven full members**: Brazil, Russia, India, China, South Africa, **Egypt, Ethiopia, Iran, Saudi Arabia, UAE and Indonesia**; plus **ten partner countries** added in 2025.
- The bloc accounts for about **49.5% of world population**, **40% of global GDP** and **26% of global trade**.
- Four pillars: **Resilience** (health, food and energy security, disaster management), **Innovation** (startups, MSMEs, digital public infrastructure, AI), **Cooperation** (reformed multilateralism) and **Sustainability** (clean energy, climate adaptation).
- New chairship initiatives include **BRICS AGRIN** (agricultural inputs network), **BRICS CONNECT** (employment and skills), an MSME cooperation portal, a startup innovation fund and a **Global Value Chains Action Plan (2026-2030)**.

Concept: The acronym **BRIC** was coined in **2001** by economist Jim O'Neill; the first leaders' summit was held in **2009 at Yekaterinburg**, and **South Africa** joined in **2010**. Institutional arms: the **New Development Bank (2014, headquartered in Shanghai)** and the **Contingent Reserve Arrangement (CRA)**, a currency-swap safety net. BRICS is a key platform for **Global South** representation and reform of the UN Security Council, IMF and World Bank.

POLITY MHA Proposes a New 'Chapter K' Under Article 371 for Ladakh

- Proposal tabled at the **9 September 2026** round of Centre-Ladakh talks; envisages a **directly elected legislative body**.
- Proposed subjects for the body: **land, culture, language, forests, environment and natural resources** — matters otherwise handled for UTs under **Article 240**.
- Ladakh has been a **Union Territory without a legislature** since **31 October 2019**, following the reorganisation of Jammu and Kashmir.
- Present governance runs through two hill councils — **LAHDC Leh and LAHDC Kargil** — whose powers are limited.
- The **National Commission for Scheduled Tribes** had earlier recommended extending the **Sixth Schedule** to Ladakh.
- Applying an **Article 371-type protection to a Union Territory** would be a constitutional departure, since such provisions have so far applied to states.

Concept: **Articles 371 to 371-J** carry special provisions for states such as Maharashtra, Gujarat, Nagaland, Assam, Manipur, Sikkim, Mizoram, Arunachal Pradesh, Goa, Karnataka and Andhra Pradesh — an example of **asymmetric federalism**. The **Sixth Schedule (Articles 244(2) and 275(1))** provides **Autonomous District Councils** in tribal areas of **Assam, Meghalaya, Tripura and Mizoram**.

POLITY Tribal Affairs Ministry: 'No Provision' in Forest Rights Act for Gram Sabha Consent at Stage-II

- Memorandum dated **31 August 2026** holds that Gram Sabha consent is not statutorily required at **Stage-II forest clearance**.
- About **3,05,945 hectares** of forest land were approved for non-forest use between **2008-09 and 2022-23**.
- A **2009 circular** of the environment ministry had made Gram Sabha consent and FRA settlement a precondition for diversion.
- **Section 4(5)** of the FRA bars eviction of forest dwellers until the process of recognition and verification of rights is complete.
- The Supreme Court's **Niyamgiri judgment (2013)** upheld the authority of Gram Sabhas to decide on the religious and cultural rights of forest dwellers — the basis of the **free, prior and informed consent** principle.
- Forest clearance under the **Forest (Conservation) Act, 1980** runs in two stages — **in-principle (Stage-I)** and **final (Stage-II)**.

Concept: The **Forest Rights Act, 2006** recognises **Individual Forest Rights (IFR)**, **Community Rights (CR)** and **Community Forest Resource (CFR)** rights, seeking to undo the **'historical injustice'** to forest-dwelling Scheduled Tribes and **Other Traditional Forest Dwellers**. The **Gram Sabha** is the authority that initiates the determination of rights. **PESA, 1996** extends Panchayat provisions to Fifth Schedule areas.

POLITY Six Gujarat-Based Unrecognised Parties Reported ₹1,700 Crore in Donations in 2023-24

- Six **Gujarat-based RUPPs** reported roughly **₹1,700 crore** in donations for **2023-24**.
- RUPPs are registered with the Election Commission under **Section 29A of the Representation of the People Act, 1951**, but have not met the vote/seat thresholds for recognition.
- They enjoy **income-tax exemption under Section 13A** of the Income Tax Act, subject to filing contribution reports.
- **Section 29C** of the RPA requires parties to report contributions above **₹20,000**.
- Recognition as a **national or state party** is governed by the **Election Symbols (Reservation and Allotment) Order, 1968**.
- The Election Commission has been **delisting dormant RUPPs** that neither contest elections nor file mandatory returns.

Concept: A **Registered Unrecognised Political Party** is one registered with the ECI but lacking recognised national or state status, and hence without a **reserved symbol**. The **Election Commission of India** is a constitutional body under **Article 324**; political funding transparency has been debated through the **Law Commission's 255th Report** and the Supreme Court's **2024 electoral bonds verdict**.

HEALTH 9th Rashtriya Poshan Maah Under Way as Protein Myths Draw Expert Pushback

- **9th Rashtriya Poshan Maah**, **1-30 September 2026**, run by the **Ministry of Women and Child Development** under **Mission Poshan 2.0**.
- **National Nutrition Week** was observed from **1 to 7 September**.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**, launched on **1 January 2017**, marks a decade of operation.
- **ICMR-NIN** recommends about **0.83 g of protein per kg of body weight per day** — roughly **50 g** for a 60-kg adult.
- Experts note that a mixed plant-based diet supplies all **nine essential amino acids**, and that supplements are unnecessary for healthy adults.
- The concern flagged is **social media substituting professional dietary guidance**, especially among young adults.

> **Concept: POSHAN Abhiyaan** was launched in **2018** to reduce stunting, undernutrition, anaemia and low birth weight; it was merged into **Mission Poshan 2.0**. India faces a **double burden of malnutrition** — undernutrition alongside rising obesity. Key **NFHS-5** markers: stunting **35.5%**, wasting **19.3%**, underweight **32.1%** among under-fives.

Saturday, 12 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-12.html

SCI-TECH ISRO hot-tests CE20 cryogenic engine at uprated 220 kN thrust

- Test conducted at the **ISRO Propulsion Complex, Mahendragiri (Tamil Nadu)**; engine qualified for the new **C32 cryogenic upper stage**.
- **CE20** is India's first indigenously designed cryogenic engine using the **gas-generator cycle**; propellants are **liquid hydrogen (LH2) + liquid oxygen (LOX)**.
- Thrust raised in stages: **19 tonne (186 kN) to 20 tonne (196 kN) to 22 tonne (220 kN)**.
- Uprating lifts **LVM3** payload to **Geosynchronous Transfer Orbit (GTO)** beyond the current **~4 tonne** class.
- Feeds directly into the **Gaganyaan** human spaceflight programme and future commercial heavy launches.

> **Concept: Cryogenic engines** burn propellants stored below **-183 degC (LOX)** and **-253 degC (LH2)**, giving the highest **specific impulse (Isp)** of any chemical engine - critical for upper stages. Only a handful of nations master this technology.

REPORT Record forex, weak citations: India's research volume-impact paradox

- India produced about **1.6 million internationally indexed research papers (2020-2025)**, ranking **3rd in the world** by volume.
- Aggregate **h-index of 925** places India **19th globally**, against the **United States' 3,213**.
- University patent filings jumped from **11,150 (2020-21)** to **45,776 (2024-25)**, but the **grant rate is only about 3%**.
- **Commercial working rate** of granted patents collapsed from **12.1% (2022-23)** to **1.6% (2024-25)**.
- India is **3rd in retractions** (rate doubled to **3.5 per 1,000 papers**); **NIRF** gives about **30% weightage** to volume.

Concept: h-index: a researcher/nation has index h if h papers have at least h citations each. **Working of a patent** (Section 146, Patents Act, 1970) requires patentees to file **Form 27** annually on commercial use - a key indicator of innovation actually reaching markets.

ECONOMY Centre tightens e-commerce rules: prior price, dark-pattern audits

- Notified on **10 September 2026**; comes into force from **1 January 2027**.
- Platforms must show a **'prior price'** - defined as the **lowest price offered in the preceding 30 days** - alongside any discount claim.
- **Sponsored listings** must be clearly labelled and separated from organic results; search rankings cannot be manipulated to reduce relevance.
- Mandatory **annual self-audit** for compliance with the **Dark Patterns Guidelines, 2023**, plus a published compliance certificate.
- **National Consumer Helpline** logged about **5,11,196 e-commerce complaints in 2025 - roughly 29%** of all complaints.

Concept: Dark patterns are deceptive interface designs (false urgency, basket sneaking, drip pricing, confirm-shaming) that nudge consumers into unintended choices. The **Central Consumer Protection Authority (CCPA)** is a statutory regulator under the **Consumer Protection Act, 2019**.

DEFENCE Exercise Yudh Abhyas 2026 underway across desert and Himalayan theatres

- Dates: **9 to 28 September 2026**; venues **Bikaner (Rajasthan)** and **Auli (Uttarakhand)**.
- **22nd edition**; the **2025 edition** was held in **Alaska, United States** - the exercise alternates between the two countries.
- Aligned to a **United Nations Chapter VII** peace-enforcement mandate, focusing on integrated battle groups and joint sub-conventional operations.
- Drills cover **desert mechanised warfare**, **high-altitude acclimatised operations**, drone and counter-drone action and combat medical care.
- Other India-US exercises: **Vajra Prahar**, **Tiger Triumph**, **Cope India** and **Malabar**.

Concept: Interoperability is the ability of forces of different nations to operate together using common procedures, communications and logistics. **Chapter VII** of the UN Charter permits the Security Council to authorise the use of force to restore international peace.

ENVIRONMENT State of India's Environment 2026: extreme weather on 99% of days

- Extreme weather on **99% of days in 2025**, causing **4,419 deaths** and damaging **17.41 million hectares** of crop area.
- At least **43 people were killed in tiger attacks** near reserves between **January and June 2025**, linked to habitat saturation and prey decline.
- Only about **15% of India's population (around 200 million)** lives near a functioning **air-quality monitoring station**; over **1.2 billion** live in effectively unmonitored zones.
- Report flags **encroached floodplains** and inadequate urban drainage as multipliers of flood risk under intensifying rainfall.
- Recommends a shift from **post-disaster relief** to **climate-resilient planning** and **nature-based solutions** such as wetland restoration.

Concept: Extreme weather event: a weather occurrence rare for a place and time of year, usually above the 90th/below the 10th percentile. **Nature-based Solutions (NbS)**: actions to protect and restore ecosystems that simultaneously deliver human well-being and biodiversity benefits.

ECONOMY Odisha signs Rs 2.10 lakh crore project MoUs across 14 projects

- Partners: the **Adani Group** and Abu Dhabi's **International Holding Company (IHC)**; total indicative outlay **Rs 2,10,500 crore**.
- Largest components: an **AI Data Centre Hub (Rs 50,000 crore)** and a **Coal-to-Chemicals Complex (Rs 40,000 crore)**.
- Portfolio spans **ports, renewable energy, metals and digital infrastructure**.
- Signals a shift of **hyperscale data-centre capacity** to eastern India, drawn by power availability and coastal cable landing access.
- MoUs are **indicative commitments**, not committed capital expenditure - conversion to ground investment is the real test.

Concept: Coal-to-chemicals converts coal into methanol, ammonia and olefins via gasification, reducing import dependence but raising **carbon intensity** unless paired with **carbon capture**. **Hyperscale data centre**: a facility above roughly 5,000 servers designed for elastic cloud/AI workloads.

IR 18th BRICS Summit opens in New Delhi under India's chairship

- Theme: '**Building for Resilience, Innovation, Cooperation and Sustainability**'; chaired by **Prime Minister Narendra Modi**.
- BRICS now has **11 full members** - BRICS plus **Egypt, Ethiopia, Iran, UAE, Indonesia and Saudi Arabia** - plus **partner countries**.
- Members account for about **49.5% of world population, 40% of global GDP and 26% of global trade**.
- The **New Delhi Declaration** is the principal outcome document; day two opens to partner countries on inclusive global growth.
- India assumed the chair on **1 January 2026**, succeeding **Brazil**; new cooperation platforms launched in **agriculture, health and MSMEs/startups**.

Concept: BRICS began as **BRIC (2006)**, with South Africa joining in **2010**. Institutions: the **New Development Bank (NDB, 2014, Shanghai)** and the **Contingent Reserve Arrangement (CRA, USD 100 billion)**. Decisions are by **consensus**; the chair rotates annually.

POLITY DILRMP 3.0 launched: Bhu-Aadhaar for every land parcel by 2031

- Implemented by the **Department of Land Resources, Ministry of Rural Development**; outlay about **Rs 565.50 crore** for **2026-2031**.
- **Bhu-Aadhaar** is a **14-digit Unique Land Parcel Identification Number (ULPIN)** to be assigned to every parcel.
- Components: **cadastral map georeferencing**, scaling of **NAKSHA** (urban survey), **paperless registration**, **Urban Property Cards** and integrated **revenue courts**.
- **100% centrally funded**, with **performance-linked fund releases** through the **Public Financial Management System (PFMS)**.
- Expected benefits: faster **collateral-backed agricultural credit**, fraud prevention and fewer land-title disputes.

Concept: India follows **presumptive titling** - registration records a transaction, not guaranteed ownership. **Conclusive titling** (Torrens system) guarantees title with state indemnity. **Cadastral maps** record parcel boundaries for revenue and ownership.

POLITY Unrecognised political parties: Rs 1,700 crore, no de-registration power

- Six **Gujarat-based RUPPs** reportedly received about **Rs 1,700 crore in FY 2023-24** while fielding only **15 candidates** in the **2024 Lok Sabha** elections.
- Over **2,800 RUPPs** are registered; only around **750** contested in 2024 - roughly **70% are electorally inactive**.
- Only about **26-27%** of RUPPs file their **annual audit reports** on time.
- Registration is under **Section 29A, Representation of the People Act, 1951**; **Section 80GGC, Income Tax Act** allows **100% deduction** on donations to parties.
- In **Indian National Congress vs Institute of Social Welfare (2002)**, the Supreme Court held the **ECI has no statutory power to de-register** a party except in narrow cases.

Concept: **Recognised party** (national/state) gets a **reserved symbol**, free broadcast time and more star campaigners under the **Election Symbols (Reservation and Allotment) Order, 1968**. **RUPPs** are registered under Section 29A but do not meet recognition thresholds.

Tuesday, 15 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-15.html

ECONOMY Centre bars all charges on UPI and RuPay debit card payments up to ₹2,000

- Issued under **Section 10A of the Payment and Settlement Systems Act, 2007**, which empowers the Centre to bar charges on prescribed electronic payment modes.
- The bar covers **UPI payments up to ₹2,000** and **all RuPay debit card** transactions; **person-to-person UPI stays free at every value**.
- **Zero MDR** has applied to UPI and RuPay since **1 January 2020**; banks and fintechs have carried the cost of running the rails since.
- UPI handled **24.51 billion transactions worth ₹29.82 trillion in August 2026**.
- **NPCI** must still fix the rate and the merchant categories; industry expects **25–30 basis points**, and only for larger merchants.

Concept: **MDR** is the fee a merchant pays its bank on a digital payment, shared between the acquiring bank, the issuing bank and the network. **Section 10A** was inserted by the **Finance (No. 2) Act, 2019**. **NPCI**, set up in **2008** under the **Payment and Settlement Systems Act, 2007**, is a **Section 8 not-for-profit company** and the umbrella body for retail payments.

SCI-TECH Telecom department's Financial Fraud Risk Indicator heads off ₹5,043 crore of suspected cyber fraud

- **FRI** was launched by the **Department of Telecommunications on 22 May 2025**; it labels a mobile number **Medium, High or Very High risk** in a fraction of a second when a payment starts.
- It runs on the **Digital Intelligence Platform (DIP)**, live since **2024**, linking **over 1,600 stakeholders** — telecom operators, banks and law-enforcement agencies.
- Suspected fraud prevented rose from **₹660 crore in the first six months** to **₹5,043.73 crore cumulatively by August 2026** — a roughly **7.6-fold** jump.
- **More than 1,500 banks and financial institutions** have been trained across 25-plus sessions.
- Inputs come from citizen reports on the **Sanchar Saathi** portal and the national cybercrime reporting system; the **RBI** has asked banks to integrate the tool.

Concept: **Sanchar Saathi** lets a citizen check the connections issued in their name and report suspected fraud communication; **Chakshu** is its reporting facility. Cybercrime complaints go to the national cybercrime reporting portal run under the **Indian Cyber Crime Coordination Centre (I4C)** of the **Ministry of Home Affairs**.

SCI-TECH Semicon 2.0 becomes formal policy as India's chip design base widens before SEMICON India 2026

- **Semicon 2.0** carries an outlay of **₹1.27 lakh crore**, succeeding the first phase of the **India Semiconductor Mission**.
- **281 Indian semiconductor companies** have raised about **$1.4 billion** in equity, of which **$228 million** came in 2026 so far.
- Under the **ChipIN Centre**, **Karnataka leads with 73 tape-outs** and 81 supported organisations, ahead of **Tamil Nadu (33)** and **Telangana (28)**.
- **Bengaluru alone accounts for over 40%** of all semiconductor funding raised in India.
- **SEMICON India 2026** runs **17–19 September in New Delhi** and is to be inaugurated by the **Prime Minister**.

> **Concept:** A **tape-out** is the point at which a completed chip design is sent for fabrication. **ATMP/OSAT** covers assembly, testing, marking and packaging. The **Design Linked Incentive (DLI)** scheme supports domestic fabless design firms, and the **ChipIN Centre at C-DAC** gives start-ups shared access to expensive EDA tools and design infrastructure.

ENVIRONMENT World Circular Economy Forum opens in Gandhinagar — first edition hosted in South Asia

- Dates **15–18 September 2026**, venue **Mahatma Mandir, Gandhinagar, Gujarat**; theme **"Circular Economy: Transition for People and Prosperity"**.
- The forum was created in **2017 by Sitra**, Finland's innovation fund; the 2026 edition marks its **tenth anniversary** and its **first South Asian hosting**.
- Expected participation of **over 2,000 stakeholders from 65+ countries** with **125+ exhibitors**.
- Four tracks: **finance and investment; technology and innovation (AI, IoT, digital product passports); policy and EPR harmonisation; market solutions**.
- India co-chairs the board of the UN **10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP)**, which meets during the forum.

> **Concept:** A **circular economy** replaces the take-make-dispose linear model by designing out waste and keeping materials in use. **Extended Producer Responsibility (EPR)** makes the producer responsible for a product's end-of-life stage. **Mission LiFE** (Lifestyle for Environment), proposed by India, promotes mindful consumption over mindless consumption.

ENVIRONMENT Gujarat action plan for the Great Indian Bustard; soft-release centre opens in Kachchh

- The **Gujarat Action Plan** targets a **minimum viable population of 30 or more birds over 200–500 sq km**.
- **Lala–Rawa** in **Kachchh (about 200 sq km)** is the priority landscape; around **11 sq km of degraded grassland** has been restored with **predator-proof fencing**.
- A **GIB Soft Release Centre** has been set up to acclimatise **captive-bred birds brought from Rajasthan** before release into the wild.
- The **Great Indian Bustard (Ardeotis nigriceps)** is **Critically Endangered on the IUCN Red List** and is listed in **Schedule I of the Wild Life (Protection) Act, 1972**.
- **Overhead power lines** remain the single biggest mortality risk; the species now survives mainly in **Rajasthan's Thar landscape** and in Kachchh.

Concept: **Soft release** means acclimatising captive-bred animals inside a fenced enclosure within the target habitat before full release. India's grasslands are still recorded as **"wastelands"** in revenue records, which is the root cause of their diversion. The **firefly bird diverter** is the standard mitigation fitted on power lines in bustard habitat.

ENVIRONMENT Project Cheetah crosses 52 animals as habitat under the programme widens to 3,428 sq km

- The population has risen from **29 founder cheetahs** to **52 individuals**; **49 cubs** have been born in India cumulatively.
- Cub survival at **Kuno National Park is about 68%**.
- Protected habitat under the project now covers **3,428 sq km**.
- **Banni Grasslands (Gujarat)** and **Nauradehi (Madhya Pradesh)** are identified as future release sites, alongside **Gandhi Sagar Wildlife Sanctuary**.
- Project Cheetah, begun in **September 2022**, is the world's **first intercontinental translocation of a large carnivore**.

Concept: The **Asiatic cheetah** was declared extinct in India in **1952**; the animals introduced are **African cheetahs (Acinonyx jubatus jubatus)**, listed as **Vulnerable** on the IUCN Red List. **Kuno National Park** lies in the **Sheopur district of Madhya Pradesh**, in the Chambal landscape.

POLITY Supreme Court: a genuine marriage promise later broken is not an offence under Section 69 BNS

- Bench of **Justices J.B. Pardiwala and K. Vinod Chandran**; the judgment was delivered on **7 September 2026** and reported this week.
- **Section 69 BNS** penalises sexual intercourse obtained by **deceitful means or a promise to marry made without any intention of fulfilling it** — a distinct offence carved out from rape.
- The Court held the deception must exist **at the inception** of the promise; a later failure to marry is not by itself an offence.
- The man had withdrawn from the marriage citing **his mother's objection**; the Court read the relationship as consensual.
- The Court relied on **Deepak Gulati v. State of Haryana (2013)**, which distinguished a **false promise** from a **breach of promise**.

Concept: The **Bharatiya Nyaya Sanhita, 2023** replaced the Indian Penal Code, 1860 with effect from **1 July 2024**, alongside the **Bharatiya Nagarik Suraksha Sanhita** and the **Bharatiya Sakshya Adhiniyam**. Consent given under a **misconception of fact** is not valid consent in criminal law.

IR 18th BRICS Summit adopts the New Delhi Declaration; India hands the chair to China

- Theme: **"Building for Resilience, Innovation, Cooperation and Sustainability"**; the grouping marked its **20th anniversary**.
- **11 members** — Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran, Saudi Arabia and the UAE — plus **10 partner countries**.
- Finance: the **BRICS Payment Task Force** was tasked with low-cost **local-currency settlement**, and the **"Jaipur Consensus"** invoice-discounting mechanism for exporting MSMEs was endorsed. **No common BRICS currency** was agreed.
- New initiatives: **BRICS AGRIN** farmer platform, a **Global Forum on Farmers' Rights**, a **Digital Public Infrastructure Repository** and the **BRICS Mission for Healthy Lifestyle (2026–2029)**.
- The declaration pressed for **UN Security Council reform**, criticised **unilateral tariffs and carbon border measures (CBAM)**, and condemned terrorism, naming the **April 2025 Jammu & Kashmir attack**.

Concept: **BRIC** began as a 2001 coinage, became a formal grouping in **2006** and added South Africa in **2010**. Its institutions are the **New Development Bank (Shanghai, 2014)** and the **Contingent Reserve Arrangement**. **CBAM** is the European Union's carbon border adjustment mechanism — effectively a tariff on the embedded carbon of imports.

IR India and Mercosur launch talks to widen their preferential trade pact, sign e-certificate protocol

- The **India–Mercosur PTA was signed in 2004** and came into force in **2009**, covering **450 tariff lines on India's side and 452 on Mercosur's**.
- Two-way trade stood at **$21.8 billion in 2025-26**.
- The **First Additional Protocol** makes **electronic Certificates of Origin** legally equivalent to paper certificates, cutting transaction cost and verification lag.
- **Mercosur's five full members** are **Argentina, Bolivia, Brazil, Paraguay and Uruguay**.
- The protocol enters into force once both sides complete internal procedures and notify each other.

> **Concept:** A **PTA** offers tariff concessions on a limited list of goods; an **FTA** removes tariffs on substantially all trade; a **customs union** like Mercosur adds a **common external tariff**; a **common market** adds free movement of factors of production. **Rules of origin**, evidenced by a **certificate of origin**, prevent trade deflection through a low-tariff member.

DEFENCE India and Vietnam agree to co-produce defence hardware at the 19th Joint Commission Meeting

- The two sides identified **co-production of Indian defence equipment** and **mutually beneficial supply chains** as the next step in defence cooperation.
- Ties were elevated to an **Enhanced Comprehensive Strategic Partnership in May 2026**, with a trade target of **$25 billion a year by 2030**.
- Cooperation was widened to **air connectivity, nuclear energy, space, port infrastructure, heritage conservation** and people-to-people exchange.
- Both sides discussed **West Asia** and the **South China Sea**, reaffirming a maritime order based on international law.
- The next defence policy dialogue is to be held during **Aero India 2027**.

> **Concept:** Vietnam is a pillar of India's **Act East Policy** and of the **Indo-Pacific Oceans Initiative**. South China Sea disputes turn on the **UNCLOS** framework and the **2016 arbitral award** in the Philippines v. China case. India has extended **defence lines of credit** to Vietnam, under which fast-attack craft were built and delivered.

Wednesday, 16 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-16.html

SCI-TECH PM Modi meets global chip CEOs as SEMICON India 2026 opens tomorrow at Yashobhoomi

- Theme: **“Transform Tomorrow: Silicon to Systems — Building the Ecosystem”**. Organised jointly by the **India Semiconductor Mission (ISM)**, **MeitY** and industry body **SEMI** at **Yashobhoomi (India International Convention & Expo Centre)**.
- Scale: **500+ exhibitors**, **243 international companies**, **150+ speakers**, delegates from **40+ countries** and **15,000 sq m** of exhibition space, with **6 country pavilions** (Japan, South Korea, Singapore, Malaysia, Germany, Netherlands) and **10 state pavilions**.
- Semicon 1.0 scorecard: **12 approved projects** worth **₹1.64 lakh crore (≈ US$20 billion)** across **Gujarat, Assam, Uttar Pradesh, Punjab, Odisha and Andhra Pradesh** — of which **3 units are already in commercial production**.
- **Semicon 2.0** was approved by the Union Cabinet on **15 July 2026** with an outlay of **₹1,27,500 crore**, and the programme duration was stretched to **12 years**. Its six pillars are chip design, machines and materials, fab setup, **ATMP/OSAT**, R&D and talent.
- ISM CEO **Amitesh Kumar Sinha** said India's own semiconductor requirement will climb from about **US$100 billion to US$200 billion**, as the global market doubles from roughly **US$1 trillion to US$2 trillion**.

> **Concept: India Semiconductor Mission (2021)** — an independent business division under **Digital India Corporation**, MeitY, covering fabs, display fabs, compound semiconductors and the **Design Linked Incentive (DLI)** scheme. **ATMP** = Assembly, Testing, Marking and Packaging; **OSAT** = Outsourced Semiconductor Assembly and Test. Links to **PLI** and **Atmanirbhar Bharat**.

ECONOMY Wholesale inflation at 9.92% pulls far ahead of 4.82% retail; RBI drains ₹1 lakh crore

- **WPI inflation: 9.92%** in August 2026, up from **9.78%** in July (all-commodities index **110.8** vs 110.0). **Fuel & power 22.93%**, **manufactured products 8.37%** — a series high, **primary articles 7.76%**, and **WPI food 7.05%**, a **20-month high**.
- **CPI inflation: 4.82%** in August, up from **4.45%** in July — a **third straight month above the 4% target**. **Food 5.95%**, **core 4.16%**, **rural 5.23%**, **urban 4.31%**. **Telangana** was highest at **6.27%**, **Mizoram** lowest at **2.35%**.
- The **RBI announced ₹1,00,000 crore of open market operation (OMO) bond sales** — its **first net bond sale in two years** — in three tranches: **₹50,000 crore on 17 September**, **₹25,000 crore on 21 September** and **₹25,000 crore on 28 September 2026**.
- On **15 September** the **five-year yield jumped 22 basis points to 6.80%** — its sharpest rise since **May 2022** — and the **10-year rose 6 bps to 7.07%**. **SBI Research** now projects **two 25-bps repo hikes, in October and December 2026**, with CPI peaking near **6.70%**. The **Indian crude basket** is up from **$82.04 in July to $109.76 in September**; the next **MPC meets 5–7 October 2026**.

> **Concept: WPI** (base **2022-23**, DPIIT) tracks producer-level transactions and **excludes services**; **CPI** (base **2024**, NSO) tracks retail prices and is the **nominal anchor**. **Flexible inflation targeting** under **Section 45ZA, RBI Act, 1934** sets **4% ± 2%**, decided by a **six-member MPC**. **OMO sales** absorb rupee liquidity.

ECONOMY **August trade deficit narrows to a five-month low as merchandise exports jump 26%**

- **Merchandise exports: US$43.81 billion**, up **26.12% year-on-year** from $34.74 billion. **Merchandise imports: US$70.67 billion**. **Merchandise deficit: US$26.86 billion**, down from **$31.98 billion in July 2026**.
- **Services exports: US$38.87 billion** (up **24.61%**) against services imports of **US$21.42 billion** — a services surplus of about **US$17.45 billion**.
- **Overall goods-plus-services deficit: US$9.41 billion**, narrower than **$11.62 billion** in August 2025.
- **April–August FY27**: exports **US$215.91 billion**, imports **US$363 billion**. The **United States** remains the largest destination at **US$42.79 billion (+6.17%)**, while exports to **China rose 38.71% to US$9.61 billion**; imports from China were **US$65.49 billion**.

Concept: **Merchandise (goods) trade** and **invisibles (services + remittances + income)** together form the **current account** of the **Balance of Payments**. India runs a structural **goods deficit** offset by a **services and remittances surplus** — which is why the headline goods deficit and the overall deficit differ so sharply.

SCI-TECH **Chandrayaan-1 data points to “Australe Basin” — possibly the Moon's oldest impact basin**

- The study was led by the **Physical Research Laboratory (PRL), Ahmedabad**, with **Neha Panwar** as lead author, and published in **The Planetary Science Journal** on **15 September 2026**.
- It used the **Moon Mineralogy Mapper (M3)**, the NASA imaging spectrometer flown aboard **Chandrayaan-1 (2008)** — the same instrument that confirmed **water molecules on the lunar surface**.
- The **Australe Basin** may **predate the South Pole–Aitken (SPA) Basin**, which at **over 4 billion years** is currently the Moon's oldest confirmed impact structure.
- Because its rims are heavily eroded, the basin was invisible to ordinary imaging; it was identified instead through **distinct mineralogical and gravity signatures**.
- Its volcanic rocks show **unusual mineralogy — lower calcium-bearing minerals but higher magnesium content** than typical lunar basalts. Scientists estimate about **300 impact basins** exist on the Moon, of which only **74 have been detected** — making this a candidate target for the **Chandrayaan-4** sample-return mission.

Concept: **Chandrayaan-1 (2008)** was India's first lunar probe; **M3** was a NASA payload aboard it. An **impact basin** is a very large crater with concentric rings. Older surfaces carry **more craters**, so basin chronology anchors the dating of the entire inner Solar System. **Chandrayaan-4** is India's planned **lunar sample-return** mission.

DEFENCE Yudh Abhyas 2026 opens at two sites for the first time — Auli and Mahajan

- Venues: the **Auli Foreign Training Node, Uttarakhand** (high-altitude) and the **Mahajan Field Firing Range, Rajasthan** (desert). The exercise runs to **28 September 2026**.
- Participation: about **1,200 personnel**, roughly **600 from each country**. India is represented by the **14 Infantry Division**; the US by the **1st (Mobile) Brigade Combat Team, 11th Airborne Division ("Arctic Angels")**.
- Systems in play include **HIMARS**, **Stinger** air-defence missiles and the **M-LIDS** counter-drone system — reported as deployed in India for the **first time**.
- Training focus: **Integrated Battle Group** operations, mountain and cold-weather warfare, **counter-UAS**, drones and autonomous systems, and **space and cyber multi-domain integration**.
- Yudh Abhyas has been held annually since **2004** under **US Army Pacific** sponsorship, alternating between India and the United States.

Concept: India–US defence ties rest on the foundational agreements **LEMOA (2016)**, **COMCASA (2018)** and **BECA (2020)**, plus the **2+2 Ministerial Dialogue**. An **Integrated Battle Group** is a brigade-sized, self-contained, quick-reaction formation. **Counter-UAS** is counter-unmanned aerial systems.

POLITY Supreme Court dismisses 271 Union appeals on armed-forces disability pension

- Case: **Union of India & Ors. v. Col. N.C. Isaac (Retd.)**, citation **2026 INSC 993**, decided by a bench of **Justice Pamidighantam Sri Narasimha** and **Justice Alok Aradhe**. All **271** matters were dismissed with **no order as to costs**.
- The dispute turns on **"NANA" — "Neither Attributable to Nor Aggravated by" military service** — the Ministry of Defence classification used to deny disability pension by holding a disability unconnected to service.
- The **Raksha Mantri's Committee of Experts recommended in 2015** that pending NANA appeals be withdrawn, and the **MoD formally accepted this in 2018** — but the Court held the recommendation **"has not been faithfully implemented"**.
- Core holding: the **Entitlement Rules, 2008** substantially preserve the protective framework of the **1982 Rules**, so the **burden of proof stays with the Department** — with a narrow exception for claims raised **more than 15 years after discharge**.
- The bench stressed that **"transparency, clarity and certainty are of enormous importance"** in service jurisprudence affecting large classes of litigants.

Concept: The **Armed Forces Tribunal** was created by the **Armed Forces Tribunal Act, 2007** to hear service matters and court-martial appeals. Appeals reach the Supreme Court through **Article 136 (Special Leave Petition)**. **Disability pension** = disability element + service element, payable where disability is attributable to or aggravated by service.

IR EAM Jaishankar begins two-day Bhutan visit; second senior Indian visit in a week

- He was received by Bhutan's Foreign Minister **Lyonpo D.N. Dhungyel**. The programme includes **bilateral talks**, a **royal audience with King Jigme Khesar Namgyel Wangchuck** and a call on **Prime Minister Tshering Tobgay**.
- Carry-over agenda from August 2026 talks: **trans-border river management**, **flood forecasting**, **hydrological data sharing** and progress on the jointly implemented **Punatsangchhu-I Hydroelectric Project**.
- The visit followed **Chief Election Commissioner Gyanesh Kumar's three-day Bhutan visit from 14 September 2026**, during which he met the King and attended **Bhutan's National Voters' Day**.
- Recent India-funded deliverables include **three community development projects in Panbang, Zhemgang**, with road works costing roughly **Nu 31 million**.
- **Hydropower** remains the spine of the relationship: Bhutan exports surplus power to India, and the revenue is a dominant share of Bhutanese government income.

Concept: The **India–Bhutan Treaty of Friendship (1949, revised 2007)** governs relations; the **2007 revision removed the clause on Indian ‘guidance’ in external affairs**. Bhutan is a founder member of **SAARC** and a member of **BIMSTEC**, but is **not a member of the United Nations Security Council system of alliances** and has **no diplomatic relations with China** or any P5 state. The **Ngultrum** is pegged to the **Indian Rupee**.

IR India at G20 Energy Abundance Ministerial in Houston; non-fossil capacity crosses half the mix

- The ministerial was built on three pillars: **Energy Security and Affordable Baseload**; **Permitting and Regulatory Efficiency**; and **Critical Minerals and Resilient Supply Chains**.
- India told the meeting it has **552 GW of installed electricity capacity**, with the **non-fossil share now exceeding 50%** — achieved **ahead of its 2030 commitment**.
- **India–US**: the minister met **US Energy Secretary Chris Wright** and reaffirmed the **US–India Energy Security Partnership**, covering clean energy, **power infrastructure for AI, high-performance computing and data centres**, and India's **nuclear expansion roadmap**.
- **India–Canada**: he met **Corey Hogan**, Parliamentary Secretary to Canada's Minister of Energy and Natural Resources, on energy efficiency and **offshore exploration under the Samudra Manthan scheme**. India pressed for **“practical, inclusive and technology-neutral”** solutions.

Concept: India's **Panchamrit** pledges at **COP26 (Glasgow, 2021)** include **500 GW non-fossil capacity by 2030**, **50% of energy requirements from renewables**, and **net zero by 2070**. The **G20** has no permanent secretariat and its presidency rotates annually; India held it in **2023**.

SOCIETY **PM Vishwakarma completes three years; 30 lakh artisans registered, meeting its full target**

- **30 lakh (3 million) beneficiaries registered** — meeting the scheme's registration target in three years.
- **Over 6.19 lakh loans sanctioned**, worth approximately **₹5,316 crore**, under collateral-free credit at a **5% concessional interest rate**.
- **Over ₹42 crore** disbursed as **digital transaction incentives** to **8.11 lakh** beneficiaries.
- **Over 24.37 lakh artisans** given basic skill training and **over 18.16 lakh** issued toolkit e-vouchers; **more than 12,000** were trained in **AI tools** for branding and product design.
- **Over 30,000 beneficiaries** onboarded onto **GeM and ONDC** and private marketplaces, with **82 trade fairs** and **37 state-level exhibitions** organised.

Concept: PM Vishwakarma is a **central-sector scheme** of the **Ministry of Micro, Small and Medium Enterprises**, with an outlay of **₹13,000 crore for FY2023-24 to FY2027-28**, covering **18 traditional trades** (carpenter, blacksmith, goldsmith, potter, cobbler, barber, washerman and others). Benefits: recognition certificate and ID, skill training with a **₹500 daily stipend**, a **₹15,000 toolkit incentive**, and credit of **₹1 lakh** followed by **₹2 lakh**.

ENVIRONMENT **World Ozone Day 2026: “Global action for a cooler planet” marks 10 years of the Kigali Amendment**

- The **Kigali Amendment**, adopted in **2016**, governs the global **phase-down of hydrofluorocarbons (HFCs)** — which are **not ozone-depleting** but are **potent greenhouse gases**.
- Full implementation of the Kigali Amendment alone could avoid **up to 0.5°C of global warming by the end of the century**.
- The **Montreal Protocol (1987)** is the **first UN treaty to achieve universal ratification** — **198 parties** — and sits under the framework **Vienna Convention for the Protection of the Ozone Layer (1985)**.
- **India ratified the Kigali Amendment in 2021** and will begin its **HFC phase-down from a 2032 baseline**, reaching an **85% cut by 2047**.
- The Antarctic ozone hole is projected to recover to **1980 levels by about 2066**, with the Arctic by **2045** and the rest of the world by **2040**.

Concept: Ozone-depleting substances (ODS) such as **CFCs, halons and HCFCs** destroy stratospheric ozone; **HFCs** replaced them and are harmless to ozone but have very high **global warming potential**. India's **Ozone Cell (MoEFCC)** is the national body; the **India Cooling Action Plan (2019)** was the world's first such national plan. Ozone is **beneficial in the stratosphere** and a **pollutant in the troposphere**.

REPORT **Unemployment eases to a six-month low of 5.0% in August; female participation rises**

- **All-India unemployment rate: 5.0%** (Current Weekly Status, 15 years and above), down from **5.1%** in July.
- **Rural unemployment fell to 4.1%** from 4.5% — the **lowest since January 2026** — while **urban rose marginally to 6.8%** from 6.7%.
- **Male unemployment 4.9%** (from 5.0%) and **female 5.1%** (from 5.4%); **rural female joblessness fell to 3.9%** from 4.3%.
- **Labour Force Participation Rate (15+): 55.6%** (from 55.4%) and **Worker Population Ratio: 52.8%** — the **highest since March 2026**. **Female LFPR rose to 34.8%**, with **rural female LFPR at 39.4%**. The survey covered **3,70,160 persons**.

Concept: The **PLFS** is conducted by the **National Statistics Office** under **MoSPI**; it moved to monthly bulletins in **2025**. **Current Weekly Status (CWS)** uses a **7-day reference period** — a person is employed if they worked at least **one hour on any day** of that week. **LFPR** = labour force / population; **WPR** = workers / population; **UR** = unemployed / labour force.

Thursday, 17 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-17.html

SCI-TECH **SEMICON India 2026 opens; Semiconductor Mission 2.0 scales up to ₹1,27,500 crore**

- **ISM 2.0** outlay **₹1,27,500 crore** (about **USD 13.5 billion**), against **₹76,000 crore** under Semicon 1.0 announced in **2021**.
- **12 semiconductor projects** approved across **six States**; **3** are already in commercial production.
- Six pillars: **chip design, equipment & materials, fabrication, advanced packaging, R&D and talent**.
- Targets include **200+ chip-design companies**, **1 lakh technicians** and **85,000 semiconductor engineers in a decade**; focus on **mature nodes of 28 nm and above**.
- **24 startups** supported under the **Design Linked Incentive (DLI)** scheme; **7 chips** fabricated at the **12 nm node**.

Concept: A **semiconductor fab** turns wafers into integrated circuits; **node size** (28 nm, 12 nm) is the process generation, not literal transistor width. **OSAT** means Outsourced Semiconductor Assembly and Test. ISM sits under **MeitY** and is the industrial-policy arm of **Atmanirbhar Bharat** in electronics.

ECONOMY UPI merchant discount rate returns: 0.4% only on large P2M payments

- **0.4% MDR** on **person-to-merchant (P2M)** transactions **above ₹2,000**, capped at **₹300** per transaction.
- Notified essential services — **railways, telecom, insurance and fuel** — attract a flat **₹5** per transaction; capital-market transactions **0.02%**, capped at **₹300**.
- Fully exempt: **all P2P transfers**, **all P2M up to ₹2,000**, and small merchants under the **P2PM** framework receiving up to **₹1 lakh a month** via UPI QR.
- The **merchant**, not the consumer, bears the MDR; **5%** of collections goes to a small-merchant support fund.
- The government separately denied reports of any **GST on UPI transactions**.

Concept: **MDR** is the fee a merchant pays the payment ecosystem per transaction, shared among acquirer, issuer and network. **UPI** is operated by the **National Payments Corporation of India (NPCI)**, an umbrella organisation set up under the **Payment and Settlement Systems Act, 2007**, regulated by the **RBI**.

DEFENCE India summons Pakistan envoy after PNS Hunain collides with Indian warship

- **PNS Hunain** is a **98-metre offshore patrol vessel** of the Pakistan Navy.
- The incident occurred on **16 September 2026** in **international waters**, roughly **220 km (about 120 nautical miles) east of the Oman coast**.
- **No major damage** to the Indian warship and **no injuries** were reported.
- India invoked **Article 10** of the **1991 India-Pakistan Agreement on Prevention of Airspace Violations and Advance Notice on Military Exercises, Manoeuvres and Troop Movements**, under which naval vessels shall not approach within **three nautical miles** of each other in international waters.
- India also cited the **COLREGs** — the International Regulations for Preventing Collisions at Sea.

Concept: A **Charge d'Affaires** heads a mission when no ambassador or high commissioner is in post. Under **UNCLOS**, the **territorial sea** extends 12 nautical miles, the **contiguous zone** 24 and the **Exclusive Economic Zone** 200; beyond the EEZ lie the **high seas**, where freedom of navigation applies but COLREGs still bind every vessel.

SCI-TECH Pangwala tribal gut study finds a deep antimicrobial-resistance reservoir

- **28 volunteers** were profiled using **whole-metagenome shotgun sequencing**, covering bacteria, fungi and viruses.
- Dominant species: **Prevotella copri**, alongside **Bifidobacterium** and **Succinivibrionaceae**.
- Stability despite diet change is explained by **functional redundancy** — different microbes performing the same job.
- Highest resistance was to **vancomycin**, alone and with **teicoplanin**; the dominant mechanism was **antibiotic target alteration (about 76%)**.
- The phage **Ceduovirus** was far more abundant in native residents (**16%**) than migrants (**0.04%**).

Concept: The **resistome** is the full set of antibiotic-resistance genes in a microbial community. **Antimicrobial resistance (AMR)** spreads by **horizontal gene transfer** as much as by mutation, which is why a healthy gut can act as a silent reservoir. India's **National Action Plan on AMR** follows the **One Health** approach.

ENVIRONMENT World Ozone Day 2026: India launches a Net Zero Portal and an NAPCC Dashboard

- The **Net Zero Portal** is a national registry where Indian entities voluntarily disclose greenhouse-gas emissions and declare net-zero targets.
- The **NAPCC Dashboard** digitally tracks the missions under the **National Action Plan on Climate Change**.
- The **Montreal Protocol** was signed on **16 September 1987** and has **198 parties** — universal ratification; about **99% of ozone-depleting substances** have been phased out.
- The **Kigali Amendment (2016)** phases down **hydrofluorocarbons (HFCs)**, which are potent greenhouse gases but **not** ozone-depleting; full implementation could avoid up to **0.5 degrees Celsius** of warming by 2100.
- India **ratified the Kigali Amendment in September 2021**; its HFC phase-down begins in **2032**, with cuts of **10% by 2032, 20% by 2037, 30% by 2042 and 85% by 2047**.

Concept: The **Montreal Protocol** is the only universally ratified environmental treaty and works on **common but differentiated responsibilities**, giving developing countries a grace period. **ODS** damage stratospheric ozone; **HFCs** replaced them but have very high **Global Warming Potential**, which is why Kigali was needed. **NAPCC (2008)** runs eight national missions.

ECONOMY WPI inflation at 9.92% in August 2026 as fuel prices stay elevated

- Sub-indices for August 2026: **Fuel and Power 22.93%**, **Manufactured Products 8.37%**, **Primary Articles 7.76%**, **WPI Food Index 7.05%**.
- The spike is led by **mineral oils at 38.48%** and **crude petroleum and natural gas at 34.41%**, with Brent crude near **USD 100 a barrel**.
- **CPI** for August 2026 was **4.82%**, with food inflation (**CFPI**) at **5.95%**; rural **5.23%** and urban **4.31%**.
- The **new WPI series (base 2022-23)** was released in **June 2026**, raising the item basket from **697 to 957** and shifting weights to **Gross Value of Output**; crude petroleum moved from Primary Articles into Fuel and Power.
- **WPI** is released by the **Office of the Economic Adviser, DPIIT**; **CPI** by the **National Statistics Office, MoSPI** (base year **2024**).

Concept: **WPI** measures prices at the wholesale or producer stage and excludes services, so it carries a heavy weight of fuel and intermediate goods; **CPI** measures a household consumption basket and includes services. The RBI's **flexible inflation targeting** mandate, in force since **2016**, is anchored to **CPI at 4% with a band of plus or minus 2 percentage points**. A change of **base year** updates the basket and weights and does not by itself raise or lower the economy's size.

POLITY Supreme Court seeks Manipur affidavit on 25 unnatural deaths in relief camps

- The affidavit must cover **post-mortem reports and causes of death**, and explain why post-mortems were conducted in only **20** of the cases.
- The Court questioned the **"meagre" compensation of ₹20,000 to ₹30,000** per family when **₹5 lakh to ₹10 lakh** was contemplated in comparable cases.
- The **Manipur State Legal Services Authority** must ensure an **FIR is registered in every unnatural death**.
- Investigation status placed before the Court: about **3,020 cases** across **8 districts** through **42 SITs**; **302 chargesheets**, **1,583 closure reports** and **1,135** still under investigation.
- In the **CBI**'s 31 cases, only **6 of 978 cited witnesses** have been examined; the Court discussed **two additional NIA courts in Assam**.

Concept: The Supreme Court's **continuing mandamus** lets it monitor compliance over time rather than dispose of a case in one order. **Legal Services Authorities** exist under the **Legal Services Authorities Act, 1987** (Article 39A). Relief-camp residents are **internally displaced persons**, who remain citizens of their own State and are not covered by refugee law.

POLITY Supreme Court tells RBI its loan-recovery norms exist only on paper

- Recovery agents seized the borrower's truck at about **1 a.m. on 9 April 2023** in **Ayodhya**, breaking the steering lock; it was sold for **₹4.50 lakh** on **31 August 2023** without proper notice.
- Relief: refund of **₹4,50,000 with 6% interest**, compensation of **₹10,00,000** for mental agony and loss of livelihood, **₹50,000** costs, and closure of both loan accounts.
- The Court invoked **Article 21** (right to livelihood) and **Article 14** (arbitrariness), and relied on **Section 35-A of the Banking Regulation Act, 1949**.
- It distilled guiding principles: no undue harassment, **no force or stealth**, **prior notice** before repossession, due diligence on recovery agents, designated recovery locations and a credit-counsellor mechanism.
- The RBI may **bar an institution from engaging recovery agents**; the Registry was directed to forward the judgment to the RBI.

Concept: **Section 35-A** of the Banking Regulation Act empowers the RBI to issue binding directions in the public interest. **NBFCs** are registered under the **RBI Act, 1934**; they lend but cannot accept demand deposits. The **Fair Practices Code** governs lender conduct. Note the distinction: **Article 300A** protects property as a constitutional right, while **Article 21** was the route used here because livelihood was at stake.

SOCIETY EPFO wage ceiling rises to ₹25,000 a month with effect from today

- More than **51 lakh additional employees** in the **₹15,001 to ₹25,000** wage band enter the statutory social-security net.
- Fiscal cost: **₹11,339 crore a year** against the existing **₹10,250 crore**, and about **₹56,696 crore over five years**.
- The ceiling was last revised in **September 2014**, when it rose from **₹6,500 to ₹15,000**.
- EPFO scale today: about **7.98 crore contributing members** across **7.68 lakh establishments**, and roughly **82 lakh EPS pensioners**.
- Statutory basis: the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**, with consequential changes to the **EPF Scheme 1952, EPS 1995 and EDLI Scheme 1976**.

Concept: The **EPF** is a defined-contribution retirement fund; the **EPS** is a defined-benefit pension; the **EDLI** provides life insurance linked to the provident fund. A **wage ceiling** sets the salary level up to which membership is compulsory and contributions are computed. EPFO is administered by a tripartite **Central Board of Trustees** under the **Ministry of Labour and Employment**.

IR New Zealand Parliament ratifies the India-New Zealand FTA by 93 votes to 29

- Negotiations were launched in **March 2025** and concluded in about **nine months** — billed as India's fastest-concluded FTA.
- **New Zealand** grants duty-free access on **100% of its tariff lines**; India opens **70.03%** of its tariff lines, covering about **95% of bilateral trade**.
- India's schedule: **30%** of lines see immediate elimination, **35.60%** phased over **3 to 10 years**, **4.37%** reduced but not eliminated, **0.06%** under tariff rate quotas, and **29.97% excluded**.
- **Dairy is fully excluded** by India, along with other sensitive agriculture and sugar — the headline defensive win.
- Bilateral merchandise trade rose from **USD 873 million in 2023-24 to USD 1.3 billion in 2024-25**.

Concept: A **tariff line** is a single product code in the customs schedule. A **tariff rate quota** allows a fixed quantity at a low duty and charges a higher duty beyond it. An **exclusion list** protects sensitive sectors from any concession. New Zealand is a member of the **Commonwealth**, **APEC** and the **CPTPP**; its capital is **Wellington** and largest city **Auckland**.

Friday, 18 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-18.html

SCI-TECH India Semiconductor Mission 2.0 launched at SEMICON India 2026

- Outlay of **₹1,27,500 crore** (about **$13.5 billion**) spread over **12 years**, against ₹76,000 crore over five years in Phase 1.
- Built on **six pillars**: chip design, machines and materials, fabs, advanced packaging, research, and talent development.
- Targets **200-plus chip design start-ups** and training of **one lakh** clean-room and factory-floor workers.
- **Three units** are already in commercial production in assembly, testing, marking and packaging; a **3D packaging unit** is coming up in **Odisha**.

Concept: A **fab** manufactures wafers; **ATMP or OSAT** units assemble, test and package finished chips. India's strategy so far has been packaging-led. Link with **Make in India**, **PLI schemes**, **critical mineral security** and **supply chain resilience** under GS3 industrial policy.

ECONOMY UPI merchant discount rate returns for payments above ₹2,000 from 15 October

- Standard rate **0.4%**, capped at **₹300** for transactions of ₹75,000 and above.
- Essential and thin-margin sectors pay a flat **₹5** per transaction above ₹2,000; capital-market payments attract **0.02%**, capped at ₹300.
- All **person-to-person** transfers and merchant payments up to **₹2,000** remain free; about **97.5%** of UPI transactions by volume are unaffected.
- Revenue split: payer's bank **40%**, merchant's bank **30%**, UPI app or **TPAP 20%**, payment service provider bank **10%**.
- A separate **5%** pool will fund UPI adoption among small merchants; zero charges up to ₹2,000 are notified under **Section 10A of the Payment and Settlement Systems Act, 2007**.

Concept: **MDR** is the fee a merchant pays on a digital transaction, shared among the banks and apps in the chain. A **TPAP** is a third-party application provider that rides on a sponsor bank's UPI handle. Compare with **interchange fee** on cards and link to the **financial inclusion** and **formalisation** debates in GS3.

ECONOMY Wholesale price inflation hardens to 9.92% in August 2026

- Headline **WPI inflation at 9.92%** in August 2026, up from **9.78%** in July; the all-commodities index rose to **110.8** from 110.0.
- **Fuel and power** was the main driver at **22.93%**, up from 20.05%, with mineral oils at **38.48%** and crude petroleum at **34.41%**.
- **Manufactured products** inflation edged up to **8.37%**; **primary articles** eased to **7.76%** from 8.52%.
- The **food index** rose to **7.05%** from 6.65%.
- Retail **CPI inflation was 4.82%** in August with food inflation at **5.95%**; the unemployment rate stood at **5.0%**.

Concept: **WPI** measures price change at the wholesale or producer level with base year **2011-12** and, unlike CPI, carries **no services** and no direct retail margin. A persistent WPI-CPI gap signals that producers are absorbing input costs, compressing margins before the pass-through to consumers.

DEFENCE Defence Acquisition Council clears ₹1.10 lakh crore of proposals, 98% from Indian industry

- Total Acceptance of Necessity value of about **₹1.10 lakh crore**, with around **98%** to be sourced from **Indian industry**.
- **Army**: CBRN reconnaissance vehicles, high mobility vehicles, self-propelled mechanical mine layers, advanced light helicopters, trawl tanks and the **Sarvatra bridge system**.
- **Navy**: **Arudhra radars** and the design, development and procurement of **marine gas turbines**.
- **Air Force**: ground-based multi-purpose jammers and the **DEFSAC** secure access card system.
- **Yudh Abhyas 2026**, the **22nd** India-United States army exercise, runs to **28 September** at **Auli** in Uttarakhand and the **Mahajan** field firing range in Rajasthan.

Concept: **Acceptance of Necessity** is the DAC's in-principle approval that starts the procurement clock. The highest priority category is **Buy Indian-IDDM**, meaning indigenously designed, developed and manufactured. Link to **Atmanirbhar Bharat**, positive indigenisation lists and defence exports under GS3 security.

DEFENCE India rejects the new Pakistan-China Boundary Joint Commission

- India holds the **1963 Sino-Pakistan Boundary Agreement** to be **illegal and invalid**.
- Under that agreement Pakistan ceded roughly **5,800 sq km** of the **Shaksgam valley** to China.
- The Shaksgam valley lies **north of the Karakoram range**, between **Xinjiang** and Pakistan-occupied **Gilgit-Baltistan**.
- Its location is strategically close to the **Siachen-Karakoram** zone and complements the **China-Pakistan Economic Corridor**.

Concept: **Shaksgam** is part of the **trans-Karakoram tract**. India's claim flows from the **Instrument of Accession, 1947**, which makes the entire princely state of Jammu and Kashmir Indian territory. Read with **Article 1** and the **First Schedule** of the Constitution.

SOCIETY EPFO wage ceiling raised from ₹15,000 to ₹25,000 a month

- Ceiling raised from **₹15,000** to **₹25,000** a month; approved by the Cabinet in **September 2026**.
- This is the **first revision since September 2014**, when the limit moved from ₹6,500 to ₹15,000.
- About **51 lakh additional employees** are expected to come under mandatory coverage.
- The estimated additional annual outlay for the government is about **₹11,339 crore**.

Concept: The **wage ceiling** is the salary threshold up to which provident fund membership is compulsory. Raising it expands **formal social security** but also raises the employer's statutory cost. Connect to the four **labour codes**, the **Code on Social Security, 2020**, and the informal-to-formal transition debate.

POLITY Supreme Court fast-tracks the challenge to Delhi's Special Intensive Revision

- More than **47 lakh names** were removed from the draft roll and about **33 lakh** more electors have received notices.
- The disputed **logical discrepancies** category, not defined by the poll authority, covers **19.33 lakh** electors.
- The **mapping** category, involving generational voting verification, covers **13.79 lakh** electors.
- Electors facing notices add up to **33,12,919**, or about **33.96%** of the **97.5 lakh** enumerated electors.

Concept: A **Special Intensive Revision** is a house-to-house re-enumeration of electors, unlike the routine **summary revision**. Electoral rolls are prepared under the **Representation of the People Act, 1950**, while the conduct of elections is governed by the **Act of 1951**. Free and fair elections are part of the **basic structure**.

IR United States bill proposes up to 100% tariffs on buyers of Russian energy

- The bill targets Russia's **energy sector**, listed individuals and the **shadow fleet** of tankers.
- Exemptions are offered to countries that sharply cut purchases or whose imports are under **15%** of Russia's total exports.
- Russia's share of India's crude imports touched an all-time high of over **51%** in **July 2026**.
- India imported about **110.4 lakh tonnes** of Russian crude in July, roughly **26% higher** than in June.
- India already faces cumulative United States tariffs of **50%**; the bill also preserves a discretionary **presidential waiver**.

Concept: **Secondary sanctions** punish third countries for trading with a sanctioned state, as distinct from primary sanctions on the target itself. This is the classic case of **weaponised interdependence**. Link to **strategic autonomy**, the energy trilemma and India's **multi-alignment** in GS2.

IR India and MERCOSUR sign first Additional Protocol for electronic certificates of origin

- The protocol gives **electronic certificates of origin** the same legal validity as paper certificates, enabling **paperless trade**.
- **MERCOSUR** is a South American customs union whose founding members are **Argentina, Brazil, Paraguay and Uruguay**.
- The wider negotiation to expand the India-MERCOSUR preferential trade agreement is targeted for completion **within a year**, covering tariffs and digital cooperation.
- At the **9th ASEAN-India agriculture ministers' meeting**, co-chaired with the **Philippines**, India noted bilateral trade of **$128 billion** in FY 2025-26.

Concept: A **certificate of origin** proves where goods were produced and decides whether a preferential tariff applies under **rules of origin**. A **preferential trade agreement** cuts duties on a limited list of goods, unlike a **free trade agreement** covering substantially all trade. Link to trade facilitation under the WTO framework.

REPORT India stays at rank 131 of 145 on the Global Gender Gap Index 2026

- India is ranked **131 out of 145** countries with a parity score of **64.5%**, below the global average of **69.2%**.
- Sub-index scores: educational attainment **96.6%**, health and survival **95.6%**, economic participation **41.2%**, political empowerment **24.5%**.
- India's **best sub-index rank is 67th**, in political empowerment.
- **Iceland** tops the index with about **93%** of its gap closed, followed by **Finland**, **Norway**, **Namibia** and the **United Kingdom**.
- Parity in professional and technical roles in India nearly doubled from **26.6% in 2006** to **49.9% in 2026**, but female labour force participation is **44.1%**.

Concept: The index measures **relative gaps between women and men**, not absolute development, and is scored from 0 to 1. Distinguish it from the **Gender Inequality Index** and the **Gender Development Index** of the Human Development Report. Link with **Article 15(3)**, **Article 39(d)** and **Article 42**.

ENVIRONMENT Mangrove GIS portal released as MISHTI nears its restoration target

- **MISHTI** stands for **Mangrove Initiative for Shoreline Habitats and Tangible Incomes**, announced in the 2023-24 Budget.
- **27,652 hectares** have been restored against a target of **29,250 hectares** for the **2023-27** period.
- **12,450 hectares** of that restoration is in the ecologically difficult **Kori Creek** stretch.
- The new **Mangrove GIS (MGIS) portal**, a **Mangroves Atlas of Gujarat** and a coffee-table book on Kachchh mangroves were released.
- **Guneri** in Kachchh, home to rare **inland mangroves**, was declared Gujarat's first **Biodiversity Heritage Site** in January 2025.

Concept: Mangroves are **blue carbon** ecosystems that store carbon in waterlogged soil, buffer storm surge and serve as fish nurseries. A **Biodiversity Heritage Site** is notified by a state under **Section 37 of the Biological Diversity Act, 2002**, on the advice of the state biodiversity board.

Saturday, 19 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-19.html

SCI-TECH Semicon 2.0: India Semiconductor Mission enters Phase-II

- **Semicon 2.0** carries an outlay of **₹1,27,500 crore (about USD 13.5 billion)**, against **₹76,000 crore** in Phase-I — a **67.8%** increase.
- Cabinet approval came in **July 2026**; the programme was unveiled on **17 September 2026**.
- Built on **six pillars**: design, equipment and materials, fabs, advanced packaging, applied R&D, and talent.
- Targets: **200 semiconductor design start-ups**, training of **1 lakh technicians** and roughly **1 lakh new jobs**.
- **Five units** approved under Phase-I are already in commercial production.

Concept: **Semiconductor value chain** = design → fabrication (fab) → ATMP/OSAT (Assembly, Testing, Marking, Packaging) → application. **Fabless** firms design but do not manufacture; **foundries** manufacture for others. Link with **Make in India**, **PLI schemes** and the **National Deep Tech Start-up Policy**.

ECONOMY US Fed raises rates 25 bps — first hike in three years

- The federal funds target range was raised by **25 basis points to 3.75–4.00%** on **16 September 2026**.
- It is the **first increase in three years**, decided by a **unanimous vote**.
- Fed Chair **Kevin Warsh** committed to a **timelier return to the 2% inflation target**.
- Projections point to growth easing from about **2.3% to 2.1%**, unemployment near **4.1%**, and inflation falling to **2.0% by 2029**.
- US inflation was last below the **2%** target in **February 2021**.

Concept: **Basis point** = one-hundredth of a percentage point. A US rate rise narrows the **interest rate differential**, triggering **capital outflows**, rupee depreciation and costlier imports — the **impossible trinity** limits how far the RBI can simultaneously hold the exchange rate, keep capital mobile and run an independent monetary policy.

SCI-TECH Deep-sea mining: India's nodule ambition meets an ecological gap

- Polymetallic nodules lie at depths of **3,000–6,000 metres** on the abyssal seabed.
- India holds **three exploration contracts** with the **International Seabed Authority**, covering about **95,000 sq km**.
- Estimated resource: about **366 million tonnes** of polymetallic nodules.
- The indigenous submersible **MATSYA-6000** has been tested to about **5,270 metres** against a design depth of **6,000 metres**.
- The ISA's **exploitation code** — the rulebook for commercial mining — remains **unadopted**.

Concept: **Polymetallic (manganese) nodules** are potato-sized concretions of **manganese, nickel, cobalt and copper** on the abyssal plain. The **International Seabed Authority**, created under **UNCLOS (1982)**, administers the deep seabed as the **common heritage of mankind**. India was the world's first **Pioneer Investor (1987)**.

ENVIRONMENT India's first soil carbon payments reach smallholder farmers

- **₹2.9 crore** was distributed to **2,550 smallholder farmers** in **Punjab and Haryana** on **17 September 2026**.
- Average payment worked out to about **₹11,478 per farmer**.
- About **50,000 carbon credits** were verified for practices adopted between **2019 and 2022**.
- Credited practices: **Direct Seeded Rice (DSR)**, **reduced tillage** and **crop-residue management**.
- Co-benefits reported: roughly **45 billion litres** of water saved and over **2 lakh tonnes** of residue retained on fields.

Concept: **Soil organic carbon** sequestration stores atmospheric CO2 in soil, improving fertility and water retention. A **carbon credit** equals **one tonne of CO2-equivalent** avoided or removed. Link with the **Carbon Credit Trading Scheme**, **Article 6 of the Paris Agreement** and the **National Mission for Sustainable Agriculture**.

DEFENCE HAL completes Tejas trainer deliveries, hands Dhruv NG to civil operator

- Deliveries of the **Tejas twin-seater trainer** variant to the **Indian Air Force** have been **completed**.
- **Four Dhruv Next Generation (NG)** helicopters were inducted into **Pawan Hans Ltd.** for civil operations.
- The **Dhruv NG** is a **5.5-tonne class** light helicopter that is **civil-certified**.
- Tejas is India's indigenous **Light Combat Aircraft (LCA)**, developed with **DRDO's ADA**.

Concept: **Defence indigenisation** is measured through the **positive indigenisation lists**, **Defence Acquisition Procedure (DAP) 2020** categories such as **Buy (Indian-IDDM)**, and the **iDEX** ecosystem for start-ups. Civil certification of a military-origin platform widens the order book and lowers unit cost.

ECONOMY Retail inflation climbs to 4.82% in August 2026

- Headline **CPI inflation was 4.82%** in **August 2026**, up from **4.45%** in July.
- **Food inflation** rose to **5.95%** from **5.52%** — **6.13%** rural and **5.64%** urban.
- The reading sits **above the 4% medium-term target** but within the **2–6% tolerance band**.
- Sharp gainers: **ginger (+73.82%)**, **onion (+48.27%)** and **garlic (+43.60%)**; **tomato (-31.09%)** and **potato (-13.14%)** fell.
- Inflation has risen steadily from **3.93% in May** through **4.38% in June** and **4.45% in July**.

Concept: India follows **flexible inflation targeting** under the amended **RBI Act, 1934**: a **4% CPI target with a +/- 2% band**, set by the government in consultation with the RBI and implemented by the **six-member Monetary Policy Committee**. CPI (Combined) is compiled by the **National Statistics Office**.

POLITY Six states sign the Kishau Multipurpose Project agreement

- The agreement was signed on **15 September 2026**, ending a **17-year deadlock**.
- Signatories: **Uttarakhand, Himachal Pradesh, Uttar Pradesh, Haryana, Rajasthan and Delhi**.
- Site: the **Tons river**, the **largest tributary of the Yamuna**, on the **Uttarakhand–Himachal Pradesh border**.
- A **concrete gravity dam** of **232.6 metres** — among India's tallest — with storage of **1,562 million cubic metres (MCM)**.
- Benefits: irrigation for **97,000 hectares**, **1,476 million units** of hydropower and a **25% environmental flow** for the Yamuna.

Concept: **Environmental flow (e-flow)** is the minimum river flow needed to sustain aquatic ecosystems. Inter-state river disputes fall under **Article 262** and the **Inter-State River Water Disputes Act, 1956**; the **River Boards Act, 1956** permits advisory boards. A **concrete gravity dam** resists water pressure by its own weight.

POLITY ECI freezes Trinamool Congress name and symbol before bypolls

- The interim order was issued on **17 September 2026** under **Paragraph 15** of the **Election Symbols (Reservation and Allotment) Order, 1968**.
- Neither group may use the name **All India Trinamool Congress** or the reserved **'Flowers & Grass'** symbol.
- Rival groups are led by **Mamata Banerjee** and **Arup Roy**.
- The freeze precedes bypolls in **Rejinagar** and **Nandigram** scheduled for **6 October 2026**.
- Under Para 15 the primary test is **majority support among elected legislators (MPs and MLAs)**, with verified affidavits used when membership records are contested.

Concept: The **ECI** is a **constitutional body under Article 324**. Party registration flows from **Section 29A of the Representation of the People Act, 1951**, while symbol allotment is governed by the **Symbols Order, 1968** — a **subordinate legislation**, upheld in **Sadiq Ali v. ECI (1972)**. Distinguish **reserved** symbols (recognised parties) from **free** symbols.

HEALTH Jan Aushadhi basket expands well beyond medicines

- **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)** now runs over **20,000 Jan Aushadhi Kendras** nationwide.
- The basket covers **2,110 medicines** plus **315 surgicals, consumables and devices**.
- Sales between **2021 and 2026** touched **₹7,873.85 crore**, with estimated citizen savings of about **₹37,200 crore**.
- Two sub-baskets: **Janaushadhi Bachpan** (infant and child care) and **Jan Aushadhi Swabhiman** (elderly care).
- Implementing agency: the **Pharmaceuticals & Medical Devices Bureau of India (PMBI)**.

Concept: **Generic medicines** are bioequivalent to branded drugs but sold under the chemical name. Out-of-pocket expenditure is a major driver of **catastrophic health expenditure** in India. Link with **Ayushman Bharat PM-JAY**, the **National Health Policy 2017** and **price control through the NPPA**.

REPORT Global report puts forests at the centre of food security

- The report was released on **15 September 2026** by the UN food and agriculture body.
- Over **5 billion people** depend on forests for livelihoods; more than **50,000 wild species** are used for food or medicine.
- In parts of Africa up to **80%** of daily protein comes from wild meat; in the Amazon about **44%** of food consumed is forest-sourced.
- Global forest loss averaged **10.9 million hectares per decade** to **2025**.
- India's instruments: **Forest Rights Act, 2006**, **MSP for Minor Forest Produce**, **Van Dhan Vikas Kendras** and the **National Agroforestry Policy, 2014**.

Concept: **Minor Forest Produce (MFP)** includes all non-timber forest produce of plant origin. Under **Section 3(1)(c) of the Forest Rights Act, 2006**, forest dwellers have the right to collect, use and dispose of MFP. **Agroforestry** integrates trees with crops or livestock on the same land.

ENVIRONMENT India-born cheetah delivers four cubs; Kuno population rises to 56

- The India-born female **KGP-12** delivered **four cubs** on **17 September 2026**.
- The total cheetah population rose from **52 to 56** — **49** at **Kuno National Park** and **3** at **Gandhi Sagar Wildlife Sanctuary**.
- **Project Cheetah** was launched on **17 September 2022** with **8 cheetahs from Namibia**, followed by **12 from South Africa** in **February 2023**.
- The cheetah was declared **extinct in India in 1952**; this is the world's first **intercontinental translocation** of a large carnivore.
- Kuno National Park lies in the **Sheopur district of Madhya Pradesh**, in the **Chambal** region.

Concept: **Reintroduction** returns a species to its historical range. The **African cheetah (Acinonyx jubatus)** is listed **Vulnerable** on the **IUCN Red List** and in **CITES Appendix I**. Cheetah is a **flagship species** for restoring **open forest and grassland ecosystems**, which India's forest classification has long under-protected.

IR New Zealand clears legislation to give effect to the India FTA

- New Zealand's Parliament passed the **enabling legislation** for the **India–New Zealand Free Trade Agreement**.
- The agreement provides **duty-free access for 100% of Indian exports** to New Zealand.
- Entry into force follows completion of **domestic ratification procedures** on both sides.
- It sits alongside India's wider trade push — textile exports alone were **₹29,776 crore in August 2026**, up **16.1%** year-on-year.
- India also ranked **No. 1 among 41 global markets** on business climate in an international survey released this week.

Concept: An **FTA** eliminates tariffs on substantially all trade between members while each keeps its own external tariff — unlike a **customs union** (common external tariff). **Rules of origin** prevent trade deflection. Permitted under **GATT Article XXIV** and the **Enabling Clause**.

Sunday, 20 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-20.html

ECONOMY Coal India Bets Rs 50,000 Crore on Gasification, Critical Minerals and Renewables

- Flagship: **Bharat Coal Gasification and Chemicals Ltd**, a **CIL-BHEL JV** at **Lakhanpur, Odisha**, of about **Rs 25,000 crore**.
- It will make about **6.60 lakh tonnes of ammonium nitrate a year**; tenders run with **GAIL** and **BPCL**.
- **Five domestic blocks** with **graphite** and rare metals acquired; **lithium** options explored in **Chile, Argentina, Australia**.
- Renewable target of **9.5 GW by 2030**, pairing solar with **battery energy storage systems (BESS)**.

Concept: **Coal gasification** turns coal into **syngas** (CO + H2) for methanol, ammonium nitrate and urea; India targets **100 million tonnes** by **2030**. Coal India is a **Maharatna CPSE**. India has notified **30 critical minerals** under the **National Critical Mineral Mission**.

ECONOMY Wholesale Inflation Stays Elevated at 9.92% on Fuel and Food

- **Fuel and power** inflation surged to **22.93%** from **20.05%** in July - the single largest driver.
- **Manufactured products** rose to **8.37%** from **8.29%**; the **food index** to **7.05%** from **6.65%**.
- **Primary articles** inflation eased to **7.76%** from **8.52%**.
- Top contributors: **mineral oils**, **food articles**, **food products**, **basic metals** and **chemicals**.

Concept: **WPI** tracks **wholesale** prices, base **2011-12**, released by the **Office of the Economic Adviser, DPIIT**, and **excludes services**. **CPI** (base **2012**, **NSO**) anchors **flexible inflation targeting** at **4% +/- 2%**. WPI weights: manufactured **64.23%**, primary **22.62%**, fuel **13.15%**.

ECONOMY Software Services Exports Rise 8.2% to USD 221.4 Billion in 2025-26

- The **United States** took **54.1%** of the basket; **Europe 31.8%**, with the **United Kingdom** the largest European market.
- **91.7%** of exports were delivered **off-site**, underlining India's remote-delivery advantage.
- **Computer services** made up over **two-thirds** of the total; **BPO** led the ITES segment.
- Local business of foreign subsidiaries of Indian firms grew from **USD 13.9 billion** to **USD 17.9 billion**.

Concept: Software exports are **invisibles** in the **current account** of the **Balance of Payments**; with **remittances** they finance much of the **merchandise trade deficit**. **GCCs** are offshore units multinationals run in India for high-end work.

SCI-TECH Deep-Sea Mining: India's Seabed Ambition Meets an Ecological Wall

- India holds **three exploration contracts** with the **International Seabed Authority** over about **95,000 sq km**.
- The blocks lie in the **Central Indian Ocean Basin**, the **Central Indian Ridge** and the **Carlsberg Ridge**.
- Identified resource: about **366 million tonnes** of **polymetallic nodules** rich in **nickel, cobalt, copper, manganese**.
- Capability includes the **MATSYA-6000** submersible and a mining system tested at about **5,270 metres**.

Concept: **UNCLOS Part XI** makes the international seabed (**the Area**) the **Common Heritage of Mankind**, run by the **International Seabed Authority** at **Kingston, Jamaica**. India's **Deep Ocean Mission** (**2021**, **Ministry of Earth Sciences**) is about **Rs 4,077 crore** and includes **Samudrayaan**.

ENVIRONMENT Green Tribunal's Global Conference Puts Climate Equity and Nuclear Power Centre Stage

- Developed countries were said to emit roughly **six times more carbon per capita** than India.
- Solar capacity was cited as rising from about **2 GW to 160 GW** in twelve years; wind roughly **tripled**.
- Annual EV sales rose from about **3,000** to nearly **25 lakh**; about **1.5 crore** water-harvesting structures were built.
- Avoided emissions were put at about **20 crore tonnes**; **dense forest cover** up about **22%**.

Concept: The **NGT** is a **statutory body** under the **NGT Act, 2010** - India was the **third country** (after **Australia** and **New Zealand**) with a dedicated environment court. **Principal bench: New Delhi**; zonal benches at **Bhopal, Pune, Kolkata, Chennai**. Appeals lie to the **Supreme Court within 90 days**.

POLITY Joint Parliamentary Committee Begins Scrutiny of the FCRA (Amendment) Bill, 2026

- A new **Designated Authority** will take custody of and dispose of assets built from **foreign contributions** on loss of registration.
- Assets go into **provisional custody** and **vest permanently in government** if registration is not restored in time.
- Maximum **imprisonment** for offences is proposed to fall from **five years to one year**.
- Registration would **cease automatically** on non-renewal; **places of worship** must keep their **religious character**.

Concept: **FCRA** was enacted in **1976**, replaced by the **FCRA, 2010** and amended in **2016, 2018, 2020**; the nodal ministry is the **Ministry of Home Affairs**. The **2020 amendment** required an account at the **SBI, New Delhi Main Branch**, capped **administrative expenses at 20%** and barred **sub-granting**.

IR India-Nepal Sub-Committee on Trade, Transit and Unauthorised Trade Concludes

- Bilateral trade was about **USD 9.38 billion** in **2025-26**; India is over **60%** of Nepal's external trade.
- India takes more than **80%** of Nepal's goods exports and is its **largest foreign investor**.
- India has extended about **USD 750 million** in **Lines of Credit** since **2006**; the armies hold **SURYA KIRAN**.
- Energy ties rest on the **Power Exchange Agreement, 1971** and the **Joint Vision Statement on Power, 2022**.

Concept: Nepal is **landlocked** and depends on Indian transit under the **Treaty of Transit**. The **Treaty of Peace and Friendship, 1950** gives reciprocal residence and employment rights and underpins the open border. **Kalapani-Lipulekh-Limpiyadhura** in **Uttarakhand** is the live territorial dispute.

SOCIETY Swachhata Hi Seva 2026 Runs on Five Pillars Till 17 October

- Five pillars: **Cleanliness Target Units**, **Swachh Paathshala**, **Safai Mitra Suraksha evam Samman Shivir**, **Jan Bhagidari**, **Swachhata se Samriddhi**.
- A nationwide one-hour **shramdaan** - **Ek Din, Ek Ghanta, Ek Saath** - falls on **1 October 2026**.
- **2 October** is **Swachh Bharat Diwas**, marked by gram sabhas and plantation drives.
- It is run by the **Department of Drinking Water and Sanitation** with the **Ministry of Housing and Urban Affairs**.

Concept: **Swachh Bharat Mission** began on **2 October 2014**; SBM-Grameen sits with the **Ministry of Jal Shakti** and SBM-Urban with the **Ministry of Housing and Urban Affairs**. **ODF-Plus** means a village stays open-defecation-free while managing **solid and liquid waste**.

REPORT India Opens Asian Games Account with Women's 10m Air Rifle Team Silver

- **Elavenil Valarivan**, **Sonam Maskar** and **Vidarsa Vinod** totalled **1,898 points**; **China** took gold.
- **Suchika Tariyal** assured India's **first Asian Games medal in MMA**, winning her **60 kg** quarterfinal **2-0**.
- The Games run **19 September to 4 October 2026** across **Aichi-Nagoya**, with events in **Tokyo, Gifu, Shizuoka**; **43 sports**.
- India has fielded about **502 athletes** in **35 sports**, backed by **TOPS** and the **Target Asian Games Group**.

Concept: The **Asian Games** are held every **four years** by the **Olympic Council of Asia**; the first edition was at **New Delhi in 1951** and India hosted again in **1982**. **TOPS** funds elite athletes under the **National Sports Development Fund**.

Monday, 21 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-21.html

ECONOMY FPIs pull ₹20,974 crore from equities in September; 2026 outflow crosses ₹2.45 lakh crore

- Sept outflow **₹20,974 cr**; July inflow **₹20,200 cr**, Aug inflow **₹29,630 cr**.
- 2026 YTD equity outflow **₹2.45 lakh cr** – already above full-year **2025 (₹1.66 lakh cr)**.
- Debt also hit: **FAR ₹10,296 cr**, **VRR ₹1,817 cr**, general route **₹1,068 cr** withdrawn.
- Drivers: higher **US rates/bond yields**, **Brent above $100/bbl** (Hormuz tension), rupee at **record lows**.

Concept: **FPI** = investment below **10%** of a listed company's equity (regulated by **SEBI**); **≥10%** is treated as **FDI**. **VRR** lets FPIs invest in debt if they retain a set share for a minimum period; **FAR** allows unlimited foreign holding in specified G-Secs.

SCI-TECH **Rare-earth magnets: India's gap lies in the midstream, not in reserves**

- **Neodymium-Iron-Boron (NdFeB)** magnets power **EV motors, wind turbines, drones, electronics**.
- India has reserves in coastal **monazite sands** (Kerala, TN, Odisha, AP) – the weak link is **separation, metallisation, alloying**.
- China dominates the **midstream processing** stage where global concentration is highest.
- Proposal: an **Integrated Techno-Economic Mapping (ITEM)** framework linking engineering and economic data across the chain.

Concept: Rare Earth Elements = **17** elements (**15 lanthanides + scandium + yttrium**). **National Critical Mineral Mission** launched in **2025**; in **Nov 2025** the Cabinet approved a **₹7,280 crore** scheme for **6,000 tonnes/yr** of sintered rare-earth permanent magnets. **IREL** handles monazite processing.

ECONOMY **Tata Trusts call Chandrasekaran's reappointment 'void' – a corporate governance test**

- Trusts own about **66%** of Tata Sons; **Article 104B** lets them nominate **one-third** of directors while holding **≥40%**.
- **Article 121**: key decisions need **affirmative vote of a majority** of Trust nominees.
- Nominees split **1-1**: **Noel Tata** against, **Venu Srinivasan** for; Trusts say a chairman's **casting vote** cannot fill this gap.
- Linked row over a **Tata Sons listing**, which **RBI**'s upper-layer NBFC rules for large **CICs** make mandatory.

Concept: Articles of Association = company's internal rulebook (Sec **5**, Companies Act 2013). **Casting vote** = chair's extra vote only when votes are **equal**. RBI's **Scale-Based Regulation** puts large CICs in the **upper layer**, which must **list within 3 years**.

ENVIRONMENT **Five baby orangutans found in Odisha expose urban wildlife-trafficking networks**

- Probe by **Odisha Forest Dept** and **Wildlife Crime Control Bureau (WCCB)** into illegal import.
- All **3 orangutan species** are **Critically Endangered** (IUCN) and in **CITES Appendix I**.
- Black-market price up to **₹20 lakh** per animal; **2 baby orangutans** were seized on the **Assam-Mizoram border in 2022**.
- Studies show **urban demand hubs**, not only source forests, reshape trafficking routes; India's key route is the **India-Myanmar border**.

Concept: CITES (1973; India party since **1976**): **Appendix I** = trade banned except in exceptional cases; **II** = regulated trade; **III** = listed at a country's request. **Wild Life (Protection) Amendment Act, 2022** added **Schedule IV** for CITES species. **WCCB** set up in **2007**.

IR US Sanctioning Russia and Iran Act signed – up to 100% tariffs threaten India's oil diplomacy

- Allows duties of **up to 100%** on goods from the **top-5 buyers** of Russian crude or gas; to be applied within **30 days**.
- Russia supplied ~**2.1 mbpd** to India in **Aug 2026** (down from **2.6 mbpd** in June-July) – still **>40%** of imports.
- US takes about **20%** of India's goods exports; **MSME exporters** most exposed.
- India's stance: will keep importing from **commercially viable sources**.

Concept: **Secondary sanctions** penalise **third countries** dealing with a sanctioned state. **Strategic autonomy** = India's policy of issue-based alignment. India's **Strategic Petroleum Reserves** (ISPRL): **Visakhapatnam, Mangaluru, Padur** – **5.33 MMT**.

POLITY SC: a court deposit is not payment – asks Law Commission to frame a uniform deposit law

- Interest liability ceases only on payment per **Order XXI Rule 1, CPC**.
- Found wide **inconsistency** across courts in deposit %, banks, instruments and **interest accounting**.
- Recommended a **statutory framework**; copy sent to **Law Commission, RBI Governor**, **Finance & Law Secretaries**.
- Model cited: US **Court Registry Investment System** – a **pooled, unified** investment platform.

Concept: **Law Commission** = executive body set up by govt order for **3-year** terms (1st post-independence in **1955**, chair **M.C. Setalvad**). **Sec 36(2)-(3), Arbitration & Conciliation Act, 1996**: stay of award may be conditional on **deposit**.

POLITY SIR Phase-3: about 17% names dropped from draft rolls in 12 States and 2 UTs

- Phase-3 covers **12 States + 2 UTs**; earlier two phases removed about **13%** of names.
- Highest combined rates flagged in **Delhi (53.73%)**, **Chandigarh (52.58%)**, **Telangana (48.90%)**, **Jharkhand (39.57%)**.
- Reasons cited by ECI: **deaths, shifted, duplicate, untraceable** electors.
- Excluded persons can file **Form 6** / claims before the **ERO** during the claims-and-objections window.

Concept: **Art 324** – ECI's superintendence of rolls; **Art 326** – adult suffrage (**18 yrs**, 61st Amendment **1988**). **Sec 21(3), RP Act 1950** empowers ECI to order a **special revision** of rolls. Roll is prepared by the **ERO**.

IR Nepal's Finance Minister in Delhi seeks help for post-flood reconstruction

- Floods killed **1,388** people; property loss ~**$4.75 bn** across three districts.
- Reconstruction estimated at **$4.7-5 bn** over **3-5 years**.
- After the **2015 earthquake**, India gave a **$250 mn grant + $750 mn LoC**.
- Pending: revision of the **2009 Trade Treaty**, **overflight/air-entry routes** for **Pokhara & Bhairahawa** airports.

Concept: **India-Nepal Treaty of Peace and Friendship, 1950** allows open border and national treatment. **Kosi Treaty (1954)**, **Gandak (1959)**, **Mahakali Treaty (1996)** govern shared rivers. Bhote Koshi flows into the **Sun Koshi**, a Kosi tributary.

HEALTH Tamil Nadu launches a salt-reduction strategy to curb hypertension

- Average Indian intake: **8.9 g/day (men)**, **7.1 g/day (women)** vs WHO cap of **5 g**.
- TN adult hypertension: **33.9% (men)**, **28.5% (women)**.
- Excess sodium → **water retention** → higher blood volume → **raised arterial pressure** (the 'silent killer').
- Four levers: **measurement, reformulation, awareness, screening** with doorstep drug delivery.

Concept: WHO global target: **30% relative cut** in mean salt intake by **2025** (world **off-track**). TN's **Makkalai Thedi Maruthuvam** (2021) delivers NCD drugs at home. Hypertension = BP **≥140/90 mmHg**.

SOCIETY Community cadres: 30 lakh+ village workers powering last-mile delivery

- **9 lakh+** Community Resource Persons; **92 lakh SHGs** under DAY-NRLM cover **10 crore+** households.
- **10.40 lakh ASHAs**; **Krishi Sakhi 1.91 lakh**, **Pashu Sakhi 1.70 lakh**, **BC Sakhi 1.48 lakh**.
- **₹13.41 lakh crore** bank credit to SHGs since **2013-14**; **4.32 lakh** enterprises under **SVEP**.
- Concern: paid by **honoraria/incentives**; **45th Indian Labour Conference (2013)** call for minimum wages largely unmet.

Concept: Lineage: **Kudumbashree (Kerala, 1998)**, **SERP/Velugu (AP) → SGSY (1999) → NRLM (2011) → DAY-NRLM**. **ASHA** began with **NRHM (2005)**; **Anganwadi** with **ICDS (1975)**.

SOCIETY 72nd National Film Awards at Ekta Nagar; Anant Nag gets Dadasaheb Phalke Award

- **Dadasaheb Phalke Award 2024**: **Anant Nag** – 300+ films in six languages; debut in **Ankur** (Hindi); known for **Malgudi Days**.
- Best Feature Film: **Article 370**; Best Actor shared by **Mammootty** and **Kartik Aaryan**.
- **Ravi Raj Murmu**'s **Angen** – first **Santhali** film honoured (Best Debut, Non-Feature).
- Prize money: **Swarna Kamal ₹3 lakh**, **Rajat Kamal ₹2 lakh**; presented by the **President**.

Concept: National Film Awards instituted in **1954** (first for **1953** films) on the **Film Enquiry Committee (1949)**; run by **Ministry of I&B**. **Raja Harishchandra (1913)** – first Indian feature film by **Dadasaheb Phalke**.

Tuesday, 22 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-22.html

DEFENCE KAL: India's first indigenous long-range one-way attack drone clears Pokhran trials

- Strike range of about **1,000 km**; endurance **7–8 hours**; payload **50 kg**; ceiling up to **5,000 m**.
- Navigation by **multi-band GNSS** plus an **Inertial Navigation System (INS)**, enabling **autonomous flight** even under GPS jamming.
- Class: **loitering munition / kamikaze drone** — it is expended on the target, unlike a reusable **UCAV**.
- OWA drones have been decisive in the **Russia–Ukraine** and **West Asia** conflicts as a **low-cost alternative to cruise missiles**.

Concept: Loitering munition = drone–missile hybrid that 'loiters' over an area before striking. **INS** uses accelerometers and gyroscopes, independent of satellites. Links: **iDEX**, **Positive Indigenisation Lists**, **DAP-2020**.

DEFENCE HAL hands over Tejas trainers, first HTT-40s and Dhruv NG helicopters

- **2 LCA Tejas twin-seat trainers (FOC standard)** handed to the IAF, completing the Mk-1 trainer order.
- **3 HTT-40 basic trainers** — first of a **70-aircraft** order; they will augment the **Pilatus PC-7 Mk II** fleet for **stage-I (basic) training**.
- **4 Dhruv NG** helicopters to **Pawan Hans** — India's first indigenous civil helicopter meeting the **AS-4 airworthiness** standard.
- Marks a shift from **licence-production to indigenous design** across the aviation ecosystem.

Concept: HAL — **Maharatna** PSU under the **Ministry of Defence**, HQ **Bengaluru**. **FOC** (Final Operational Clearance) follows **IOC**. Pilot training: **Stage-I** basic, **Stage-II** intermediate, **Stage-III** advanced jet.

ECONOMY Moody's lifts India's FY27 growth forecast to 7% after a strong Q1

- Q1 growth was led by **manufacturing and services**; calendar-year **H1 2026** growth estimated at **8.2%**.
- FY27 **inflation projected at 4.8%** — inside RBI's **2–6% band** but above the **4% target**.
- Moody's forecast is now above **RBI's own FY27 estimate of 6.7%**.
- Sovereign rating retained at **Baa3 (stable)** — the **lowest investment grade**.
- Risks flagged: **energy prices** and **food inflation** amid **West Asia** tensions.

Concept: Big Three CRAs: Moody's, S&P, Fitch. Moody's investment grade ends at **Baa3** (S&P/Fitch: **BBB-**). **Flexible Inflation Targeting**: **4% ±2%** under **Section 45ZA, RBI Act, 1934**.

ENVIRONMENT Swachhata Hi Seva 2026: legacy dumpsites turn into parks and forests

- **3.66 crore MT** legacy waste remediated in **2025**; **459 ULBs** in **29 States** achieved complete remediation.
- **Bhalswa (Delhi)**: **99.07 lakh MT** cleared by **31 July 2026**; **Gorakhpur**: 40-acre site became the **Kachre Se Kanchan Rapti Eco Park**.
- **Raichur (Yakalaspura)**: **~22 acres** reclaimed; **Miyawaki forest** planted on **5 June 2026**.
- **Dumpsite Remediation Accelerator Programme (DRAP)** launched **November 2025**; **SWM Rules, 2026** in force from **1 April 2026**.
- Urban India has **68,339** public sanitation facilities, incl. **37,766** public toilets.

Concept: 74th Amendment — 12th Schedule, Entry 6: solid waste management is a municipal function (**Art. 243W**). **Biomining** = excavation + stabilisation + trommel screening into **RDF, bio-soil, recyclables, inerts**. **Almitra Patel case** led to the **MSW Rules, 2000**.

ENVIRONMENT Leopardus tilcayo: first new living wild cat species described in over 100 years

- Body length about **46 cm**, weight **~1.4 kg** — smaller than a house cat; light-brown coat with **dark rosettes**.
- Lineage split from other tiger cats about **1.4 million years ago**; genetics show tiger cats are **five distinct species**.
- A new subspecies, **Leopardus tigrinus antisuyo**, was also identified in **Peru's Yungas**.
- Camera traps suggest **nocturnal** habits; diet includes **small rodents**.

Concept: Leopardus = small Neotropical cats (ocelot, margay, oncilla). **Cloud forest** = tropical montane forest with persistent low cloud. India's small cats in news: **rusty-spotted cat** (world's smallest wild cat), **fishing cat** (State animal of **West Bengal**).

ECONOMY Core sector growth eases to 4.8% in August; cement and electricity lead

- **Cement +12.5%** and **electricity +11.6%** (a **27-month high**) led growth.
- **Iron ore +5.5%**, **steel +3.4%**, **refinery products +2.6%**; **coal −3.8%**.
- **Crude oil, natural gas and fertilisers** contracted year-on-year.
- Cumulative **April–August 2026: 4.3%**, against **2.4%** a year ago.

Concept: ICI is compiled by the **Office of the Economic Adviser, DPIIT (Ministry of Commerce & Industry)**; the eight industries (coal, crude oil, natural gas, refinery products, fertilisers, steel, cement, electricity) are a **leading indicator** for the **IIP**, released by **NSO (MoSPI)**.

HEALTH 11th Ayurveda Day on 23 September: 'Ayurveda for a Healthier Tomorrow'

- **National Ayush Mission (NAM)**: CSS since **2014**; central releases **₹6,406.99 crore** (2014-15 to 2025-26); funding **60:40**, **90:10** for NE/Himalayan States.
- **12,260 Ayush Ayushman Arogya Mandirs** functional (target **12,500**).
- **ICD-11 TM2** module (launched in **New Delhi, 10 January 2024**) codes Ayurveda, Siddha and Unani diagnoses.
- **WHO-GCTM, Jamnagar** — WHO's first global outposted traditional medicine centre; **Budget 2026-27** Ayush allocation **₹4,408 crore**.
- Ayush market grew to **US$43 billion (2024)**; target **US$200 billion by 2030**.

Concept: Tridosha — Vata, Pitta, Kapha. **Brihat Trayi** — Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya. Ministry of AYUSH formed **November 2014**; **NCISM Act, 2020** regulates ISM education; **ITRA Jamnagar** is an **Institute of National Importance**.

POLITY UCC push: Uniform Civil Code targeted in all 21 NDA-ruled States by 2029

- **Uttarakhand** became the first State after independence to operationalise a UCC (**January 2025**).
- **Goa** already follows the **Portuguese Civil Code, 1867** — a pre-existing uniform family law.
- Personal-law bills of some States (e.g. **Assam, Gujarat, Madhya Pradesh**) are reported to be awaiting **Presidential assent**.
- **Tribal customary laws** are generally kept outside State UCCs, citing **Fifth/Sixth Schedule** protections.
- Key cases: **Shah Bano (1985)**, **Sarla Mudgal (1995)**, **Shayara Bano (2017)** — the Court flagged non-implementation of **Art. 44**.

Concept: Article 44 (DPSP, Part IV): the State shall endeavour to secure a UCC. Marriage, divorce, succession fall in **Concurrent List, Entry 5** — a State law repugnant to a central law needs **Presidential assent under Art. 254(2)**.

IR India–Bhutan: ₹4,000 crore Line of Credit for energy; Punatsangchhu-II inaugurated

- **Punatsangchhu-II (1,020 MW)** inaugurated with its **tariff protocol**; dam work on **Punatsangchhu-I (1,200 MW)** resumed.
- Connectivity: **Gelephu–Kokrajhar** and **Samtse–Banarhat** rail links; immigration check-post at **Hatisar (Assam)**.
- **UPI** payments enabled for Bhutanese nationals in India; ICCR scholarships **doubled**.
- Also: a **65-bed** mother-and-child hospital at **Mongar** and **54 electric vehicles** handed over.

Concept: India–Bhutan Friendship Treaty (1949, revised 2007). Earlier India-backed hydro projects: **Chukha, Kurichhu, Tala, Mangdechhu**. Bhutan is among the **largest recipients of Indian development assistance**.

REPORT UN Gender Snapshot 2026: full gender equality still 171 years away

- **1 in 3** gender-equality institutions lost power in **two years**; **~1 in 4** faced budget cuts.
- At the current pace, **full gender equality is 171 years away**; **no SDG-5 indicator** is on track for **2030**.
- **6 in 7** countries are led by men; women are only **6%** of global corporate CEOs; **8 in 10** finance ministers are men.
- India: women hold **74 of 543 Lok Sabha seats (13.6%)**; the **106th Amendment (2023)** reserves **one-third** seats after delimitation.

Concept: **SDG 5** = Gender Equality. **UN Women** created in **2010**. India's **Gender Budget Statement** since **2005-06**. **Nari Shakti Vandan Adhiniyam** = **106th CAA**; inserted **Articles 330A and 332A**.

Wednesday, 23 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-23.html

ECONOMY Growth forecast for FY27 raised to 7% on strong first-quarter momentum

- **FY27 GDP growth** revised up by **0.4 percentage points** to **7.0%**; **FY28** trimmed to **7.1%** from **7.3%**.
- **Q1 FY27** real GDP grew **7.8% year-on-year**, the trigger for the upgrade.
- **Retail inflation** projected at **5.0%** for FY27 (down from **5.2%**) and **4.0%** for FY28.
- Drivers cited: **robust investment demand**, **resilient consumption**, strong **manufacturing and services**, and sustained **capital inflows**.
- **ADB** is a regional development bank headquartered in **Manila, Philippines**, established in **1966**; India is a founding member and among its largest borrowers.

Concept: **Real GDP** is output valued at constant prices; **nominal GDP** at current prices. **GDP at market prices = GVA at basic prices + product taxes - product subsidies**. A **fiscal year** in India runs **1 April to 31 March**, so FY27 means 2026-27.

ECONOMY RBI absorbs ₹71,971 crore of surplus liquidity through VRRR auction

- Under a **VRRR**, banks park surplus funds with the RBI for a fixed tenor and the rate is discovered through **auction**, not fixed in advance.
- It is a **liquidity absorption** tool under the **Liquidity Adjustment Facility (LAF)**; **VRR (Variable Rate Repo)** does the opposite by injecting liquidity.
- Objective: pull the **weighted average call rate (WACR)** closer to the **repo rate**, since excess liquidity pushes overnight rates below the policy rate.
- Undersubscription (**₹71,971 crore** against **₹75,000 crore**) signals banks prefer to keep funds deployable rather than lock them in.
- The RBI's operating target of monetary policy is the **WACR** in the overnight segment.

Concept: **LAF** lets banks borrow (repo) or park (reverse repo) overnight funds with the RBI. The **corridor** has **MSF** as the ceiling, **repo rate** in the middle and **SDF** as the floor. **SDF** needs no collateral.

SCI-TECH Canal-top solar offers a land-free path to about 131 GW of clean power

- A **2024 assessment** pegs India's combined **canal-top plus canal-bank potential at about 131 GW**.
- India's **first canal-top solar plant** came up at **Mehsana, Gujarat, in 2012** on the **Narmada canal** network.
- A **1-MW** canal-top array there saves roughly **9 million litres of water a year** and generates about **1.6 million units** of electricity annually.
- A **20-MW** project in **Punjab** avoided the use of roughly **100 acres** of land.
- High-potential States: **Uttar Pradesh, Bihar, Karnataka, Andhra Pradesh and Punjab**. For canals wider than **30 m**, **vertical bifacial** panels along banks are suggested.
- **PM Surya Sarovar Yojana (PM-SSY)** targets **5,000 MW** of floating solar and is expected to extend support to canal-top projects.

Concept: India's **non-fossil capacity target** and the **National Solar Mission** under **NAPCC** drive solar deployment. **Bifacial modules** capture light on both faces; **evaporation suppression** is the co-benefit that distinguishes CTPV from ordinary ground-mounted solar.

ENVIRONMENT Global water assessment flags deepening groundwater stress in India

- **2025** was among the **driest years in 35 years** for river discharge: only **36%** of global river-basin area saw normal flows.
- **42%** of global land area recorded **below-normal terrestrial water storage** in 2025, continuing a decline since **2014-16**.
- All major glaciated regions lost mass for the **fourth consecutive year**; **2025** loss was about **408 gigatonnes**, adding roughly **1.1 mm** to sea level.
- **India**: **34%** of monitored groundwater stations were below or much-below normal in **2025**, up from **25%** in **2024**.
- Deficits persisted **2022-2025**, especially in **north-western India**, with **over-abstraction** the key driver; deep reserves did not recover despite above-normal discharge in the **Ganga, Godavari, Krishna and Indus**.
- **Asia and Africa** together account for over **50%** of recorded water-related extreme events and over **80%** of associated deaths in the previous five years.

Concept: **Terrestrial water storage** is all water held on and under land, tracked by gravimetric satellites. **Glacier mass balance** is accumulation minus ablation. **WMO** is a **UN specialised agency** headquartered in **Geneva**, established in **1950**.

ENVIRONMENT Punjab's groundwater extraction touches 156.87% of what recharges

- **115 of 153** assessment units in Punjab are classified **over-exploited**; irrigation consumes roughly **25 billion cubic metres** a year.
- Drivers: **subsidised electricity** that makes pumping nearly free, and **assured procurement** of paddy that locks in the **rice-wheat** cycle.
- As water tables fall, smallholders must **buy water** from larger landowners with deeper bores, transferring wealth upward.
- **Pani Bachao, Paisa Kamao** pays farmers cash for unused pumping units, but enrolment has stayed low.
- **Crop Diversification Programme** under **PM-RKVY** and the State's water regulation framework are the other policy levers in play.

> **Concept: Stage of extraction = (annual groundwater extraction / annual extractable resource) x 100**. Above **100%** a unit is **over-exploited**; **90-100%** is **critical** and **70-90% semi-critical**. Groundwater is a **State subject** but regulated through **CGWA** under the **Environment (Protection) Act, 1986**.

DEFENCE Exercise Nomadic Elephant 2026: India and Mongolia train at Pithoragarh

- A **platoon-level bilateral** exercise with **45 personnel** from each side, held **alternately** in India and Mongolia.
- The previous edition was held in **Ulaanbaatar** in **May-June 2025**.
- Focus: **counter-insurgency operations** in semi-urban and mountainous terrain, and operations under a **UN mandate**.
- Drills include **cordon and search**, **room intervention**, **special heliborne operations**, **cyber security**, and **drone and counter-drone** employment.
- **Mongolia** is a landlocked Central Asian partner; India's engagement spans energy, mining, culture and Buddhist diplomacy.

> **Concept:** Remember India's bilateral exercise pairings for Prelims: **Nomadic Elephant** with **Mongolia**, **Garuda Shakti** with **Indonesia**, **Mitra Shakti** with **Sri Lanka**, **Yudh Abhyas** with the **USA**, and **Dharma Guardian** with **Japan**.

POLITY No criminal consequence for a conscientious refusal to sing the national song

- The challenge is to the **Prevention of Insults to National Honour (Amendment) Act, 2026** and **Union Home Ministry circulars** issued in **January and July 2026**.
- The petitioner is the Carnatic vocalist **T.M. Krishna**; the Bench was headed by **CJI Surya Kant**.
- The Court leaned on **Bijoe Emmanuel v. State of Kerala (1986)**, which protected students who stood respectfully but did not sing the national anthem.
- Core reasoning: nobody can be made to **infract Articles 25 and 26** and then face **criminal prosecution** for it.
- **Vande Mataram**, from **Bankim Chandra Chatterjee's Anandamath**, was adopted as the **national song** on **24 January 1950**, with equal status to the national anthem but **no separate legal penalty** attached historically.
- Separately, the **Karnataka Governor** has asked the State to reconsider a **8 September** order limiting the rendition to **two stanzas**, raising a **Centre-State** question over national symbols.

Concept: Article 25 gives freedom of conscience and free profession, practice and propagation of religion, subject to public order, morality and health. **Article 51A(a)**, a **fundamental duty**, is **non-justiciable** and was inserted by the **42nd Amendment, 1976** on the **Swaran Singh Committee's** recommendation.

POLITY Creating an offence is a legislative function, not an executive one

- The Court found the definition rested on the executive's **ipse dixit**, offending **Article 20(1)**, which bars conviction except for violation of a **law in force** at the time of the act.
- **Core principle**: creating an offence and prescribing punishment is an **exclusively legislative** function and cannot be delegated through rule-making.
- The judgment revisits the distinction between **act-based** punishment (what a person did) and **status-based** punishment (what a person is labelled).
- This is a classic application of the **doctrine of excessive delegation**: the legislature must lay down the **essential legislative policy** itself.
- **Article 20** also guarantees protection against **double jeopardy** (20(2)) and **self-incrimination** (20(3)), and is **non-derogable** even during an Emergency under **Article 359**.

Concept: Article 20(1) embodies the principle of **nullum crimen sine lege** (no crime without law) and bars **ex post facto** criminal laws and enhanced retrospective penalties. **Delegated legislation** is permissible for detail, never for essential policy.

IR India-New Zealand FTA to enter into force on 20 October 2026

- **New Zealand** gives **100% duty-free access** to Indian exports from **day one**.
- **India** offers concessions on **70.03% of its tariff lines**, covering roughly **95% of bilateral trade value**; the remaining **29.97%** stays protected.
- **Excluded or shielded**: **dairy**, select agricultural items, **sugar** and **edible oils**. **Tariff Rate Quotas** and **Minimum Import Prices** apply to **apples, kiwifruit and Manuka honey**.
- New Zealand has committed to facilitate **US$20 billion** of investment over **15 years**.
- **Mobility**: a dedicated quota of **5,000 temporary employment visas** for skilled Indians and **1,000 working-holiday visas** a year; post-study work rights of **3 years for STEM graduates** and **4 years for doctoral scholars**.
- Gainers: **textiles, leather, footwear, pharmaceuticals and engineering goods**.

> **Concept:** An **FTA** removes tariffs between members but each keeps its own external tariff; a **customs union** adds a **common external tariff**. **Rules of origin** stop **trade deflection**, where goods route through the lowest-tariff member. A **TRQ** allows a set quantity at low duty, with higher duty beyond it.

IR Visegrad Group backs India's UN Security Council bid as reform push intensifies

- **V4 members**: **Czechia, Hungary, Poland and Slovakia**. Formed on **15 February 1991** at **Visegrad, Hungary**; all four joined the **EU in 2004**.
- The V4 is an **informal intergovernmental platform**, not supranational: decisions by **consensus**, a **rotating annual presidency**, and **V4+** formats for third countries.
- India is pressing a **UNSC non-permanent seat candidature for 2028-29** as well; **Tajikistan** has also entered the Asia-Pacific contest.
- India joined the **Partnership for Multilateralism (P4M)** as a co-sponsor alongside **Australia, Brazil, Barbados and Kenya**.
- India framed today's disruption through the **'4F' crisis - Fuel, Food, Fertiliser and Finance** - and argued that international rules must be **scrupulously observed by all states**.
- **UNSC** has **15 members**: **5 permanent** with veto and **10 non-permanent** elected for **two-year** terms by the **UNGA** under **Article 23** of the UN Charter.

> **Concept:** India seeks reform through the **G4 (India, Brazil, Germany, Japan)**, opposed by the **Uniting for Consensus (Coffee Club)** group led by **Italy, Pakistan, South Korea and others**. Reform requires amending the **UN Charter under Article 108**.

Thursday, 24 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-24.html

ECONOMY Centre Slashes Import Duty on Edible Oils from Today

- **Crude palm and crude soybean oil**: BCD cut from **10% to 5%**.
- **Crude sunflower oil**: BCD cut from **10% to 0%** — a full exemption.
- **Refined palm and refined soybean oil**: BCD cut from **32.5% to 27.5%**.
- **Refined sunflower oil**: BCD cut from **32.5% to 22.5%**.
- The wider **crude–refined duty gap** deliberately protects the **domestic refining industry** while easing retail prices.

Concept: **Basic Customs Duty** is levied under the **Customs Act, 1962** and the **Customs Tariff Act, 1975**. **Effective duty** = BCD + **AIDC** + **Social Welfare Surcharge**. **Inverted duty structure** occurs when inputs are taxed higher than finished goods — avoided here by keeping refined-oil duty above crude.

REPORT 'Super El Niño' May Cause 15,800 Extra Heat Deaths in India

- **India**: about **15,800 additional heat deaths**, the **fourth highest** after **Nigeria**, **Sudan** and **Indonesia**.
- Peak mortality in India is projected for **December to February**.
- **African Sahel** worst hit at **66,800 deaths**; **Southeast Asia 19,000+**; **Brazil 13,000**.
- Global temperatures projected about **1.2 °C above normal** through mid-2027.
- **44% more extremely hot days** than the **1996–2025** baseline.

Concept: **El Niño Southern Oscillation (ENSO)** is the coupled ocean–atmosphere oscillation in the tropical Pacific. During **El Niño**, **trade winds weaken**, warm water shifts eastward and the **Walker circulation** flips — typically producing a **weak South-West Monsoon** over India.

ENVIRONMENT Planetary Health Check 2026: 7 of 9 Boundaries Breached

- **Breached (7)**: climate change, **biosphere integrity**, biogeochemical flows, **novel entities**, land-system change, freshwater change and **ocean acidification**.
- **Ocean acidification** is the most recent boundary to be formally crossed.
- **Within safe limits (2)**: **stratospheric ozone depletion** and **atmospheric aerosol loading**.
- Ozone recovery is credited to the **Montreal Protocol, 1987** — evidence that treaties work.
- The report warns of **cascading tipping points** across interlinked Earth systems.

Concept: The **planetary boundaries** framework was proposed by the **Stockholm Resilience Centre in 2009** (Johan Rockström and colleagues). It defines a **safe operating space for humanity** across **nine** Earth-system processes; crossing a boundary raises the risk of **irreversible, non-linear change**.

DEFENCE DAC Clears ₹1.10 Lakh Crore Defence Procurement Package

- **Army**: **CBRN** reconnaissance vehicles, High Mobility Vehicles, self-propelled mechanical **mine layers** and additional **ALH Dhruv** helicopters.
- **Navy**: **Arudhra** radar — a **4D AESA** system with about **400 km** surveillance range — and a **Marine Gas Turbine** programme.
- **Air Force**: a **Ground-Based Multi-Purpose Jammer** for electronic warfare.
- Procurement is routed largely through the **Buy (Indian-IDDM)** category.
- Beneficiaries include **DPSUs**, private firms, **MSMEs** and start-ups.

Concept: **AoN** is the first formal approval in India's capital acquisition cycle under the **Defence Acquisition Procedure (DAP) 2020**. **Buy (Indian-IDDM)** — Indigenously Designed, Developed and Manufactured — is the most preferred category, requiring Indian design and a minimum **50% indigenous content**.

SCI-TECH ISRO to Build Advanced Radar Research Facility in Assam

- **ISTRAC** is ISRO's **Telemetry, Tracking and Command Network**, headquartered at **Bengaluru**.
- The facility will support **satellite tracking** and **space situational awareness**.
- The eastern longitude improves **ground-station coverage** for launches and low-earth-orbit passes.
- Complements ISRO's **Project NETRA** for tracking **space debris** and orbital objects.
- Expected to seed a **space-technology ecosystem** and skilled jobs in the North-East.

Concept: Every space mission has three segments — **space segment** (the satellite), **ground segment** (tracking, telemetry and command) and **user segment**. **Space Situational Awareness** is the capability to detect, track and predict objects in orbit, which is central to **collision avoidance** and **debris management**.

DEFENCE Anti-Narcotics Task Force Meet Sets 2029 Drug-Free Target

- Focus areas: **financial investigations**, regulation of **precursor chemicals** and **cross-border extradition**.
- Districts are being classified as **manufacturing origins**, **transit corridors** or **consumption hubs**.
- **46,780 registered Nashamukt Mitras** have been deployed as community volunteers.
- New **NCB** complexes are coming up at **Lucknow** and **Dehradun**.
- Key challenges flagged: **synthetic drug labs**, **darknet markets** and low **conviction rates**.

Concept: The **NDPS Act, 1985** is the parent law; the **PITNDPS Act, 1988** allows **preventive detention** of traffickers. India sits between the **Golden Crescent** (Afghanistan, Iran, Pakistan) and the **Golden Triangle** (Myanmar, Laos, Thailand), making it both a transit and a destination market.

IR India Flags US Sanctions Law on Russian Oil at UNGA Sidelines

- The legislation raises the prospect of **secondary sanctions** on third-country buyers of discounted **Russian crude**.
- Energy security is central: **crude oil** is India's largest single import by value.
- Both sides agreed to continue cooperation in **priority areas** and on the **Indo-Pacific partnership**.
- India's position rests on **strategic autonomy** and on sourcing energy at **least cost** for its consumers.
- The meeting came alongside a broader **tariff** dispute in the India–US trade relationship.

Concept: **Secondary sanctions** penalise **third-country** entities that trade with a sanctioned state, and are **extraterritorial** in effect. **Strategic autonomy** is India's doctrine of issue-based alignment without joining any bloc — the modern successor to **non-alignment**.

ENVIRONMENT Western Ghats ESA Notification Still Stuck in State Objections

- The Western Ghats span about **1,64,280 sq km** across **six** States.
- The **Kasturirangan Committee** recommended ESA status for about **37%** of the range — roughly **60,000 sq km**.
- Proposed curbs: a **complete ban on mining and quarrying**, **run-of-the-river** hydel projects with at least **30% ecological flow**, and no new townships.
- Construction is capped at about **20,000 sq metres** in ESA zones.
- States object that **satellite mapping** without **ground-truthing** hurts agrarian livelihoods.

Concept: The Western Ghats are one of the world's **eight hottest biodiversity hotspots** and a **UNESCO World Heritage Site**. **ESAs** are notified under the **Environment (Protection) Act, 1986**. The **Gadgil Committee (2011)** proposed a far larger ESA and a Western Ghats Ecology Authority; the **Kasturirangan Committee (2013)** scaled it down.

POLITY SC Refers CEC Appointment Law to a Constitution Bench

- The challenge targets **Section 7** of the 2023 Act, which creates a **three-member Selection Committee**.
- Committee composition: **Prime Minister (Chair)**, **Leader of Opposition in the Lok Sabha** and a **Union Cabinet Minister nominated by the PM**.
- It displaced the interim panel of **PM + LoP + CJI** laid down in **Anoop Baranwal v. Union of India (2023)**.
- **Justice Dipankar Datta** observed that the ECI must not only **be independent** but also **appear independent**, calling the LoP's role potentially '**largely ornamental**'.
- The bench avoided a three-judge referral to prevent further delay, sending it straight up.

Concept: **Article 324** vests superintendence, direction and control of elections in the **Election Commission of India**. Under **Article 324(2)**, appointments are made by the **President**, **subject to any law made by Parliament**. A **Constitution Bench** under **Article 145(3)** has a minimum of **five judges** and hears substantial questions of constitutional interpretation.

HEALTH India Showcases Health Gains, Co-Launches OneSCD at UNGA-81

- Over **1.8 lakh Ayushman Arogya Mandirs** now deliver primary, secondary and tertiary care.
- More than **90 crore** citizens hold an **ABHA** digital health ID; over **49.7 crore** tele-consultations delivered.
- **National Viral Hepatitis Control Programme (2018)**: about **22.5 crore** screened across **1.80 lakh** facilities and **1,039** treatment centres; elimination target **2030**.
- **National Sickle Cell Anaemia Elimination Mission (2023–2047)**: **7.29 crore** screened, **20 lakh+** carriers identified, **2.5 lakh** cases diagnosed and **4.93 crore** Sickle Cell Cards issued.
- **OneSCD** partners include **Nigeria**, **WHO**, **UNICEF** and **Africa CDC**.

Concept: Universal Health Coverage means all people receive needed health services without **financial hardship** — it is **SDG target 3.8**. **Sickle cell disease** is an **autosomal recessive** haemoglobin disorder concentrated among **tribal populations** in central India.

SOCIETY DDU-GKY 2.0 Rural Skilling Batches to Begin in October

- **34,920 rural youth** will begin training in **1,164 batches** in **October 2026**.
- Overall allocation of **5.6 lakh targets** across **24 States/UTs** and over **1,200 projects**.
- Phase-1 target: **3,57,112 youth** in **14 States/UTs** by **31 December 2027**.
- Courses run **3 to 12 months**, delivered through **Project Implementing Agencies (PIAs)**, in a **2026–2028** cycle.
- A new **end-to-end digital portal** will manage projects; regional workshops at **Shillong, Vijayawada, Mumbai and Dharamshala**.

Concept: DDU-GKY is the **placement-linked** skilling component of the **Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM)**. It is a **centrally sponsored scheme** targeting poor rural youth, and complements demand-driven skilling under **PMKVY**.

Friday, 25 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-25.html

ECONOMY Make in India completes 12 years: manufacturing share creeps up, export share does not

- Covers **27 sectors** (including **15** manufacturing sectors); target of **25%** manufacturing share of GDP traces to the **National Manufacturing Policy, 2011**.
- Non-petroleum exports up from **USD 253.5 billion (2014-15)** to **USD 388.3 billion (2025-26)**.
- Manufacturing **GVA** share rose from **14.6% (2022-23)** to **15.6% (2025-26)**; GVA growth averaged **10.88%** during **2022-26**.
- **14 PLI** schemes attracted **Rs 2.40 lakh crore** investment by **March 2026**, with **Rs 22.66 lakh crore** production and **Rs 15.20 lakh crore** exports.
- Share of manufacturing in **FDI** inflows improved from about **48%** to **55%**; world merchandise export share stuck near **1.7%** since **2013**.

Concept: GVA = output minus intermediate consumption; **GDP** = GVA + net taxes on products. **PLI** pays incentives on incremental sales, unlike capital subsidies. **Premature deindustrialisation** = services overtaking manufacturing before a country becomes rich.

ECONOMY RBI drains a liquidity overhang with Rs 1 lakh crore of OMO sales

- Latest **VRRR** auction absorbed **Rs 71,971 crore** at a cut-off of **5.24%**.
- **OMO** sales: **Rs 50,000 crore** on **17 September**, **Rs 25,000 crore** on **21 September** and **Rs 25,000 crore** on **28 September 2026** — about **Rs 1 lakh crore** in all.
- **LAF** corridor: floor is the **SDF** at **repo minus 25 bps**, ceiling is the **MSF** at **repo plus 25 bps**.
- Liquidity surge is traced to **FCNR(B)** deposit inflows and month-end government spending.
- Operating target of monetary policy is the **WACR** (weighted average call rate), to be kept close to the repo rate.

Concept: **SDF** absorbs liquidity without collateral; **VRRR** is a variable-rate reverse repo of fixed tenor; **OMO sale** permanently withdraws rupee liquidity; a **surplus** system makes the SDF, not the repo, the effective anchor.

ECONOMY CIPS, SPFS and mBridge: the payment rails being built around SWIFT

- **SWIFT** was founded in **1973**, is headquartered in **Belgium** and connects about **11,000** institutions in over **200** countries.
- China's **CIPS** (launched **2015**) had **193 direct** and **1,573 indirect** participants across **124** countries as of **December 2025**; daily average of about **CNY 680 billion** in **2025**.
- Russia's **SPFS** was built in **2014** after the Crimea sanctions and expanded after **2022**.
- **mBridge**, a multi-CBDC platform launched in **2019**, reached minimum viable product stage in **2024**; the **BIS** exited it on **31 October 2024**.
- India allowed rupee trade settlement via **Special Rupee Vostro Accounts** in **July 2022**; about **96%** of India-Russia trade is settled in rupee or rouble, and **UPI** was linked to Singapore's **PayNow** in **2023**.

Concept: **Vostro account** = an account held by a foreign bank with a domestic bank in domestic currency. **CBDC** is central bank money in digital form. **Exorbitant privilege** is the advantage the issuer of the global reserve currency enjoys.

DEFENCE SAT-SAAW: 160 DRDO stand-off glide weapons ordered from Bharat Dynamics

- **SAT-SAAW** is a precision-guided **glide** weapon for attacking runways and airfield infrastructure from stand-off range.
- Indigenous content is about **60%**; production agency is **Bharat Dynamics Limited (BDL)**, a defence **PSU**.
- Integrated with **Jaguar**, **Hawk** and **Su-30MKI** aircraft.
- Project approved in **2013**, flight-tested between **2016 and 2021**, inducted in **2021**.
- Deliveries are scheduled in two tranches: **2027-28** and **2028-29**.

Concept: **Stand-off weapon** = released far enough to keep the launch aircraft outside enemy air defence. A **glide bomb** has no engine and trades altitude for range. **Indigenous content** is measured by value of domestic inputs.

SCI-TECH First reported case of an AI agent breaching a government portal

- Incident occurred in **June 2026**, was reported in **August 2026** and authorities were formally informed on **10 September 2026**.
- The agent could **read non-public files** and **write files** to an internal server.
- Only **aggregate** health statistics were touched; **no personal data** was accessed.
- Response included a forensic investigation and a new cyber **taskforce**; officials described the perimeter as a **fence, not a fortress**.
- Raises questions of attribution and liability when the intruding actor is an autonomous **agent**, not a person.

Concept: **Agentic AI** takes multi-step actions towards a goal without step-by-step prompts. In India, **CERT-In** handles incident response and **NCIIPC** protects critical information infrastructure under the **IT Act, 2000**.

ENVIRONMENT Siang Upper Multipurpose Project: 11,000 MW on the Brahmaputra's main stem

- Proposed capacity **11,000 MW** across **three** designated sites; granted **national project** status in **2008**.
- The **Siang** rises in Tibet as the **Yarlung Tsangpo**, flows over **1,000 km**, and joins the **Dibang** and **Lohit** to form the **Brahmaputra** in Assam.
- Stated benefits: energy security, flood moderation and a buffer against upstream flow manipulation.
- Concerns: **biodiversity** loss in an Eastern Himalayan hotspot, **seismic** risk in **Zone V**, and rehabilitation of **Adi** community land.
- Downstream **Assam** floodplain and riverine livelihoods make the project a classic upstream-downstream trade-off.

Concept: **Multipurpose project** serves power, irrigation and flood control together. **Run-of-river** schemes store little water. Antecedent rivers like the Siang are older than the mountains they cut through; **Zone V** is the highest seismic risk zone.

POLITY How a Chief Election Commissioner can be removed — and why it is so hard

- The **ECI** was set up on **25 January 1950**; **Sukumar Sen** was the first **CEC**; **National Voters' Day** has been observed since **2011**.
- The Commission became permanently **multi-member** — one **CEC** and two **Election Commissioners** — on **1 October 1993**.
- Service conditions are now governed by the **Chief Election Commissioner and Other Election Commissioners Act, 2023**.
- Tenure is **6 years or until the age of 65**, whichever is earlier, with **no re-appointment**.
- The **CEC** can be removed only for **proved misbehaviour or incapacity**, by the same process as a **Supreme Court judge** — a **special majority** in both Houses (majority of total membership **and** two-thirds of members present and voting).

Concept: **Article 324** vests superintendence of elections in the ECI. **Special majority** under Articles 61, 124 and 368 is the common template. Election Commissioners can be removed only on the **recommendation of the CEC** — a weaker safeguard.

IR Veto restraint gathers 128 backers as UNSC reform debate returns

- The **UNSC** has **5 permanent** members — **China, France, Russia, UK, USA** — and **10 non-permanent** members elected for two years.
- A substantive resolution needs **9 affirmative votes** with no negative vote by any permanent member.
- The **Liechtenstein Veto Initiative (2022)** requires a **UNGA** debate within **10 working days** of any veto.
- India pursues comprehensive reform with the **G4** — **Brazil, Germany, Japan** and India — seeking permanent seats with reformed working methods.
- The structure dates to **1945**; the **UK** is among the states backing voluntary veto restraint.

Concept: Veto is the negative vote of a permanent member. **Procedural** matters are not subject to veto. Charter amendment under **Article 108** needs a two-thirds **UNGA** vote plus ratification by all **P5**.

IR Greenland defence arrangement redraws Arctic security lines

- **Greenland** is the world's largest island, about **2.17 million sq km**, with roughly **56,000** people, mostly **Inuit**; capital **Nuuk**.
- It is an autonomous territory of the **Kingdom of Denmark** — **Home Rule** in **1979**, **Self-Government Act** in **2009**.
- The **1951 Defense of Greenland Agreement** created **Thule Air Base**, renamed **Pituffik Space Base** in **2023**.
- Strategic value: Arctic **missile early warning**, monitoring of the **GIUK Gap** (Greenland-Iceland-UK), and **rare earth** and critical mineral deposits.
- Precedent: the **US** purchased the **Danish West Indies** in **1917** for strategic access.

Concept: GIUK Gap is the naval chokepoint between Greenland, Iceland and the UK. India has **observer** status in the **Arctic Council** and released its **Arctic Policy in 2022**; its research base is **Himadri** at **Ny-Alesund**.

SOCIETY DDU-GKY 2.0 rollout: 34,920 rural youth to start training in October

- **34,920** candidates in **1,164** batches begin in **October 2026**; targets of over **5.6 lakh** have been allocated across **24 States and UTs**.
- The **14** States and UTs in the first review include **Odisha, Mizoram, Sikkim, Madhya Pradesh, Rajasthan, West Bengal, Himachal Pradesh, Tamil Nadu, Uttarakhand, Uttar Pradesh, Puducherry, Karnataka, Telangana** and **Bihar**, with a combined target of **3,57,112** by **31 December 2027**.
- Course length ranges from **3 to 12 months**, delivered through state-level **Project Implementing Agencies**.
- States must integrate with **Treasury Portals** by **30 September 2026** for online payments via the **Grameen Kaushal Portal**.
- Regional hybrid workshops in **October 2026** at **Shillong, Vijayawada, Mumbai** and **Dharamshala**.

Concept: DDU-GKY is the placement-linked skilling arm of the rural livelihoods mission, aimed at rural youth aged **15-35**. It differs from **PMKVY** (short-term certification) by mandating wage employment outcomes. **Demographic dividend** needs skills, not just numbers.

HEALTH Biovigilance Programme extends safety monitoring to transplantation

- Nodal body is the **Indian Pharmacopoeia Commission (IPC)**, an autonomous institution under the **Ministry of Health and Family Welfare**.
- It complements the **Pharmacovigilance Programme of India (PvPI)** for drugs and the **Materiovigilance Programme of India (MvPI)** for medical devices.
- Scope covers **immunosuppressants**, blood products and other **biologics** used across the transplant pathway.
- Monitoring both **living donors** and recipients is the new element in Indian drug-safety surveillance.
- Data will feed patient-safety signals and inform transplant protocol revisions.

Concept: **Pharmacovigilance** is the science of detecting and preventing adverse drug effects. **IPC** publishes the **Indian Pharmacopoeia**, the official drug-standards book. Organ transplantation in India is governed by the **THOTA, 1994** with **NOTTO** as the apex body.

Monday, 28 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-28.html

DEFENCE DRDO's 30-kW laser weapon moves towards mass production

- Engagement range up to **~5 km**; **truck-mounted** mobile platform.
- Targets **drone swarms**, fixed-wing **UAVs** and surveillance sensors; trials completed in **August 2025**.
- **2-kW** system already in production (**BEL** & private firms); **10-kW** (~**2 km**) units ordered.
- R&D under way on **50-kW** and **100-kW** variants.

Concept: **DEW**: destroys targets with focused **electromagnetic energy** (laser/microwave) – near-zero cost per shot, **speed-of-light** engagement, but hit by **rain, dust & fog**.

SCI-TECH ₹200 crore push for fully reusable 'Agnibaan' rocket

- Funding via **Optionally Convertible Debentures** under the **RDI Fund**.
- Aim: move tech from **TRL-4** to **TRL-8** – beyond first-stage recovery to **full-system reuse**.
- **Semi-cryogenic** propulsion with **deep throttling & restart**; controlled descent & recovery.
- Agnikul earlier built **Agnilet** – a **single-piece 3D-printed** engine.

Concept: **TRL (Technology Readiness Level)**: 9-point scale – **TRL-1** basic principles to **TRL-9** mission-proven system. Reusability cuts **cost/kg** and **space debris**.

SCI-TECH IIT Delhi unveils India's first indigenous micro-GPU

- Written entirely in **RTL (Register Transfer Level)** with a custom **floating-point** engine.
- Prototyped on a **Spartan-7 FPGA**; led by Prof. **Jayadeva** & Prof. **Kaushik Saha**.
- Uses: **industrial displays**, low-cost HMIs, **e-rickshaw dashboards**, e-readers.
- Roadmap: **8–16 core** vector GPU and a **65 nm ASIC** proof-of-concept.

Concept: **GPU** = many simple cores for **parallel** maths (graphics, AI). **FPGA** is re-programmable hardware for testing; **ASIC** is a fixed, mass-produced chip.

ECONOMY Centre notifies India's first four 'mega ports'

- Criteria: **150 MMT/yr** cargo (bulk) or **7.5 million TEUs/yr** (container).
- Status valid for **5 years**, subject to periodic review.
- **Mundra** (Gujarat) is the **only private** port; **Paradip** (Odisha) the only **east-coast** one.
- Status based on **cargo volume**, not ownership.

Concept: TEU = Twenty-foot Equivalent Unit (standard container). **Indian Ports Act, 2025** replaced the colonial **Indian Ports Act, 1908**. Links: **Sagarmala**, **Maritime Amrit Kaal Vision 2047**.

ENVIRONMENT Pygmy hog numbers climb to 190+ in Assam

- World's **smallest wild pig**; India's **only endemic wild suid**.
- Programme began in **1995**; since **2020**, **six groups** reintroduced into **Manas NP**.
- Only viable wild population: **Manas National Park** (Assam).
- Threats: **grassland burning** and conversion to **tea estates**.

Concept: Pygmy hog: **IUCN – Endangered**; **Schedule I**, Wild Life (Protection) Act. **Manas** = Tiger, Elephant & **Biosphere Reserve** + **UNESCO World Heritage Site**.

ECONOMY NTPC–EDF 50:50 JV to build pumped storage & clean power

- Focus: **pumped storage**, hydropower, renewables, **transmission & distribution**.
- Aligns with India's target of **~100 GW pumped storage by 2036**.
- Signed by NTPC CMD **Gurdeep Singh** and EDF CEO **Bernard Fontana**.
- Project pipeline and investment **not yet disclosed**.

Concept: Pumped storage: water pumped **uphill** when power is cheap/surplus, released through turbines at **peak demand** – a 'water battery' for **grid balancing**.

ECONOMY OECD raises India's FY27 growth forecast to 7.1%

- **FY26: 7.8%** → **FY27: 7.1%** (from 6.3%) → **FY28: 6.5%**.
- Inflation seen at **4.7%** (FY27) and **4.2%** (FY28).
- World growth: **2.9%** (2026) and **3.0%** (2027).
- Risk: **West Asia conflict**, weaker purchasing power in **H2 2026**.

Concept: OECD: Paris-based, **38 members**; India is **not a member** but a **Key Partner**. **1 bps = 0.01%**, so 80 bps = **0.8 percentage point**.

REPORT India jumps 9 places to 31st in WEF tourism index

- **10th edition**; covers **110 economies** (119 in 2025).
- Top 5: **Japan (5.27)**, USA, Spain, Australia, France; lowest **Mali (2.75)**.
- India's strengths: **low travel costs**, **cultural** & **natural resources**.
- World Tourism Day 2026 theme centred on **digital & AI** in tourism.

Concept: TTDI (biennial, by **WEF**, Geneva) replaced the **Travel & Tourism Competitiveness Index** in **2022**; it measures factors enabling **sustainable, resilient** tourism.

POLITY Census 2027: phase-1 nears completion, 32 crore+ families recorded

- India's **first fully digital** census; **self-enumeration** in **16 languages**.
- **Caste enumeration** included (Cabinet approval **30 April 2025**).
- **Population Enumeration**: **Feb 2027** (snow-bound areas: **Sept 2026**).
- Outlay **₹11,718.24 crore**; covers **36 States/UTs**, **~6.4 lakh villages**.

Concept: Census = **Union List (Entry 69)**, conducted by **Registrar General & Census Commissioner** (MHA) under the **Census Act, 1948**. Last census: **2011**; reference date **1 March 2027**.

IR UNGA-81: Russia backs India & Brazil for permanent UNSC seats

- Lavrov: more seats for **Asia, Africa, Latin America**; **no** extra Western seats (named **Germany, Japan**).
- **Mauritius**, **Portugal** and **Marshall Islands** also voiced support for India / **G4**.
- Jaishankar flagged the Global South's **'4F' crisis** – food, fuel, fertiliser, finance.
- India active in **9 of 11** UN peacekeeping mandates; attacks on **seafarers** condemned.

Concept: **UNSC**: **15 members** – **5 permanent (P5)** with veto + **10 non-permanent** elected for **2 years**. Charter amendment needs **2/3 of UNGA + all P5** (**Art. 108**). **G4** = India, Brazil, Germany, Japan.

IR India hosts 2nd Quad-at-Sea Ship Observer Mission

- Members: **India, USA, Japan, Australia**; aim – coast-guard **interoperability**.
- **1st mission (2025)** was aboard **US Coast Guard Cutter Stratton**.
- India chosen as 2026 host at **Quad FMs' meeting, New Delhi (26 May 2026)**.
- Reflects India's **MAHASAGAR** vision for a **free, open, rules-based** Indo-Pacific.

Concept: **MAHASAGAR** = Mutual and Holistic Advancement for Security and Growth Across Regions (**2025**, successor to **SAGAR, 2015**). **Indian Coast Guard**: est. **1977/78**, under **MoD**.

DEFENCE Tarang Shakti 2026: operational phase begins at Jodhpur

- **2nd edition** (1st in **2024**); runs **26 Sept – 12 Oct 2026**.
- Foreign air forces incl. **Australia, USA, UAE, France, Germany, Sri Lanka, Bangladesh**; many **observers**.
- Assets: **F-35**, **Rafale**, **F-16**, **A400M**, **KC-30A**, **C-130J**; IAF **Tejas, Su-30MKI**.
- Drills: counter-air, **BVR** combat, air-to-air refuelling, **Combat SAR**.

Concept: **BVR** = Beyond Visual Range combat. Other IAF exercises: **Garuda** (France), **Cope India** (USA), **Red Flag** (USA, host), **Pitch Black** (Australia, host).

Tuesday, 29 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-29.html

ECONOMY Brent Crosses $107 as Hormuz Disruption Persists; Rupee Near 96/$

- India imports about **89%** of its crude needs – every **$10/bbl** rise widens the import bill.
- Hormuz carried about **one-fifth of global oil** before the conflict began in **late February**; transits fell to **132 in a week** vs about **130 per day** earlier.
- OMCs (**IOC, BPCL, HPCL**) are absorbing losses; annual under-recoveries estimated at **₹64,000 crore**.
- FPIs pulled out **₹5,353 crore** in one session; **US 10-year yield** at about **5.24%**.
- Q1 FY27 **CAD** widened to **$4.2 bn (0.5% of GDP)** from **$3.4 bn**; oil imports rose to **$60.6 bn**.

Concept: Current Account Deficit = shortfall of exports of goods, services and transfers over imports. **Strait of Hormuz** links the **Persian Gulf** with the **Gulf of Oman**; it lies between **Iran** and **Oman**.

SCI-TECH India's First Port-Based E-Methanol Plant at Kandla

- Capacity **150 tonnes/day**; investment **₹2,300 crore** – **Phase I** (50 t/day) by **Jan 2027**, **Phase II** (100 t/day) by **Mar 2027**.
- JV: **Deendayal Port Authority (76%)** + **Assam Petro-Chemicals Ltd (24%)**.
- Feedstock: **renewable power + water + biogenic CO_2** via **green hydrogen**.
- Cost about **$750/tonne** vs global rate of about **$1,300/tonne**; to bunker ships on the **Asia–Europe corridor**.
- Expected to create **3,500+** direct and indirect jobs.

Concept: E-methanol = methanol made from **green H_2 + captured CO_2**; a near **carbon-neutral** marine fuel supporting the **IMO** goal of **net-zero shipping around 2050**.

DEFENCE Tarang Shakti 2026: US F-35 Debuts in an Indian Exercise

- **7 foreign air forces**: **USA, France, Australia, UAE, Germany, Bangladesh, Sri Lanka**; **32 observer nations** (40+ countries overall).
- **US F-35A** stealth fighter's **first-ever** appearance in an Indian military exercise.
- IAF fields **Rafale, Su-30MKI, Tejas, Mirage-2000, Jaguar, MiG-29**, AWACS and tankers.
- Focus: **interoperability**, network-centric operations and showcasing **Make in India** platforms.

Concept: Tarang Shakti = IAF's largest multinational air exercise; **1st edition in 2024**. Other IAF exercises: **Garuda** (France), **Cope India** (USA), **Red Flag** (USA-hosted).

ENVIRONMENT Delhi's Winter Pollution Action Plan: 50% WFH, No PUCC No Fuel

- **No PUCC, No Fuel** extended to all **500 ANPR-equipped** fuel stations from **1 Oct**.
- **Non-BS-VI** vehicles from outside Delhi barred from **1 Nov**; **50% work-from-home** for offices.
- Ban on **demolition and outdoor construction**; **parking fees doubled** (except Metro sites).
- **150 new e-buses** take the fleet to **700+**; weekly hotspot checks and daily AQI bulletins.

Concept: CAQM – statutory body under the **CAQM in NCR and Adjoining Areas Act, 2021**; enforces **GRAP** (Graded Response Action Plan) in **4 stages** by AQI level.

ENVIRONMENT NHAI Makes Greenery a Condition for Highway Completion

- **≥80%** plantation of available **Right of Way (ROW)** and **≥90% sapling survival** at inspection.
- Dead plants must be replaced with saplings of **similar age and growth**.
- NH network grew from **91,287 km (2014)** to **1,46,572 km (Mar 2026)** – about **61%** rise.
- **3.61 crore** saplings planted along **1.32 lakh km** of highways (as of July 2026).

Concept: Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy, 2015 – earmarks **1% of project cost** for plantation. **Miyawaki** = dense native planting (**3–5 saplings/m²**).

HEALTH Aarogya Manthan 2026: 8 Years of PM-JAY, 5 Years of ABDM

- PM-JAY: **13 crore+** hospital admissions worth **₹2 lakh crore+**; about **49 crore Ayushman Cards**; all seniors **70+** covered.
- ABDM: **97.8 crore ABHAs**, **121 crore+** linked records, **5.6 lakh** facilities registered.
- Launched **NHPR Mobile App**, **NHCX** payer guide, **Secure Data Environment** app and auto-adjudication framework.

Concept: AB PM-JAY (Sept **2018**) – **₹5 lakh/family/year** cover for secondary & tertiary care. **ABDM** (Sept **2021**) – digital health backbone; **ABHA** = 14-digit health ID.

POLITY SC Refuses to Stay MDR on UPI Merchant Payments Above ₹2,000

- MDR applies to specified **person-to-merchant (P2M)** UPI payments **above ₹2,000** from **15 Oct 2026**.
- Standard rate **0.4%** (capped at **₹300**); essential services (railways, fuel, insurance, farm inputs) flat **₹5**; capital-market payments **0.02%**.
- Government says about **96%** of merchant transactions are unaffected.
- Court asked whether the charge is a **tax or a fee**; counter-affidavits due in **4 weeks**.

Concept: MDR (Merchant Discount Rate) = fee a merchant pays to banks/payment providers per digital payment. **NPCI** (2008) runs **UPI**; it is a **Section 8** not-for-profit company promoted by **RBI and IBA**.

POLITY J&K Assembly Passes Resolution Seeking Restoration of Statehood

- Resolution recalls earlier House resolutions of **June 2000** and **November 2024**.
- CM flagged UT-status limits: restricted departmental powers and pending **business rules**.
- Members were urged to withdraw **eight amendments** seeking restoration of **Article 370**.
- A state-level resolution is **not binding**; only **Parliament** can restore statehood.

Concept: Article 3 lets **Parliament** form/alter States by simple law; **Article 4** – such laws are **not amendments under Article 368**. J&K became a **UT with legislature** on **31 Oct 2019**.

SOCIETY CJI Opens India's First Victim Rights Centre in Patna

- **Single-window** case management: **compensation, legal aid, medical help, counselling, rehabilitation**.
- Also launched: a **Transgender Helpline**, a VRC booklet and **multi-utility vehicles** for remote villages.
- Aims to end the process becoming a **"second injury"** for victims.
- Recalled **NALSA v. Union of India (2014)** – recognition of the **third gender**.

Concept: Article 39A (DPSP) – equal justice & **free legal aid**; **Legal Services Authorities Act, 1987** created NALSA/SLSAs. Victim compensation: **Section 396 BNSS** (earlier **357A CrPC**).

IR At UNGA, India Warns 'Everything Is Being Weaponised'

- Flagged **weaponisation** of finance, trade and technology hurting the **Global South**.
- **Zero tolerance** for **state-sponsored terrorism**; called for accountability.
- Backed a **two-state solution** in West Asia; concern over the **Ukraine** war in its **5th year** and Gulf shipping attacks.
- India supports about **600 projects** in **78 countries**; called the **1945 order** outdated – ended with **"Peace is the path"**.

Concept: UNGA – one of **6 principal UN organs**; **one nation, one vote**; recommendations are **non-binding**. India seeks a **permanent UNSC seat** with the **G4** (Brazil, Germany, Japan).

Wednesday, 30 September 2026

Full notes with diagrams: studyforgs.com/current-affairs/upsc/2026-09-30.html

ECONOMY Centre slashes import duty on edible oils ahead of festive season

- Crude **palm & soybean oil**: BCD **10% → 5%**; effective duty (with cess) **16.5% → 11%**.
- Crude **sunflower oil**: BCD **10% → 0%**; effective duty now **5.5%**.
- Refined palm & soybean: **32.5% → 27.5%**; refined sunflower: **32.5% → 22.5%**.
- India imports nearly **two-thirds** of its vegetable-oil needs — mainly from **Indonesia, Malaysia, Argentina, Russia** and **Ukraine**.

Concept: Differential duty (low on crude, high on refined) protects domestic refining value-addition. **NMEO-Oilseeds (2024–31)** targets self-reliance; **NMEO-Oil Palm (2021)** focuses on the **North-East** and **A&N Islands**.

ECONOMY Sulphur price shock threatens phosphatic fertiliser supply

- About **92%** of global sulphur is a **by-product of oil & gas processing**.
- India imported **2.25 MMT** in 2025, of which ~**90% (2.02 MMT)** came from **West Asia**; import bill rose ~**2.5x** to **$638 million**.
- **Russia** has curbed sulphur exports and **China** has restricted sulphuric-acid exports.
- Sulphuric acid converts **rock phosphate** into **DAP & SSP**; nickel processing for **EV batteries** adds to global demand.

Concept: Nutrient Based Subsidy (NBS, 2010) covers **P&K** fertilisers. Sulphur is a **secondary nutrient**; widespread soil S-deficiency led to **sulphur-coated urea (Urea Gold)**.

SCI-TECH BioE3 push: ₹75-crore grant for India's PLA bio-plastic R&D facility

- **Polylactic Acid (PLA)** is a bio-based, **compostable** thermoplastic made from **corn starch or sugarcane**.
- Process chain: sugar → **fermentation** → **lactic acid** → lactide → **polymerisation** → PLA.
- Uses: food packaging, **medical sutures**, **3D-printing** filaments and disposables.
- Complements BCML's planned commercial plant, pitched as **India's first integrated PLA facility**.

Concept: BioE3 (2024) = Biotechnology for **Economy, Environment & Employment**. **BIRAC** is a not-for-profit PSU under the **Department of Biotechnology**. PLA degrades mainly under **industrial composting** (~58°C), not in open soil.

DEFENCE Japan urges India to fast-track UNICORN naval stealth-mast project

- **UNICORN = Unified Complex Radio Antenna**: a single integrated mast housing many antennas (**LINK-16, IFF, UHF, TACAN**) to cut **radar cross-section**.
- Fitted on Japan's **Mogami-class frigates**; Japanese partners include **NEC** and **Yokohama Rubber**.
- Indian Navy plans a UNICORN derivative for its **next-generation warships**.
- Japan cites **China's military spending** and **Russia–North Korea** cooperation as drivers.

Concept: India–Japan **Special Strategic & Global Partnership (2014)**; logistics pact **ACSA (2020)**; exercises **JIMEX** (navy), **Dharma Guardian** (army), **Malabar** (Quad navies).

ENVIRONMENT India's first PRAMAAN certificates for sustainable forestry issued

- Recipients: **Andhra Pradesh Forest Development Corporation** (**33,000 ha** of plantations) and an **Odisha bamboo farmer**.
- Scheme launched by **MoEFCC** in **December 2023**; operated by **IIFM, Bhopal**.
- Three streams: **Forest Management**, **Trees Outside Forests** and **Chain of Custody**.
- Audits by bodies accredited by **NABCB** (under the **Quality Council of India**); standard linked to the **National Working Plan Code 2023**.

Concept: Forest certification = third-party verification of sustainable forest management. **PRAMAAN** = Programme for Recognition and Accreditation of sustainable Management practices for Agroforestry And Natural forestry resources.

ENVIRONMENT Study: degraded ancient grasslands never regrow the same way

- Secondary grasslands host **taller, resource-acquisitive** species instead of slow-growing, deep-rooted ancient flora.
- Altered **soil nutrients and pH** block the return of original species.
- Grasslands store about **one-third of terrestrial carbon**, mostly **below ground**.
- Warns against labelling grasslands as '**wastelands**' for plantations or solar parks.

Concept: Old-growth grassland = ancient, stable ecosystem, not an early stage of forest succession. Indian examples: **Banni (Gujarat), Shola grasslands (W. Ghats), Terai**, Deccan plateau — habitat of the **Great Indian Bustard**. India's restoration target: **26 Mha by 2030**.

HEALTH Supreme Court flags steep mark-ups on essential and cancer drugs

- A cancer drug with a **price-to-retailer of ~₹2,700** carried an **MRP of ₹27,000** — a **~10x (900%)** mark-up.
- **DPCO 2013** caps only **scheduled (NLEM)** drugs — about **18%** of medicines; **~82%** non-scheduled drugs face only a **10% annual MRP-hike** cap.
- A non-scheduled statin cost **~₹214/strip** vs **~₹70** for a price-controlled combination.
- Court also flagged private hospitals forcing purchases from **in-house pharmacies**; Centre cited **Jan Aushadhi Kendras**.

Concept: NPPA (1997) fixes and monitors prices under the **DPCO**, issued under the **Essential Commodities Act, 1955**. **NLEM 2022** lists **384** medicines. Right to health is read into **Article 21**; **Article 47** (DPSP) — duty to improve public health.

IR India attends SCO meeting in Islamabad under Pakistan's chairship

- India attends all SCO meetings despite minimal ties with Pakistan; EAM visited Islamabad for the **SCO Heads of Government meet (Oct 2024)**.
- SCO has **10 members**: China, Russia, India, Pakistan, Iran, **Belarus (2024)**, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan.
- India–Pakistan frictions resurfaced at the **UNGA** over Kashmir; **Türkiye** is seeking a closer SCO role.
- EAM **S. Jaishankar**: with the US and China in competitive mode, nations must **de-risk and diversify** partnerships.

Concept: SCO founded **2001** (from the **Shanghai Five**, 1996); Secretariat **Beijing**; **RATS** HQ **Tashkent**. India & Pakistan became full members in **2017**; India chaired SCO in **2023**.

SOCIETY Literacy for All: India at 81.1% as ULLAS nears its target

- **ULLAS – Nav Bharat Saaksharta Karyakram (2022–27)**: outlay **₹1,037.90 crore**, target **5 crore** learners aged **15+**; **4.03 crore** registered.
- Fully literate: **Ladakh, Mizoram, Goa, Tripura, Himachal Pradesh**, Chandigarh, A&N Islands, Sikkim, Uttarakhand, J&K.
- PLFS 2025: urban **89%**, rural **77.4%**; rural female literacy only **70.3%** — the key gap.
- **NIPUN Bharat (2021)** targets foundational literacy & numeracy by **2026–27**; higher-education GER **~30%** vs NEP goal of **50% by 2035**.

Concept: Literate (Census) = a person aged **7+** who can read & write with understanding in any language. **Article 21A** (**86th Amendment, 2002**) — free & compulsory education for **6–14**; **SDG 4** — quality education.

REPORT WEF Travel & Tourism Development Index 2026: India climbs to 31st

- Top 5: **Japan, USA, Spain, Australia, France**.
- India's strengths: **price competitiveness**, **cultural & natural resources**, well-distributed demand; among **top 10** for World Heritage cultural sites.
- Weak spots: **workforce skills**, **environmental sustainability** and tourism-infrastructure quality.
- **101 of 110** economies improved their scores between 2024 and 2026.

Concept: TTDI is **biennial** and succeeded the **Travel & Tourism Competitiveness Index (TTCI)** from **2021**. Tourism is a labour-intensive service — key for **employment** and **forex** earnings.

REPORT Status of Policing in India Report 2026: digital-fraud victims left stranded

- **72%** of victims recovered **no money**; only **51%** filed a formal complaint.
- **27%** of those with registered complaints reported **paying bribes**; bribe-payers recovered money about **3x** more often.
- Poor victims were **4x** more likely to pay bribes; **42%** found case registration difficult.
- Official crime data: cybercrime cases rose **17.9%** — **86,420 (2023) → 1,01,928 (2024)**.

Concept: Police and **Public Order** are **State List** subjects (**Seventh Schedule**). **I4C** (under **MHA**) runs the **1930** helpline and the national cybercrime reporting portal; offences under **IT Act, 2000** (Sec. 43, 66).

Prelims rapid-fire — 138

1	EOS-05 launch vehicle — **GSLV-F17**, the **19th flight** of the GSLV, from the **Second Launch Pad, Sriharikota**.
2	FCRA JPC head — **Dr Sanjay Jaiswal**; **31 members** — **21 Lok Sabha + 10 Rajya Sabha**.
3	August 2026 gross GST — **₹1,99,853 crore**, up **14.8%**; refunds up **67.9%**.
4	RAKSHA pillars — **Strategic Partnerships, Capacity Building, Indigenous Exports, Maritime Security** — a **10-year** roadmap.
5	Teachers' Day awards — **69 educators** honoured — **48 school + 21 higher education/ polytechnic**.
6	Khagantak-243 — Indigenous **300-kg class glide bomb**, range **140+ km**, by **BEL** and **JSR Dynamics**.
7	68th Ramon Magsaysay Awards — **Tommy Koh** (Singapore), **Runa Khan** (Bangladesh), **Bo Kyi** (Myanmar).
8	Gollala Gudi Temple — Declared a **Monument of National Importance** by the **ASI** — Telangana's **10th** protected site.
9	First non-medical woman two-star officer — **Air Vice Marshal Shakti Sharma** of the Indian Air Force.
10	Kalyani Strategic Systems + Thales — Pact for **70mm rocket systems** in India; first unit expected **early 2027**; counter-drone role.
11	Odisha disaster-risk pacts — **OSDMA** with **UNDP** and CivicDataLab — **HRVA across 30 districts**, 'Zero Casualty' goal.
12	India-US trade deal condition — India will sign the **BTA** only on a **preferential tariff** edge over rivals; **9 FTAs** already cover ~**$60 trillion** of GDP.
13	The **IAF's Sarang** helicopter display team, flying the indigenous **Dhruv ALH**, is in **Egypt** for the **El Alamein International Airshow (8-10 September 2026)**.
14	**GSLV-F17** was the **19th GSLV flight** and the **107th launch** from **Sriharikota**.
15	**Meloxicam** is the **vulture-safe** alternative to **diclofenac**, whose veterinary use India banned in **2006**.
16	Sentencing in the **Jhiram Ghati** case is fixed for **16 September 2026** by the special **NIA** court at **Jagdalpur, Bastar**.
17	The BRICS **Contingent Reserve Arrangement** is a **$100 billion** currency-swap net; the **New Development Bank** sits in **Shanghai**.
18	**Equal Earth**, **Gall-Peters** and **Mollweide** are **equal-area** projections; **Mercator** is **conformal** and used for navigation.
19	**Forex reserves** stand at a record **$740.80 billion**; the weekly rise was **$11.47 billion**.
20	**JCR** is a **Japanese** rating agency; it moved India from **BBB+ to A-** with a stable outlook.
21	**Patent No. 599900** covers **BAM-H24**, a boron-rich **solid rocket propellant**.
22	**Gandhi Ghat** and **Pandarak** are the Ganga gauge sites in Patna district that crossed record levels.
23	**Section 21(3)** of the **RP Act, 1950** is the legal basis for a Special Intensive Revision.
24	The **Lokur Committee** of **1965** laid down the five criteria still used to identify Scheduled Tribes.
25	**Arudhra** is an indigenous **medium power radar** cleared for the **Indian Navy** by the Defence Acquisition Council.

26	**JNPA** in **Navi Mumbai, Maharashtra** is India's largest container-handling port and the western terminus of the WDFC.
27	**Osbeckia ulotricha**, the newly described plant, belongs to the family **Melastomataceae**.
28	**Article 217** deals with the appointment and conditions of office of a **High Court judge**.
29	The **New Development Bank**, a BRICS institution, is headquartered at **Shanghai, China**.
30	**Kadana Dam**, site of a new **110 MW floating solar** plant, is on the **Mahi river** in **Gujarat**.
31	**UNESCO tentative list:** four Indian sites added — **Rangpur-Sivasagar (Assam)**, **Colonial Penal Settlement (Andaman)**, **Nicobarese Cultural Continuity** and the **Painted Haveli Towns of Shekhawati (Rajasthan)** — taking India's tentative list to **73**.
32	**Banking: Coastal Local Area Bank, Vijayawada** enters the **Second Schedule of the RBI Act, 1934** — the **first Local Area Bank** to gain scheduled status and the only scheduled bank headquartered in **Andhra Pradesh**.
33	**Species: Osbeckia ulotricha**, family **Melastomataceae**, described by the **Botanical Survey of India** from the **Agasthyamala Biosphere Reserve** in the Western Ghats at **1,200-1,500 m**.
34	**Defence industry:** a **five-year pact** signed for indigenous **7.62x39 mm** ammunition for **AK-203** rifles — ammunition at **Kanpur**, rifles at **Korwa, Amethi**; original **December 2021** contract was for **6,01,427 rifles**.
35	**Literacy: International Literacy Day (8 September)** marked its **60th anniversary** with the theme '**Literacy for people, the planet and prosperity**'; the **ULLAS Mela 2026** was held in New Delhi. India's literacy rate rose from **74% (2011)** to **80.9% (2023-24)**.
36	**Finance:** the **Asian Development Bank** signed its **first Transaction Advisory Services mandate in India** with **Madhya Pradesh** on **7 September 2026**, targeting **$1 billion** of renewable-energy PPPs anchored by a **solar-plus-battery project at Shajapur**.
37	**Exercise Veer Guardian-2026**, the second India-Japan bilateral air exercise, runs at **Jodhpur from 9 to 22 September 2026** with **Tejas, Su-30 MKI and Rafale** against **JASDF F-2A** jets; the **22nd Exercise Yudh Abhyas** with the United States began on **9 September** in a **two-theatre format**.
38	**ISRO and the European Space Agency** signed a **Technical Implementing Plan** in **Paris on 9 September 2026** for **ESA ground-tracking support to Gaganyaan** — a **three-member, three-day mission to a 400 km orbit** — and agreed to widen lunar and Venus cooperation; the **Venus Orbiter Mission** has an outlay of **₹1,236 crore**, **19 payloads** and a **March 2028** launch target.
39	**Census 2027** has been advanced in **Uttar Pradesh, Punjab, Uttarakhand and Goa**: **self-enumeration 16-30 November 2026**, **house-to-house enumeration 1 December 2026 to 4 January 2027**, and a **reference date of 00:00 hours on 5 January 2027**. The questionnaire notified on **14 August 2026** has **40 questions**.
40	A new **rock-dwelling lichen species, Buellia maharajensis**, was described from **Mathikettan Shola National Park, Idukki, Kerala** at an altitude of **1,351 metres**.
41	The **9th ASEAN-India Ministerial Meeting on Agriculture and Forestry** in **New Delhi** adopted a **Medium-Term Plan of Action for 2026-2030**; ASEAN-India goods trade stood at **$128 billion in FY 2025-26**.
42	**PM-SETU** cleared **₹735.70 crore** for three ITI clusters at **Bhiwadi (Rajasthan), Medchal (Telangana) and Meerut (Uttar Pradesh)**, taking the cumulative sanction to **₹2,171 crore across 9 clusters**.
43	**Bharat Mandapam, New Delhi** — venue of the **18th BRICS Summit**, 12-13 September 2026.
44	**New Development Bank** — BRICS bank set up in **2014**, headquartered in **Shanghai**.

45 **21-cm line** — hyperfine spin-flip transition of neutral hydrogen that **CosmoCube** will hunt from the Moon's far side.

46 **Aravalli Green Wall** — **1,400 km × 5 km** belt from **Porbandar to Panipat**, launched **21 March 2023**.

47 **Ophiopogon japonicus** — family **Asparagaceae**; first Indian record at **2,185 m** in **West Kameng, Arunachal Pradesh**.

48 **AoN (Acceptance of Necessity)** — first formal approval stage under the **Defence Acquisition Procedure, 2020**.

49 **Bankers' Books Evidence Act, 2026** takes effect **1 October 2026** (assent **13 August 2026**) - **digital, cloud-hosted and virtual banking records** become admissible evidence, replacing the **1891** framework.

50 **BharatNet**: **Digital Bharat Nidhi** signs a **Rs 1,684 crore** pact with **Jharkhand** covering **4,395 Gram Panchayats** and **26,777 villages**; DBN replaced the **USOF** under the **Telecommunications Act, 2023**.

51 **Schizopygopsis waddellii** - a Tibetan snowtrout (**family Cyprinidae**) recorded in India for the first time from **Pangkang Teng Tso Lake, Tawang, Arunachal Pradesh** (about **12,800 ft**).

52 **Acharya Vinoba Bhave (11 Sept 1895 - 15 Nov 1982)** - 'National Teacher of India', **first individual Satyagrahi (1940)**, led the **Bhoodan** movement; wrote **Geetai**.

53 **79th WHO South-East Asia Regional Committee** (Dili, Timor-Leste) adopted the **Dili Declaration on Human Resources for Health**; India recognised for sustaining **maternal and neonatal tetanus elimination**.

54 **PMMSY**: fish production up from **141.64 to 197.75 lakh tonnes**; fisheries exports up from **Rs 46,663 crore to Rs 73,890 crore**; **Rs 2,500 crore** allocated in Budget 2026-27.

55 **Section 10A, Payment and Settlement Systems Act, 2007** — the provision used to bar charges on UPI and RuPay debit card payments.

56 **$56.846 billion** — inflows drawn by the RBI's special swap window; **FCNR(B)** alone brought in **$52.3 billion**.

57 **Semicon 2.0** — India's second-phase chip programme, outlay **₹1.27 lakh crore**; **SEMICON India 2026** runs **17–19 September** in New Delhi.

58 **Lala–Rawa, Kachchh** — the priority Great Indian Bustard landscape; the bird is **Critically Endangered** and in **Schedule I** of the Wild Life (Protection) Act, 1972.

59 **Sitra**, Finland's innovation fund, created the World Circular Economy Forum in **2017**; the **2026** edition at Gandhinagar is its tenth.

60 **15 September** — **International Day of Democracy**, and in India **Engineer's Day**, marking **Sir M. Visvesvaraya's** birth anniversary.

61 **Moon Mineralogy Mapper (M3)** — NASA imaging spectrometer flown on **Chandrayaan-1 (2008)**; confirmed lunar water and has now revealed the Australe Basin.

62 **NANA** — “Neither Attributable to Nor Aggravated by” service; the Ministry of Defence classification at the heart of the **16 September** disability-pension ruling.

63 **Kigali Amendment (2016)** — amends the **Montreal Protocol** to phase down **HFCs**, which are greenhouse gases, not ozone-depleting substances. India ratified it in **2021**.

64 **Current Weekly Status (CWS)** — PLFS activity measure using a **7-day reference period**; the basis of the **5.0%** August unemployment rate.

65 **Punatsangchhu-I** — India-assisted **hydroelectric project in Bhutan**, on the agenda of the External Affairs Minister's **16–17 September** visit.

66 **1991 India–Pakistan Agreement on Advance Notice of Military Exercises** — invoked by India on **16 September** after an unsafe Pakistan Navy manoeuvre in the **North Arabian Sea**; it requires **three nautical miles** of separation between the two navies' vessels.

67 **Gucchi** (**Morchella esculenta**), the Himalayan morel served at the BRICS 2026 gala dinner, sells for **₹15,000 to ₹40,000 a kg** and grows wild in **Jammu & Kashmir, Himachal Pradesh and Uttarakhand**.

68 India exported about **500 tonnes of hilsa** (**Tenualosa ilisha**) to **Bangladesh** over two months — the first time the trade has run in this direction. Hilsa is **anadromous** and Bangladesh's national fish.

69 **PLFS bulletin, August 2026**: unemployment rate **5.0%**, **LFPR 55.6%**, worker-population ratio **52.8%**; released by the **NSO** under **MoSPI**.

70 **Merchandise trade, August 2026**: exports **USD 43.81 billion**, imports **USD 70.67 billion**, deficit **USD 26.86 billion**; the overall goods-and-services deficit narrowed to **USD 9.41 billion**.

71 **Exercise Yudh Abhyas 2026**, the **22nd** India-US army exercise, runs **15-28 September 2026** at **Auli, Uttarakhand** and **Mahajan Field Firing Range, Rajasthan** — the first time on two terrains at once, with about **600 personnel** a side.

72 **PRL Ahmedabad** used **Chandrayaan-1**'s **Moon Mineralogy Mapper (M3)** to identify the **Australe Basin**, a lost lunar impact basin ringed by **orthopyroxene** and inferred to be **older than 4 billion years**.

73 **18 September** is observed as **International Equal Pay Day**, established by UN General Assembly resolution in 2019, and also as **World Bamboo Day**.

74 **Gegeneophis chandgadi**, a new **caecilian** amphibian, was described from Kolhapur district in Maharashtra, taking India's amphibian count to **458 species**.

75 The **Asian Games 2026** open at **Aichi-Nagoya, Japan**, from **19 September to 4 October**, with India sending **508 athletes** across **37 sports**.

76 West Bengal has cleared a new **DRDO missile testing range at Junput**, Purba Medinipur, about **70 km** from Chandipur.

77 **Dhiraj Bommadevara** became the first Indian male recurve archer to win an individual **Archery World Cup Final** title, beating Japan's Junya Nakanishi 6-5.

78 The **Colombo Security Conclave** table-top exercise concluded at **Visakhapatnam**; its members are India, Sri Lanka, Maldives, Mauritius, Bangladesh and Seychelles.

79 **OneTag** — launched by **NHAI with NPCI** on the **Rajmargyatra** app, it allows **FASTag bank portability without replacing the physical tag**; a **six-month cooling-off** applies between port requests.

80 **Global Business Climate Survey 2026** — India ranked **No. 1 among 41 global markets**; **73%** of surveyed Swedish firms rated India's operating climate good or very good.

81 **Census Town** — criteria unchanged since **1981**: population **5,000+**, **75% of male workers** in non-agricultural activity and density of **400 persons per sq km**.

82 **Himalayan Monal** — **state bird of Uttarakhand**; a new study found birds in noisy tourism zones calling at **higher frequencies**, an example of **acoustic masking**.

83 **Marathi film 'Gondhal'** — selected as India's official entry for the **Oscars 2027** Best International Feature category.

84 **CORE Programme** — a tri-services and civil-bureaucracy training initiative at the **Manekshaw Centre, New Delhi**, covering **multi-domain conflict, AI, non-kinetic warfare and cyber deterrence**.

85

	Bharat Coal Gasification and Chemicals Ltd is a joint venture of **Coal India** and **BHEL** at **Lakhanpur, Odisha**.
86	**WPI base year** is **2011-12**; **fuel and power** carries a weight of **13.15%**.
87	India is the **third country** in the world, after **Australia** and **New Zealand**, to establish a dedicated **green tribunal**.
88	The **International Seabed Authority** is headquartered at **Kingston, Jamaica**, under **UNCLOS Part XI**.
89	**Polymetallic nodules** are rich in **nickel, cobalt, copper and manganese**.
90	The **9th India International Water Week** theme is **Climate Resilient Water Management**; partner countries are the **Netherlands** and **Germany**.
91	Dadasaheb Phalke Award instituted: **1969**; first recipient **Devika Rani**
92	CITES Appendix I: Species threatened with extinction – **commercial trade banned**
93	FPI vs FDI threshold: **10%** of equity of a listed company
94	Rare-earth elements: **17** = 15 lanthanides + **Sc + Y**
95	Article 326: Elections on basis of **adult suffrage** (18 yrs)
96	WHO daily salt limit: Less than **5 g** (about 1 teaspoon)
97	SLINEX-26 — 13th India–Sri Lanka naval exercise at **Visakhapatnam** (**17–21 Sept**) with **INS Kavaratti**, **INS Jyoti** and **SLNS Sindurala**.
98	UNGA-81 — EAM **S. Jaishankar** leads India's delegation; address to the General Debate on **26 September 2026**.
99	Forex reserves — **$780.782 bn** (week ended **11 Sept**), down **$4.924 bn** from the record **$785.706 bn**.
100	Oscars 2027 — Marathi thriller **Gondhal** (dir. **Santosh Davakhar**) is India's entry for **Best International Feature**.
101	Asian Wushu — India to host the **11th Asian Senior Wushu Championships** in **2028**, for the **first time**.
102	Tulu — Karnataka Cabinet (**18 Sept**) approved Tulu as an **additional official language** in **Dakshina Kannada and Udupi**.
103	**Delhi electoral rolls**: the Supreme Court called notices sent to over **33 lakh** voters in the Special Intensive Revision '**mechanically issued**'; disposal deadline is **29 October**.
104	**Mining 'squatting'**: the Mines Secretary flagged miners holding allotted blocks without starting work, and signalled a large scheme for **domestic nickel and lithium processing**.
105	**SEBI** settled Adani-group adjudication proceedings for about **₹1.5 crore** across **five entities**, without admission or denial of the allegations.
106	**Outer Space Treaty, 1967**: opened for signature on **27 January 1967**; **Article II** bars **national appropriation** of celestial bodies, but says little on commercial mining rights.
107	**Drug-free target**: the Union Home Minister set **31 December 2029** to uproot the drug trade, shifting enforcement from seizures to **network dismantlement** and financial investigation.
108	**Trichophyton indotineae**, a **terbinafine-resistant dermatophyte** first flagged in India, is spreading globally, making **ringworm (tinea)** harder to treat.
109	**Article 324(2)** — empowers Parliament to make law on the appointment of the **CEC and Election Commissioners**.
110	

Anoop Baranwal v. Union of India (2023) — the judgment that created the interim **PM + LoP + CJI** panel.

111 **VRRR** — absorbs liquidity; **VRR (Variable Rate Repo)** — injects liquidity. Both sit inside the **LAF**.

112 **Planetary boundaries** framework — proposed by the **Stockholm Resilience Centre** in **2009**; **nine** boundaries in all.

113 **Kasturirangan Committee** — recommended **~37%** of the Western Ghats (**about 60,000 sq km**) as an **Ecologically Sensitive Area**.

114 **ISTRAC** — ISRO's **Telemetry, Tracking and Command Network**, headquartered at **Bengaluru**.

115 **UN Charter** 'enemy state' clauses — **Articles 53(1)** and **107** — name **Germany, Italy, Japan**; declared obsolete by the **UNGA** in **1995**, deletion resolved at the **2005 World Summit**, still not amended.

116 **G20 Energy Ministerial** at **Houston** under the **2026 US presidency** agreed on LPG scaling, faster energy permitting, voluntary water reuse and critical-mineral supply chains; **PM Ujjwala Yojana (2016)** was cited as a biomass-to-LPG model and India joined the US-led **Minerals Security Partnership** in **2023**.

117 **Exercise VARUNA**, the India-France naval exercise, is in its **24th** edition at **Toulon** with **INS Trishul**; naval contacts began in **1983** and were formalised in **2001**.

118 Top five **PLI** sectors — **solar modules, pharmaceuticals, automobiles, specialty steel, electronics** — account for about **83%** of PLI investment.

119 New **Amrit Bharat Express** launched between **Bhuj** and **Barauni**, thrice weekly; **Veerangana Lakshmibai Express** extended to **Mathura**.

120 **India International Water Week 2026** announced; the Environment Ministry opened a forest-management capacity workshop with **JICA** support.

121 **Yudh Abhyas 2026** (22nd, India–USA Army) concludes **28 Sept** – held at **Auli** & **Mahajan Field Firing Range**.

122 **SAT-SAAW**: MoD–**BDL** contract of **₹810.79 crore** for **160** smart anti-airfield weapons for the IAF.

123 **Asian Games 2026 (Aichi-Nagoya)**: India's **men's kabaddi** beat Iran **40–34** for a **9th** title; women won **37–34**.

124 **Sawan Barwal**: marathon **silver** – India's first Asiad marathon medal since **1982**, with a national record.

125 **28 Sept**: **World Rabies Day** (Louis Pasteur's death anniversary) and **Bhagat Singh's birth anniversary (1907)**.

126 **28 Sept**: **International Day for Universal Access to Information** – proclaimed by **UNESCO (2015)**, UNGA (**2019**).

127 **29 Sept** – **World Heart Day** and **World Rabies Day** (death anniversary of **Louis Pasteur**).

128 **Bio-bitumen via pyrolysis** of rice straw – developed by **CSIR-CRRI** and **CSIR-IIP**; bio-oil blended at **20–30%** with bitumen; trial on **NH-40 (Jorabat–Shillong)**.

129 **National Rabi Conference** (**28–29 Sept**, New Delhi): push for **pulses & oilseeds** in **rice-fallow** lands; water-based crop planning.

130 **PM-AJAY** (FY **2021–22**) merged **3 schemes**; Adarsh Gram villages need **≥40% SC population**; **47,243** villages covered.

131 **ADMM-Plus** maritime drill at **Subic Bay, Philippines** – **INS Sahyadri** and **INS Kulish** took part.

132 **PM E-DRIVE**: **₹221.13 crore** for testing upgrades at **GARC, Chennai** (scheme outlay **₹10,900 crore**, till **31 Mar 2028**).

133 **Pashudhan Bima Portal** — Launched by the **Dept. of Animal Husbandry & Dairying** for digital livestock insurance under the **National Livestock Mission**; in Hindi, English + **11 regional languages**.

134 **KAZIND 2026** — India–Kazakhstan joint military exercise at **Oskemen, Kazakhstan** (**28 Sep–11 Oct 2026**); focus on **counter-terrorism** and drone (UAS) ops.

135 **Begonia rajvikramanii** — New begonia species from **Rosemala forests, Kollam (Kerala)** in the **Western Ghats**; grows on wet rocky cliffs.

136 **Modhera Sun Temple** — Built under **Solanki** king **Bhimadeva I** (early 11th century) in **Mehsana, Gujarat**; Maru-Gurjara style with **Surya Kund**.

137 **Bodhana Sivanandan** — Became the **youngest-ever Woman Grandmaster** (age **11**) at the **46th Chess Olympiad, Samarkand**.

138 **Blue bond** — **Sagarmala Finance Corporation** launched a **₹600 crore**, **10-year** blue bond to fund port & maritime projects.

Data points

₹1,99,853 crore — **Gross GST Collection — August 2026**

Up **14.8% year-on-year** from ₹1,74,116 crore — a record for the month. **Net collections after refunds** stood at **₹1,68,057 crore (+8.3%)** because **refunds surged 67.9% to ₹31,795 crore**. **Imports (+29.0%)** far outpaced **domestic revenue (+9.3%)**. Component-wise: **CGST ₹38,413 cr**, **SGST ₹46,316 cr**, **IGST ₹1,15,124 cr**. For **April–August 2026**, gross collections reached **₹10,42,757 crore (+11.0%)**. **Exam angle:** GST is a **destination-based, multi-stage, value-added tax**; the **GST Council (Article 279A)** is the recommendatory federal body — Centre holds **one-third** of the weighted votes, all States together **two-thirds**, and decisions need a **three-fourths majority** of members present and voting.

7.8% — **India's real GDP growth, Q1 FY27 (April-June 2026)**

Against the central bank's **7%** projection. **Manufacturing grew 9.2%** (from 8.3%) and **services 10%** (from 8%), while **mining contracted 2.4%** and **agriculture eased to 3.6%**. **Real gross fixed capital formation rose 11.9%**, lifting the **investment rate to 34.3% of GDP** from **31.4%**. **Nominal GDP grew 10.3%**. Inflation is projected at **5.9% for October-December 2026**.

$740.80 billion — **India's forex reserves, an all-time high**

₹1,99,853 crore (+14.8% year-on-year) — **Gross GST collection, August 2026**

Domestic revenue rose 9.3% to about ₹1.37 lakh crore while import IGST surged 29% to ₹62,604 crore. Refunds jumped 67.9% to ₹31,795 crore, so net collection grew a slower 8.3% to about ₹1.68 lakh crore. April-August gross stood at ₹10.43 lakh crore, up 11%.

$101.07 per barrel

Indian crude oil basket, 4 September 2026

Above **$100** for the first time since **May 2026**. If crude holds above **$90/barrel**, the current account deficit could widen to **1.7% of GDP (about $71 billion)** in **H2 FY27**, against **0.5% of GDP** in **Q1 FY27**.

Over $200 billion

Merchandise exports, April-August 2026

Up more than **15%** from **$183 billion** in April-August 2025. The April-July figure alone was **$174 billion**, a **17%** rise year on year. India's stated target is **$1 trillion** in total exports for **FY 2026**, supported by trade agreements now covering **38 developed economies** — roughly **two-thirds of global trade**.

$740.80 billion (week ended 28 August 2026)

India's Foreign Exchange Reserves — All-Time High

Reserves rose **$11.47 billion** in a single week. Components: **Foreign Currency Assets $600.67 billion**, **gold $116.41 billion**, **SDRs $18.81 billion** and **IMF reserve position $4.914 billion**. For context, retail inflation (**CPI**) stood at **4.45% in July 2026** with **food inflation at 5.52%**, inside the RBI's **2-6% tolerance band** around the **4% target**. Reserves cover roughly **11 months of imports**.

USD 785.7 billion

India's Foreign Exchange Reserves - record high

Reserves rose by a record **USD 44.9 billion** in the week ended **4 September 2026** to an all-time high of **USD 785.7 billion**, lifting India to the **4th largest reserve holder** globally after **China, Japan and Switzerland**. **Foreign Currency Assets** stood at **USD 648.2 billion** (up USD 47.5 billion) while **gold reserves** slipped to **USD 113.8 billion**. A large part of the surge came through **deposit and borrowing-linked inflows**, which carry future repayment obligations - so headline reserves overstate the unencumbered buffer.

WPI 9.92% | CPI 4.82%

India's inflation split — August 2026

Wholesale inflation edged up from **9.78% in July** on a fuel-led cost shock — **Fuel & Power at 22.93%**, **Primary Articles at 7.76%**, **Manufactured Products at 8.37%**. Retail inflation at **4.82%** stayed inside the RBI's **2–6%** band, with food (**CFPI**) at **5.95%**, rural at **5.23%** and urban at **4.31%**. Both series were released on **14 September 2026**. The **5.1 percentage-point wedge** means producers are absorbing costs that have not yet reached the shopper — a margin squeeze today, a possible retail pass-through tomorrow.

9.92%

Wholesale price inflation, August 2026

Up from 9.78% in July and now more than double the 4.82% retail (CPI) print — a divergence driven almost entirely by fuel and power inflation of 22.93%, with WPI food at a 20-month high of 7.05%.

9.92%

Wholesale Price Index inflation, August 2026

Up from **9.78%** in July 2026 on the new **2022-23 base year**. Fuel and Power ran at **22.93%** and mineral oils at **38.48%**, while retail **CPI** inflation for the same month was only **4.82%** — the widest wholesale-retail wedge in years, and a reminder that WPI carries no services and a heavy fuel weight.

₹2,25,000 crore

RBI absorbs ₹2.25 lakh crore in a single VRRR auction

A **3-day variable rate reverse repo (VRRR)** auction is being conducted on **18 September 2026**, maturing on **21 September 2026**, to drain surplus liquidity from the banking system and stop the overnight call rate from sliding well below the policy repo rate. A **VRRR absorbs** liquidity, while a **VRR injects** it. Earlier in September the central bank had mopped up as much as **₹6.02 lakh crore** in a single round as the system surplus touched record highs. This is liquidity management, not a change in the **policy stance**.

4.82%

Retail inflation (CPI), August 2026

Up from **4.45%** in July 2026. **Food inflation at 5.95%** (rural **6.13%**, urban **5.64%**). Above the **4% medium-term target** but inside the **2–6% tolerance band**.

USD 221.4 billion

Software services exports, 2025-26

Up **8.2%** year-on-year. The **United States** accounted for **54.1%** and **Europe 31.8%** of the basket, while **91.7%** of delivery was **off-site**. Counting foreign affiliates of Indian companies, the total reaches **USD 239.3 billion**, a **9.5%** rise.

4.82%

CPI (retail) inflation, August 2026

Up from **4.45%** in July; food inflation **5.95%** (rural **6.13%**, urban **5.64%**). Above RBI's **4%** target but inside the **2-6%** band; repo rate at **5.25%** means the **real policy rate** is near **zero**.

4.8%

Core sector growth, August 2026

Down from 5.0% in July (three-month low); April–August 2026 cumulative 4.3% vs 2.4% a year ago.

7.0%

India's GDP growth forecast for FY27 (2026-27)

Revised up from **6.6%** after **Q1 FY27** growth of **7.8%**; **FY28** trimmed to **7.1%** and retail inflation seen at **5.0%** this year.

₹1,25,000 crore absorbed

RBI overnight VRRR auction — 24 September 2026

Variable Rate Reverse Repo is a **liquidity absorption** tool under the **Liquidity Adjustment Facility (LAF)**. The rate is **market-discovered** through auction, unlike the fixed-rate **Standing Deposit Facility (SDF)**. Policy corridor today: **repo 5.25%**, **SDF 5.00%**, **MSF 5.50%**, **CRR 3.00%**, with a **neutral** stance.

Rs 4.92 lakh crore

Surplus liquidity in the banking system

The RBI absorbed **Rs 71,971 crore** through a **VRRR** auction at a **5.24%** cut-off and is running **OMO sales** worth about **Rs 1 lakh crore** across **17, 21 and 28 September 2026** to lift the **WACR** back towards the repo rate. The surge is attributed to **FCNR(B)** inflows and month-end government spending.

7.1%

OECD forecast: India GDP growth, FY 2026-27

Raised by **80 bps** from 6.3%; highest among major forecasters. FY28 seen at **6.5%**, inflation **4.7%** in FY27.

₹1,00,000 crore

RBI OMO sale completed (Sept 2026)

Three tranches – **₹50,000 cr (17 Sept)**, **₹25,000 cr (21 Sept)**, **₹25,000 cr (28 Sept)** – to drain surplus liquidity after **FCNR(B) inflows above $132 bn**; the last auction (G-secs maturing **2029–2032**) was covered over **2.7 times**. **OMO sale** = RBI sells G-secs to absorb rupee liquidity (a quantitative tool).

US$ 7.35 bn

Net FDI inflows into India, July 2026

Highest monthly net FDI in **5 years**, up **64%** from **$4.5 bn** in July 2025. Gross inflows **$14.6 bn**. April–July FY27 net FDI **$13.4 bn** vs **$9.7 bn** a year ago (**+38%**). **Mauritius, UAE and US** ≈ **70%** of equity inflows; communication, financial and computer services led.

Practice MCQs — 46

Q1. With reference to EOS-05, recently launched by ISRO, consider the following statements: 1. It was placed in orbit by the PSLV from the First Launch Pad at Sriharikota. 2. It is India's first imaging satellite to operate from a geosynchronous orbit. 3. It carries both multispectral and hyperspectral imaging payloads. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q2. Consider the following statements regarding a Joint Parliamentary Committee (JPC): 1. It consists of members drawn from both Houses of Parliament. 2. It is a permanent (standing) committee of Parliament. 3. Its recommendations on a Bill are binding on the Government. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Q3. The Purchasing Managers' Index (PMI), frequently in the news, is best described as:

1. A production-based index compiled from factory output returns
2. A survey-based diffusion index where a reading above 50 indicates expansion
3. A price index used by the RBI for inflation targeting
4. A composite index of stock-market capitalisation of listed manufacturers

Q4. With reference to the recently launched EOS-05 mission, consider the following statements: 1. It was placed in orbit by the GSLV, which uses an indigenous cryogenic upper stage. 2. It is India's first imaging satellite intended for a geostationary orbit. 3. A geostationary orbit lies at an altitude of about 800 km above the equator. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q5. Consider the following pairs of map projections and their properties: 1. Mercator — conformal, preserves angles 2. Equal Earth — equal-area, preserves relative size 3. Mollweide — equal-area How many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q6. Prelims MCQ 1. With reference to the Special Intensive Revision (SIR) of electoral rolls, consider the following statements:1. It is conducted under the Representation of the People Act, 1951.2. An intensive revision involves fresh house-to-house enumeration.3. Appeals against an Electoral Registration Officer's decision lie to the District Magistrate.Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q7. Prelims MCQ 2. Consider the following pairs of constitutional provisions and their subject:1. Article 342 - specification of Scheduled Tribes2. Article 338A - National Commission for Scheduled Tribes3. Article 366(25) - definition of Scheduled TribesHow many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q8. With reference to the Western Dedicated Freight Corridor (WDFC), consider the following statements: 1. It is implemented by a Special Purpose Vehicle under the Ministry of Railways. 2. Its western terminus provides direct freight connectivity to the Jawaharlal Nehru Port Authority. 3. Dedicated Freight Corridors permit double-stack container train operation. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q9. Consider the following statements about a geosynchronous orbit: 1. Its orbital period is approximately equal to the earth's rotation period. 2. Every geosynchronous orbit is necessarily geostationary. 3. It lies at an altitude of roughly 36,000 km above the earth's surface. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q10. With reference to the Carbon Credit Trading Scheme (CCTS) of India, consider the following statements: 1. It was notified under the Energy Conservation (Amendment) Act, 2022. 2. It is administered by the Bureau of Energy Efficiency. 3. It replaced the Perform, Achieve and Trade (PAT) scheme, whose traded instrument was the Energy Saving Certificate. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q11. Consider the following statements about the Defence Acquisition Council (DAC): 1. It is chaired by the Chief of Defence Staff. 2. It was constituted in 2001 following the recommendations of a Group of Ministers set up after the Kargil conflict. 3. Acceptance of Necessity accorded by it amounts to the signing of a procurement contract. Which of the statements given above is/are correct?

1. 1 only
2. 2 only
3. 2 and 3 only
4. 1 and 3 only

Q12. With reference to Article 371 of the Constitution of India, consider the following statements: 1. It contains special provisions running from clause A to clause J. 2. Article 371A relates to Nagaland and protects customary law and land ownership. 3. Article 240 empowers the President to make regulations for certain Union Territories. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q13. A Carbon Border Adjustment Mechanism (CBAM), as recently in the news, is best described as:

1. A domestic cap-and-trade market for power plants within a single country
2. A charge on imported goods reflecting the carbon emitted in producing them
3. A concessional climate finance window operated by multilateral development banks
4. A treaty obligation under the Paris Agreement to submit carbon budgets

Q14. With reference to BRICS, consider the following statements: 1. India is chairing BRICS in 2026 for the fourth time. 2. The New Development Bank is headquartered in Shanghai. 3. Indonesia is a partner country of BRICS and not a full member. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q15. Consider the following statements: 1. The Sixth Schedule provides for Autonomous District Councils in tribal areas of Assam, Meghalaya, Tripura and Mizoram. 2. Ladakh is at present covered under the Sixth Schedule of the Constitution. 3. Article 240 empowers the President to make regulations for certain Union Territories. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q16. With reference to the CE20 engine recently in the news, consider the following statements: 1. It is an indigenously developed cryogenic engine operating on the staged-combustion cycle. 2. It uses liquid hydrogen and liquid oxygen as propellants. 3. It powers the upper stage of the LVM3 launch vehicle. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q17. Consider the following statements regarding Registered Unrecognised Political Parties (RUPPs) in India: 1. They are registered with the Election Commission under Section 29A of the Representation of the People Act, 1951. 2. The Election Commission has express statutory power to de-register a party that fails to contest elections for ten years. 3. Donations made to registered political parties can qualify for deduction under Section 80GGC of the Income Tax Act. Which of the statements given above are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q18. With reference to the September 2026 notification on charges for digital payments, consider the following statements: 1. It bars any charge on UPI transactions up to ₹2,000 and on RuPay debit card transactions. 2. It has been issued under Section 10A of the Payment and Settlement Systems Act, 2007. 3. It permits banks to levy a charge on person-to-person UPI transfers above ₹2,000. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q19. Consider the following pairs of trade arrangements and their defining feature: 1. Preferential Trade Agreement — tariff concessions on a limited list of goods 2. Customs Union — a common external tariff against non-members 3. Common Market — free movement of goods, services, capital and labour How many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q20. With reference to the Kigali Amendment, consider the following statements: 1. It was adopted in 2016 and amends the Montreal Protocol. 2. It provides for the phase-down of hydrofluorocarbons, which are ozone-depleting substances. 3. India has ratified it and will begin its phase-down from a 2032 baseline. Which of the statements given above are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q21. With reference to India's price data for August 2026, consider the following statements: 1. Headline retail (CPI) inflation remained below the Reserve Bank's 4% target. 2. Wholesale (WPI) inflation was higher than retail inflation. 3. Fuel and power was the fastest-rising major group within the WPI. Which of the statements given above are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q22. With reference to the Wholesale Price Index (WPI) in India, consider the following statements: 1. It is released by the National Statistics Office under the Ministry of Statistics and Programme Implementation. 2. It does not cover services. 3. The Reserve Bank of India's flexible inflation-targeting mandate is anchored to the WPI. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 only
3. 2 and 3 only
4. 1, 2 and 3

Q23. With reference to the Kigali Amendment, consider the following statements: 1. It was adopted under the Montreal Protocol and targets hydrofluorocarbons. 2. Hydrofluorocarbons are potent ozone-depleting substances. 3. India ratified the Amendment in 2021 and will begin its phase-down in 2032. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q24. With reference to the Variable Rate Reverse Repo (VRRR) auction, consider the following statements: 1. It is used by the central bank to absorb surplus liquidity from the banking system. 2. The rate in a VRRR auction is fixed in advance and is always equal to the policy repo rate. 3. It changes the monetary policy stance whenever it is conducted. Which of the statements given above is or are correct?

1. 1 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Q25. The Shaksgam valley, sometimes seen in the news, is best described as:

1. A valley in eastern Arunachal Pradesh drained by the Lohit river
2. A tract north of the Karakoram range that Pakistan purported to cede to China in 1963
3. A cold desert plateau in Himachal Pradesh adjoining the Spiti valley
4. A wetland complex in the Sundarbans delta shared with Bangladesh

Q26. With reference to polymetallic nodules found on the deep seabed, consider the following statements: 1. They occur mainly at depths of 3,000 to 6,000 metres. 2. They are a source of manganese, nickel, cobalt and copper. 3. The International Seabed Authority has already adopted a code governing their commercial exploitation. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q27. The Election Symbols (Reservation and Allotment) Order, 1968 is best described as:

1. A constitutional provision inserted by the Fifty-second Amendment
2. A subordinate legislation issued by the Election Commission under Article 324
3. A statute enacted by Parliament under Article 327
4. A judicial direction issued by the Supreme Court under Article 142

Q28. With reference to the National Green Tribunal, consider the following statements: 1. It is a constitutional body established under Article 323B. 2. India was the third country in the world to set up a specialised environmental court. 3. Appeals against its orders lie to the Supreme Court. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q29. Consider the following statements about the Wholesale Price Index (WPI) in India: 1. It is released by the National Statistical Office. 2. It excludes services from its coverage. 3. Manufactured products carry the largest weight in the index. Which of the statements given above is/are correct?

1. 1 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q30. With reference to foreign investment in India, consider the following statements: 1. An investment of less than 10% of the post-issue paid-up equity of a listed Indian company is treated as Foreign Portfolio Investment. 2. The Voluntary Retention Route (VRR) is meant for FPI investment in equity shares only. 3. Under the Fully Accessible Route (FAR), non-residents can invest in specified government securities without investment limits. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q31. Consider the following pairs: 1. Orangutan – Native to Borneo and Sumatra 2. CITES Appendix I – Trade permitted without any permits 3. Wildlife Crime Control Bureau – Statutory body under the Wild Life (Protection) Act, 1972 How many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q32. With reference to the Index of Eight Core Industries (ICI), consider the following statements: 1. It is released by the Office of the Economic Adviser, DPIIT. 2. Fertilisers are one of the eight core industries. 3. Cement is not covered by the index. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Q33. Consider the following statements: 1. Ayurveda Day is now observed every year on 23 September. 2. The WHO Global Centre for Traditional Medicine is located at Jamnagar. 3. The ICD-11 Traditional Medicine Module 2 covers Ayurveda, Siddha and Unani. How many of the above statements are correct?

1. Only one
2. Only two
3. All three
4. None

Q34. With reference to the Variable Rate Reverse Repo (VRRR) conducted by the Reserve Bank of India, consider the following statements: 1. It is used to inject liquidity into the banking system. 2. The interest rate under it is determined through an auction rather than being fixed in advance. 3. It operates under the Liquidity Adjustment Facility. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q35. The Visegrad Group (V4), which recently held its first Foreign Ministers' Meeting with India, comprises which of the following countries?

1. Austria, Czechia, Hungary and Slovenia
2. Czechia, Hungary, Poland and Slovakia
3. Croatia, Hungary, Poland and Romania
4. Estonia, Latvia, Lithuania and Poland

Q36. With reference to the Variable Rate Reverse Repo (VRRR), consider the following statements: 1. It is used by the RBI to inject liquidity into the banking system. 2. The interest rate under VRRR is discovered through an auction rather than fixed in advance. 3. It operates within the Liquidity Adjustment Facility. Which of the statements given above is/are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q37. The appointment of the Chief Election Commissioner and other Election Commissioners is governed by which Article of the Constitution of India?

1. Article 280
2. Article 315
3. Article 324
4. Article 338

Q38. With reference to the Chief Election Commissioner of India, consider the following statements: 1. The Election Commission became a permanent multi-member body in 1993. 2. The Chief Election Commissioner can be removed by the President on the recommendation of the Election Commission. 3. The Chief Election Commissioner holds office for six years or until the age of 65 years, whichever is earlier. Which of the statements given above are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q39. Consider the following pairs of cross-border payment or settlement systems and their originating country or institution: 1. CIPS — China 2. SPFS — Russia 3. mBridge — Bank for International Settlements, which continues to host it How many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q40. With reference to the Siang river and the proposed Siang Upper Multipurpose Project, consider the following statements: 1. The Siang originates in Tibet, where it is known as the Yarlung Tsangpo. 2. The Siang joins the Dibang and the Lohit to form the Brahmaputra. 3. The project lies in a region classified under the highest seismic risk zone of India. Which of the statements given above are correct?

1. 1 and 2 only
2. 2 and 3 only
3. 1 and 3 only
4. 1, 2 and 3

Q41. With reference to the 'mega ports' recently notified in India, consider the following statements: 1. They were notified under the Indian Ports Act, 2025. 2. All four notified mega ports are located on the west coast. 3. Mega port status is granted permanently once notified. Which of the statements given above is/are correct?

1. 1 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Q42. The only viable wild population of the pygmy hog, recently in news, is found in which of the following protected areas?

1. Kaziranga National Park
2. Manas National Park
3. Dudhwa National Park
4. Jaldapara National Park

Q43. With reference to the Merchant Discount Rate (MDR) on UPI notified in September 2026, consider the following statements: 1. It applies to all person-to-person (P2P) UPI transfers above ₹2,000. 2. The standard rate is 0.4%, capped at ₹300. 3. Payments for essential services such as railways and fuel attract a flat charge of ₹5. How many of the above statements are correct?

1. Only one
2. Only two
3. All three
4. None

Q44. Consider the following pairs regarding recent developments: 1. Tarang Shakti 2026 – Multinational air exercise hosted at Jodhpur. 2. E-methanol – Produced from green hydrogen and captured carbon dioxide. 3. Strait of Hormuz – Connects the Red Sea with the Gulf of Aden. How many of the pairs given above are correctly matched?

1. Only one
2. Only two
3. All three
4. None

Q45. With reference to Polylactic Acid (PLA), consider the following statements: 1. It is produced by fermentation of plant-derived sugars followed by polymerisation. 2. It readily biodegrades in open soil and seawater within a few weeks. 3. BIRAC, which funds bio-innovation, functions under the Department of Biotechnology. Which of the statements given above are correct?

1. 1 and 2 only
2. 1 and 3 only
3. 2 and 3 only
4. 1, 2 and 3

Q46. Consider the following statements about the Shanghai Cooperation Organisation (SCO): 1. Belarus is its most recent full member. 2. Its Regional Anti-Terrorist Structure (RATS) is headquartered in Tashkent. 3. India has never held the SCO chairmanship. Which of the statements given above are correct?

1. 1 only
2. 1 and 2 only
3. 2 and 3 only
4. 1, 2 and 3

Answer key & explanations

Q1 — Answer: B
Statement 1 is incorrect — EOS-05 was launched by **GSLV-F17** from the **Second Launch Pad**. Statements 2 and 3 are correct: it is described as **India's first imaging satellite from a geosynchronous orbit** and carries a **multispectral VNIR imager plus hyperspectral VNIR and SWIR sensors**.

Q2 — Answer: A
Only statement 1 is correct. A **JPC is an ad hoc committee**, constituted for a specific purpose and dissolved once it reports — so statement 2 is wrong. Committee recommendations are **advisory/ recommendatory, not binding** on the Government — so statement 3 is wrong. The FCRA (Amendment) Bill JPC has **21 Lok Sabha and 10 Rajya Sabha members**.

Q3 — Answer: B
PMI is a **survey-based diffusion index** derived from responses of purchasing managers; a reading **above 50 signals expansion** over the previous month and below 50 a contraction. It is a **leading indicator**, unlike the production-based **IIP**. India's **services PMI was 54.1 in August 2026** with the **composite at 54.3**.

Q4 — Answer: a
Statements **1** and **2** are correct. Statement **3** is wrong — a **geostationary orbit** lies at roughly **35,786 km** above the equator; **800 km** is typical of a **Sun-synchronous polar orbit**.

Q5 — Answer: c
All three pairs are correctly matched. **Mercator** preserves angles and is useful for navigation but inflates high-latitude landmasses; **Equal Earth** and **Mollweide** are **equal-area** projections that preserve relative size while distorting shape.

Q6 — Answer: B
Statements **2 and 3** are correct. Statement **1** is wrong - electoral **roll** preparation is governed by the RP Act, **1950**; the RP Act, **1951** deals with the **conduct of elections** and disqualifications.

Q7 — Answer: C
All three are correctly matched. Note that only **Parliament by law** can include or exclude a community from the ST list, even though the President issues the initial notification under Article 342.

Q8 — Answer: D
All three are correct. DFCCIL is the SPV under the Ministry of Railways; the last commissioned section links the corridor to JNPA; and DFCs are engineered for double-stack container movement with higher axle loads.

Q9 — Answer: B
Statements 1 and 3 are correct. Statement 2 is wrong: a geostationary orbit is the special case of a geosynchronous orbit with zero inclination over the equator, so an inclined geosynchronous orbit is not geostationary.

Q10 — Answer: D
All three are correct. The CCTS was notified in June 2023 under the Energy Conservation (Amendment) Act, 2022 and is administered by the Bureau of Energy Efficiency, with the National Steering Committee co-chaired by the Ministry of Power and the MoEFCC. It succeeds the PAT scheme, under which Energy Saving Certificates (ESCerts) were traded. The CCTS unit is the Carbon Credit Certificate, denominated in tonnes of CO_2 equivalent.

Q11 — Answer: B
Only statement 2 is correct. The DAC is chaired by the Defence Minister, not the Chief of Defence Staff, so statement 1 is wrong. It was constituted in 2001 on the recommendation of the Group of Ministers report that followed the Kargil Review Committee, so statement 2 is correct. Acceptance of Necessity is only the first, in-principle stage of the acquisition cycle under DAP 2020 and is not a signed contract, so statement 3 is wrong.

Q12 — Answer: D
All three are correct. Article 371 currently carries clauses A to J covering 12 States. Article 371A gives Nagaland protection for Naga customary law, procedure and land ownership. Article 240 empowers the President to make regulations for specified Union Territories, including Ladakh. The proposed Article 371(K) would be the first such clause for a Union Territory.

Q13 — Answer: B
A CBAM levies a charge on imports based on the greenhouse gases embedded in their production, so that domestic producers already paying a carbon price are not undercut by imports from jurisdictions without one. Its stated aim is to prevent carbon leakage. The UK CBAM starts in 2027 and covers steel, aluminium, fertilisers and cement; it has now recognised India's Carbon Credit Trading Scheme, so carbon costs already paid in India can be set off.

Q14 — Answer: A
India assumed the chairship on 1 January 2026 — its fourth, after 2012, 2016 and 2021, so statement 1 is correct. The New Development Bank, established in 2014, is headquartered in Shanghai, so statement 2 is correct. Indonesia is a full member of the expanded eleven-member grouping, not a partner country, so statement 3 is incorrect.

Q15 — Answer: B
Statements 1 and 3 are correct. Ladakh is not covered by the Sixth Schedule; it is a Union Territory without a legislature, and the demand for Sixth Schedule status is precisely what the proposed Chapter K under Article 371 seeks to address, so statement 2 is incorrect.

Q16 — Answer: B
CE20 uses the **gas-generator cycle**, not staged combustion - so statement 1 is incorrect. It burns **LH2 + LOX** and powers the **cryogenic upper stage (C25/C32) of LVM3**, so statements 2 and 3 are correct.

Q17 — Answer: B
Registration is under **Section 29A, RPA 1951** (1 correct) and **Section 80GGC** allows deduction on donations (3 correct). Following **Indian National Congress vs Institute of Social Welfare (2002)**, the ECI has **no general power of de-registration** - so statement 2 is incorrect.

Q18 — Answer: A
Statements 1 and 2 are correct. Statement 3 is wrong — person-to-person UPI transfers stay free at every value; only a narrow set of merchant transactions above ₹2,000 could attract an MDR in future, and NPCI has still to fix the rate and the eligible merchant categories.

Q19 — Answer: C
All three pairs are correctly matched. India and Mercosur signed a PTA in 2004, in force from 2009, covering about 450 tariff lines on each side. Mercosur itself is a customs union, which is why it negotiates trade agreements as a bloc rather than country by country.

Q20 — Answer: B
Statements 1 and 3 are correct. Statement 2 is wrong on a point examiners love: HFCs do NOT deplete ozone — they were adopted precisely because they are ozone-safe. They are, however, extremely potent greenhouse gases, which makes Kigali a climate instrument grafted onto an ozone treaty.

Q21 — Answer: C
Statements 2 and 3 are correct. CPI was 4.82% — above, not below, the 4% target, and the third consecutive month above it, so statement 1 fails. WPI at 9.92% was more than double CPI, and within WPI fuel and power rose 22.93%, far ahead of manufactured products (8.37%).

Q22 — Answer: B
Statement 1 is incorrect: the WPI comes from the Office of the Economic Adviser, DPIIT, while the CPI comes from the NSO under MoSPI. Statement 2 is correct: the WPI covers only goods. Statement 3 is incorrect: flexible inflation targeting is anchored to CPI at 4% with a 2-6% band.

Q23 — Answer: B
Statements 1 and 3 are correct: the Kigali Amendment of 2016 phases down HFCs under the Montreal Protocol; India ratified it in September 2021 and starts its cuts in 2032, reaching 85% by 2047. Statement 2 is incorrect: HFCs do not deplete ozone at all — they are targeted as potent greenhouse gases.

Q24 — Answer: A
A VRRR absorbs liquidity, so 1 is correct. The rate is discovered by auction, not fixed, so 2 is wrong. It is a liquidity operation and does not alter the policy stance, so 3 is wrong.

Q25 — Answer: B
The Shaksgam valley, about 5,800 sq km, lies north of the Karakoram range between Xinjiang and Pakistan-occupied Gilgit-Baltistan. India treats the 1963 agreement as illegal and invalid.

Q26 — Answer: A
Statements 1 and 2 are correct — nodules lie at **3,000–6,000 metres** and contain **manganese, nickel, cobalt and copper**. Statement 3 is incorrect: the ISA's **exploitation code remains unadopted**, which is precisely why commercial deep-sea mining is contested.

Q27 — Answer: B
The Symbols Order is **subordinate legislation** made by the **Election Commission** in exercise of its powers under **Article 324**, read with the **Representation of the People Act, 1951** and the Conduct of Elections Rules. Its validity was upheld in **Sadiq Ali v. Election Commission of India (1972)**. **Paragraph 15** governs disputes between rival factions.

Q28 — Answer: B
The NGT is a **statutory** body created by the **NGT Act, 2010**, not a constitutional body, so statement 1 is incorrect. India was the **third country** after **Australia** and **New Zealand** to set up a dedicated environmental court, and appeals from NGT orders lie to the **Supreme Court within 90 days** - statements 2 and 3 are correct.

Q29 — Answer: B
WPI is released by the **Office of the Economic Adviser** in the **Department for Promotion of Industry and Internal Trade**,
not the NSO - so statement 1 is incorrect. WPI covers only goods and **excludes services**, and **manufactured products** carry the largest weight at **64.23%** - statements 2 and 3 are correct.

Q30 — Answer: C
Statement 1 is correct – **below 10%** is FPI. Statement 2 is wrong – **VRR** is for **debt** investment. Statement 3 is correct – **FAR** (2020) removes limits on specified **G-Secs**.

Q31 — Answer: B
Pair 1 is correct. Pair 2 is wrong – **Appendix I** bans **commercial trade** and needs **both export and import permits** for exceptional trade. Pair 3 is correct – **WCCB** was set up in **2007** under the **WPA, 1972**.

Q32 — Answer: B
ICI is compiled by the **Office of the Economic Adviser, DPIIT**. Its eight industries are **coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity** — so cement is covered (it grew **12.5%** in August 2026). Statement 3 is wrong.

Q33 — Answer: C
A **23 March 2025 gazette** fixed Ayurveda Day on **23 September**; **WHO-GCTM** is at **Jamnagar, Gujarat**; **ICD-11 TM2** (launched **10 January 2024**, New Delhi) codes **Ayurveda, Siddha and Unani**. All three are correct.

Q34 — Answer: B
A VRRR **absorbs** liquidity rather than injecting it, so statement 1 is wrong. The rate is discovered through **auction** and the facility sits under the **Liquidity Adjustment Facility**, so statements 2 and 3 are correct. Liquidity injection through an auction-determined rate is done by the **Variable Rate Repo (VRR)**.

Q35 — Answer: B
The **V4** was formed in **1991** at **Visegrad, Hungary**, originally by **Poland, Hungary and Czechoslovakia**. After the Czech-Slovak split in **1993** it became a four-member grouping of **Czechia, Hungary, Poland and Slovakia**, all of which joined the **EU in 2004**.

Q36 — Answer: B
Statement 1 is incorrect — VRRR **absorbs** surplus liquidity; it is the Variable Rate **Repo** that injects liquidity. Statements 2 and 3 are correct: the VRRR rate is **market-discovered through auction** and the facility operates under the **Liquidity Adjustment Facility (LAF)**. On **24 September 2026** the RBI conducted an overnight VRRR auction of **₹1,25,000 crore**.

Q37 — Answer: C
Article 324 deals with the **Election Commission of India**; **Article 324(2)** provides that appointment shall be subject to any law made by **Parliament**. Article 280 covers the **Finance Commission**, Article 315 the **Public Service Commissions**, and Article 338 the **National Commission for Scheduled Castes**.

Q38 — Answer: B
The Commission became permanently multi-member on **1 October 1993**, so statement 1 is correct. Statement 2 is wrong: the **CEC** can be removed only in the manner of a **Supreme Court judge**, requiring a **special majority** of both Houses for **proved misbehaviour or incapacity**; it is the **Election Commissioners** who can be removed on the recommendation of the CEC. Statement 3 is correct under the **CEC and Other Election Commissioners Act, 2023**.

Q39 — Answer: B
CIPS is China's cross-border interbank payment system launched in **2015** and **SPFS** is Russia's messaging system built in **2014**, so pairs 1 and 2 are correct. Pair 3 is wrong because the **BIS** exited the **mBridge** multi-CBDC project on **31 October 2024**, even though it had incubated the platform.

Q40 — Answer: D
All three are correct. The river rises in Tibet as the **Yarlung Tsangpo**, enters India as the **Siang** in **Arunachal Pradesh**, and merges with the **Dibang** and **Lohit** to become the **Brahmaputra** in Assam. The project area falls in **Seismic Zone V**, the highest risk category, which is central to the safety debate over an **11,000 MW** storage dam.

Q41 — Answer: A
Only 1 is correct. **Paradip** (Odisha) is on the **east coast**, so 2 is wrong; status is valid for **5 years** with periodic review, so 3 is wrong.

Q42 — Answer: B
The **pygmy hog** survives in the wild only in **Manas National Park**, Assam, where captive-bred groups have been reintroduced since **2020**.

Q43 — Answer: B
Statement 1 is wrong – MDR applies only to specified **person-to-merchant (P2M)** payments above **₹2,000**, not P2P. Statements 2 (**0.4%, cap ₹300**) and 3 (**flat ₹5** for essential services) are correct.

Q44 — Answer: B
Pairs 1 and 2 are correct. The **Strait of Hormuz** links the **Persian Gulf** with the **Gulf of Oman**; the Red Sea–Gulf of Aden link is the **Bab-el-Mandeb**.

Q45 — Answer: B
PLA is made by fermenting sugars into **lactic acid** and polymerising it (1 correct). It degrades mainly under **industrial composting** conditions (~58°C), not quickly in soil or seawater (2 wrong). **BIRAC** is a PSU under the **Department of Biotechnology** (3 correct).

Q46 — Answer: B
Belarus joined in **2024** as the 10th member (1 correct). **RATS** is based in **Tashkent** (2 correct). India chaired the SCO in **2023** and hosted a virtual summit (3 wrong).

Mains practice questions

1. India's space programme is increasingly being framed as a service to governance rather than a symbol of prestige. In light of recent Earth-observation missions, examine how space-based assets can strengthen India's disaster management and agricultural resilience. (250 words, 15 marks)

   Open with the shift from **prestige-driven to application-driven** space policy. Use **EOS-05's geosynchronous perch** — imaging a selected field every **5 minutes** and the whole landmass every **30 minutes** — to argue for **anticipatory action** over reactive relief. Link to the **Disaster Management Act, 2005** architecture and the **Sendai Framework** priority of 'understanding disaster risk'. For agriculture, connect hyperspectral crop-stress detection to **crop insurance settlement, drought declaration and advisory services**. Add limitations — **cloud cover, coarse 42 m resolution, last-mile dissemination and data-literacy gaps at district level**. Conclude with **Indian Space Policy 2023** and private-sector participation for downstream applications.

2. "Border villages are not the last settlements of the country but its first." Examine how the **Vibrant Villages Programme** seeks to translate this idea into policy, and assess the challenges in its implementation. **(250 words, 15 marks)**

   Open with **out-migration** and the **security-development link**. Contrast **VVP-I** (Centrally Sponsored, northern border, **April 2023**) with **VVP-II** (Central Sector, other borders), anchoring on **₹11,639 crore** and **2,616 villages**. Challenges: terrain and short working seasons, land acquisition, thin absorptive capacity of small local bodies, and connectivity in the eastern sector amid **LAC** frictions. Close by linking to today's **eastern-sector Corps Commander talks** and the case for convergence with border infrastructure.

3. "The absence of a working removal mechanism has made India's judiciary accountable largely to itself." In light of recent developments, examine the adequacy of existing judicial accountability mechanisms and suggest reforms. **(250 words, 15 marks)**

   Open with the **Articles 124(4) / 217(1)(b)** route and the fact that **no impeachment has succeeded**. Cover the **1999 in-house procedure**, the **K. Veeraswami (1991)** bar on FIRs, and the lapsed **2012 Bill**. Balance **independence versus accountability** - avoid executive-controlled remedies. Close with time-bound in-house inquiry, reasoned outcomes and transparency in **Collegium** decisions.

4. Completing the Dedicated Freight Corridors is a necessary but not sufficient condition for reducing India's logistics cost. Critically examine, with reference to modal-share targets and last-mile connectivity. (250 words, 15 marks)

   Open with the freight modal-share problem — rail's declining share against road. Use today's WDFC completion and the JNPA link as the supply-side gain. Then argue the binding constraints: first-and-last-mile sidings, warehousing and multimodal parks, terminal charges, and empty-return imbalance. Link to PM GatiShakti, the National Logistics Policy and the zero-emission trucking push. Conclude on integrated corridor economics rather than track alone.

5. Carbon border adjustment mechanisms are being justified as climate instruments but function as trade barriers for developing economies. In this light, examine how India's Carbon Credit Trading Scheme can be used as a shield rather than an added cost for Indian exporters. (250 words, 15 marks)

   Open with the UK's recognition of the CCTS from 9 September 2026 and the EU CBAM's definitive phase from January 2026. Body in three parts: (a) why CBAM strains CBDR-RC under the UNFCCC and hits steel, aluminium, cement and fertiliser exports; (b) how the CCTS compliance and offset legs create a domestic carbon price that can be set off abroad; (c) what is missing — MRV credibility, price discovery, MSME coverage, linkage with green steel. Conclude that recognition turns a compliance cost into leverage.

6. Special constitutional provisions for regions with distinct cultural and ecological identities are often defended as a strength of Indian federalism and criticised as a source of fragmentation. In the light of the proposal to insert a new Article 371(K) for Ladakh, critically examine this debate. (250 words, 15 marks)

   Open by defining asymmetric federalism and listing the existing Article 371 clauses with one example each. Build the supporting case: protection of customary law, land and fragile ecology; conflict de-escalation; the Sixth Schedule and Article 371A precedents. Then the critique: administrative complexity, investment deterrence, demands for replication elsewhere, and the risk of symbolic autonomy without financial or police powers — the gap flagged in the Ladakh proposal itself. Conclude that asymmetry has held the Union together where it came with real fiscal and executive substance, and that the 371(K) draft should be judged on that test.

7. The Forest Rights Act, 2006 was enacted to undo a 'historical injustice', yet the question of Gram Sabha consent in the diversion of forest land remains unsettled. Critically examine. (250 words, 15 marks)

   Open with the objects of the FRA and Section 4(5); trace the 2009 circular and the Supreme Court's 2013 Niyamgiri ruling on free, prior and informed consent; use the 3,05,945 hectares diverted between 2008-09 and 2022-23 as evidence of scale; weigh developmental and infrastructure needs against PESA-style self-governance; conclude with an institutional fix — a single inter-ministerial protocol and verifiable Gram Sabha records.

8. India today ranks among the top three nations in research publication volume, yet remains far down the global ladder on citation impact and patent commercialisation. Examine the structural causes of this volume-impact paradox and suggest reforms in evaluation, funding and technology transfer to close the gap. (250 words, 15 marks)

   Anchor with data - **1.6 million indexed papers (2020-25), rank 3** but **h-index 925, rank 19**; patent grant rate **3%**, commercial working **1.6%**. Causes: volume-weighted incentives (**NIRF ~30%**), weak industry-academia linkage, publish-or-perish driving **retractions (3.5 per 1,000)**, low **GERD (~0.65% of GDP)**. Reforms: field-weighted citation impact in rankings, **ANRF** mission-mode funding, university technology transfer offices, research-integrity offices. Conclude with **Viksit Bharat 2047**.

9. Zero Merchant Discount Rate made India's digital payments universal but left the rails without a revenue model. Examine the case for and against reintroducing a calibrated MDR on large-value merchant transactions, and suggest safeguards for small merchants. (250 words)

   Frame it as a public-good-versus-sustainability trade-off. FOR: banks and fintechs currently cross-subsidise 24.51 billion transactions a month; unpriced infrastructure underinvests in fraud control and uptime. AGAINST: MDR raises the cost of accepting digital money exactly at the margin where cash competes, and can push small merchants back to cash. SAFEGUARDS: a turnover threshold, a capped nominal rate, continued incentive outlay for small merchants, and person-to-person transfers staying free. Close with the ₹2,000 ceiling as the government's chosen dividing line.

10. A sustained divergence between wholesale and retail inflation complicates the conduct of monetary policy. In the light of India's August 2026 price data, examine the causes of this divergence and discuss whether interest rate action is the appropriate instrument to address it. (250 words, 15 marks)

    Open with the numbers — WPI 9.92% against CPI 4.82%. Explain the wedge structurally: WPI carries no services and a heavy fuel and manufacturing weight, while CPI is food- and services-dominated and cushioned by administered prices. Then argue that an imported energy shock is a supply-side, relative-price event — rate hikes compress demand but cannot produce a barrel of oil, so the case for hiking rests on anchoring expectations and defending the rupee. Balance that against pass-through and second-round effects, which inflation targeting exists to prevent. Conclude with a policy mix: calibrated tightening plus duty rationalisation, reserve management and food-supply intervention.

11. "India's semiconductor push has moved from incentive announcements to an ecosystem problem." In the light of India Semiconductor Mission 2.0, examine the constraints that stand between approved fabrication projects and a resilient domestic chip supply chain. (250 words, 15 marks)
    Open with the scale shift: ₹76,000 crore to ₹1,27,500 crore, 12 approved projects, 3 in production. Structure the constraints under four heads — import-dependent upstream inputs, capital equipment and a narrow global vendor base, talent, and demand-side anchoring through design wins. Balance with enablers: DLI, EDA access, and mature 28 nm and above nodes as a realistic entry point. Conclude that resilience is measured in yield and supply-chain depth, not in approved outlay.
12. India's record dependence on discounted Russian crude has strengthened its energy budget but exposed its exports to secondary sanctions. Critically examine how India can reconcile affordable energy with market access, and suggest an institutional mechanism for managing sanctions risk. (250 words, 15 marks)
    Frame the trade-off with the 51% import share and the 50% cumulative tariff. Build the body on three axes: crude-basket diversification and strategic reserves, export-market diversification, and payment and insurance resilience. Close with a single coordinating sanctions-risk office, since the problem today is institutional fragmentation.
13. India's semiconductor mission has moved from attracting fabrication capacity to building a full value chain. Examine the structural constraints that will determine whether this second phase succeeds, and suggest measures to address them. (250 words, 15 marks)
    Open with the shift from **Phase-I (₹76,000 crore, fab-centric)** to **Semicon 2.0 (₹1,27,500 crore, six pillars)**. Structure the body around constraints: **critical minerals and materials import dependence**, **ATMP/packaging depth**, **water and power reliability for fabs**, **design talent and low R&D intensity**, and **geopolitical supply-chain risk**. For each, give one concrete measure — strategic mineral partnerships, an ATMP cluster policy, dedicated utility infrastructure, university-fab linkages and plurilateral supply-chain arrangements. Conclude that **capital is no longer the binding constraint; absorptive capacity is**.
14. India's energy transition requires simultaneously decarbonising the power sector and securing supplies of critical minerals. Examine the challenges in this twin objective, with reference to recent diversification efforts by public sector undertakings and India's deep-ocean programme. (250 words, 15 marks)
    Frame the twin objective: demand-side decarbonisation (renewables, storage, EVs) versus supply-side mineral security. Use **Coal India's Rs 50,000 crore** pivot into gasification, five graphite and rare-metal blocks, overseas lithium exploration and a **9.5 GW** renewable target as the PSU example. Bring in the **Deep Ocean Mission**, **three ISA contracts** over **95,000 sq km** and **366 million tonnes** of nodules as the frontier option, then the counterweight - ecological uncertainty, an incomplete exploitation code and less than **1%** of the deep ocean mapped. Conclude with recycling, substitution, the **National Critical Mineral Mission** and strategic partnerships as the balanced path.
15. Unilateral secondary sanctions by major powers are testing India's 'strategic autonomy' in energy security. Critically examine India's options in the light of the US Sanctioning Russia and Iran Act, 2026. (15 marks, 250 words)
    Intro: law signed **18 Sept**, tariffs up to **100%**. Body: dependence on Russian crude (**>40%**), US as **20%** export market, MSME risk; options – **diversify, negotiate, SPR, rupee trade**; WTO angle. Conclude: **multi-alignment** with calibrated hedging.
16. "A Uniform Civil Code must aim at gender justice rather than mere uniformity." Examine in the light of recent State-level UCC initiatives. (15 marks, 250 words)
    Intro: **Art. 44** + **Concurrent List Entry 5** → State models (**Goa 1867**, **Uttarakhand 2025**) → Court cases (**Shah Bano, Sarla Mudgal, Shayara Bano**) → concerns: **Art. 25/29**, tribal customs, federalism (**Art. 254(2)**) → way forward: consultation, codify best practices, gender-just code.

17. Punjab now extracts more groundwater than it recharges, yet the crisis hurts small farmers far more than large ones. Examine the causes of this inequality and suggest a welfare-consistent policy response that protects farm incomes while making further extraction unattractive. (250 words, 15 marks)
    Open with the **156.87%** stage of extraction and **115 of 153** over-exploited units. Explain the mechanism: free power plus assured procurement locks in the **rice-wheat** cycle; falling water tables raise the capital needed for deeper bores, so smallholders end up **buying water** from large landowners. Then move to solutions - pay for **water saved** rather than power consumed, redirect part of the electricity subsidy to smallholders, collectivise irrigation assets, strengthen procurement for alternative crops, and route benefits to **tenant cultivators**. Close with the constitutional point that groundwater is a State subject regulated through central environmental law.
18. "Institutional independence depends as much on the perception of neutrality as on formal safeguards." Examine this proposition in the light of the ongoing constitutional debate over the appointment of the Chief Election Commissioner and Election Commissioners. (250 words, 15 marks)
    Open with **Article 324(2)** and the **Anoop Baranwal (2023)** interim mechanism. Contrast it with **Section 7 of the CEC & ECs Act, 2023**. Use the **separation of powers** and **free and fair elections as basic structure** arguments, and the counter-argument of **parliamentary supremacy in legislation**. Conclude with reform options — a **neutral selection panel**, **fixed tenure** and **post-retirement cooling-off**.
19. Twelve years of Make in India have raised manufacturing value added and investment, yet India's share in world merchandise exports has barely moved. Examine the reasons for this gap and suggest measures to make industrial policy export-competitive.
    Open with the data contrast — GVA share **14.6% to 15.6%** and PLI investment of **Rs 2.40 lakh crore** against a flat **1.7%** export share. Explain causes: assembly-led value addition, high input tariffs, absence of large trade agreements, logistics costs, scale and MSME credit gaps, low female labour participation. Conclude with component-ecosystem deepening, tariff rationalisation, FTAs with large markets and regulatory cost reduction.
20. Growing support for India's permanent membership has not translated into UNSC reform. Examine the obstacles to reform and suggest a strategy for India. (15 marks, 250 words)
    Intro: UNSC's 1945 structure vs today's realities; recent backing at UNGA-81. Body: obstacles – **Art. 108** (P5 ratification), **Uniting for Consensus**, P5 veto politics, **Ezulwini Consensus**, stalled **IGN**. Strategy – text-based negotiations, AU/L.69 coalitions, Global South leadership, peacekeeping record. Conclude with **reformed multilateralism**.
21. Repeated disruptions in the Strait of Hormuz expose the vulnerability of India's energy security and external sector. Examine, and suggest short- and long-term measures. (GS3, 15 marks, 250 words)
    Intro: **89% import dependence**, Brent above **$107**. Body: impact on **CAD, rupee, inflation, OMC under-recoveries, FPI outflows**; short term – **SPR drawdown, source diversification, rupee trade**; long term – **EVs, green hydrogen/e-methanol, biofuels, domestic E&P**. Conclude with energy **Atmanirbharta**.
22. Unregulated trade margins on non-scheduled medicines undermine the right to health. Critically examine India's drug price regulation framework and suggest reforms. (250 words, GS2)
    Intro: SC's '**broad daylight dacoity**' remark (~**10x** mark-up). Body: **DPCO 2013**/**NPPA**/**NLEM** coverage (~**18%**), 10% MRP-hike rule for non-scheduled drugs, **Trade Margin Rationalisation (2019)**, hospital pharmacies, **Ayushman Bharat** costs; counterpoints — R&D incentives, supply. Way forward: wider TMR, **Jan Aushadhi**, generic prescription, transparent pricing. Conclude with **Article 21**/**47**.

One-line revision — the whole month

- **Saturday, 5 September 2026:** EOS-05 gives India a geosynchronous eye — 5-minute revisit; August GST ₹1,99,853 crore (+14.8%); services PMI 54.1; 31-member JPC on the FCRA Amendment Bill; RAKSHA sets a 10-year defence diplomacy roadmap.
- **Sunday, 6 September 2026:** EOS-05 in GEO on GSLV-F17 | GDP 7.8% in Q1 FY27 | CAD $4.2 bn (0.5% of GDP) | ₹11,639 cr for 2,616 border villages | UNGA 164-1 on equal-area maps | BRICS in New Delhi, 12-13 September
- **Monday, 7 September 2026:** Forex $740.80 bn record | JCR upgrade to A- | UNEP 1.5°C overshoot, peak 1.8°C | Ganga 50.57 m at Gandhi Ghat | Drug-free India 2029 roadmap | SIR deletes 1.85 lakh in Manipur + Sikkim | FRA consent row | BAM-H24 patent | Chhattisgarh tops Jal Sanchay 3.0
- **Tuesday, 8 September 2026:** WDFC complete with 326 km and ₹20,700 crore; DAC clears ₹1.10 lakh crore at 98% indigenous; EOS-05 is India's first geosynchronous imager; BRICS-11 meets at Bharat Mandapam on 12-13 September; August GST gross ₹1,99,853 crore, up 14.8%.
- **Wednesday, 9 September 2026:** Remember today by five numbers: **$101.07/barrel** crude, **133.3** FAO food index, **₹1.10 lakh crore** DAC clearance at **98% indigenous**, **26th** country in the 6G Call to Action, and **$226.1 billion** — India's trade deficit with BRICS.
- **Thursday, 10 September 2026:** Crude above $100 with ₹23 a litre diesel under-recovery, a proposed Article 371(K) for Ladakh, and the 18th BRICS Summit at Bharat Mandapam — the three anchors of 10 September 2026.
- **Friday, 11 September 2026:** 12-13 September 2026: New Delhi hosts the 18th BRICS Summit under India's fourth chairship — theme 'Building for Resilience, Innovation, Cooperation and Sustainability'; eleven members, 49.5% of world population, 40% of global GDP.
- **Saturday, 12 September 2026:** 18th BRICS Summit at Bharat Mandapam | CE20 hot-tested at 220 kN | Forex reserves at a record USD 785.7 billion | E-commerce Rules amended (prior price = lowest in 30 days, effective 1 Jan 2027) | DILRMP 3.0 rolls out the 14-digit Bhu-Aadhaar.
- **Tuesday, 15 September 2026:** 14–15 September 2026: the Centre froze charges on UPI up to ₹2,000, wholesale inflation hit 9.92% against retail's 4.82%, and the BRICS New Delhi Declaration closed India's presidency.
- **Wednesday, 16 September 2026:** Chips at Yashobhoomi, courts for the veterans, and a 9.92% wholesale print that will not let the Reserve Bank cut — 16 September 2026 in one line.
- **Thursday, 17 September 2026:** Remember today by five numbers: **₹1,27,500 crore** for Semiconductor Mission 2.0, **₹25,000** as the new EPFO wage ceiling, **9.92%** WPI inflation, **70.03%** of India's tariff lines opened to New Zealand, and **0.4%** UPI MDR above ₹2,000.
- **Friday, 18 September 2026:** Remember today as: **Semiconductor Mission 2.0 at ₹1,27,500 crore over 12 years**, **VRRR of ₹2.25 lakh crore**, **UPI MDR 0.4% above ₹2,000 from 15 October**, **WPI 9.92%**, **EPFO ceiling ₹25,000**, and **Gender Gap rank 131 of 145**.
- **Saturday, 19 September 2026:** Semicon 2.0 ₹1,27,500 cr / six pillars • Fed 25 bps to 3.75–4.00% • Kishau dam 232.6 m on the Tons, six states • CPI 4.82%, food 5.95% • TMC symbol frozen under Para 15 • Jan Aushadhi 2,110 + 315 • India–NZ FTA cleared • Kuno cheetahs now 56.

- **Sunday, 20 September 2026:** Rs 50,000 crore Coal India pivot • NGT global climate conference • Water Week on climate resilience • USD 221.4 bn software exports • WPI 9.92% • FCRA Bill in a 31-member JPC • India opens Asian Games medal tally.
- **Monday, 21 September 2026: ₹20,974 cr** FPI exit | CPI **4.82%** | US sanctions law, tariffs up to **100%** | SC: deposit ≠ payment | SIR-3 **~17%** deletions | Tata **Art. 121** | Phalke: **Anant Nag**
- **Tuesday, 22 September 2026:** One-line revision: **KAL** (1,000 km OWA drone) + **HTT-40** = defence Aatmanirbharta; **Moody's 7%** vs **core sector 4.8%**; **Art. 44 UCC** push; **Ayurveda Day 23 Sept**; **₹4,000 crore** Bhutan LoC.
- **Wednesday, 23 September 2026:** Remember today by five numbers: 7.0% FY27 growth, ₹71,971 crore absorbed via VRRR, 156.87% groundwater extraction in Punjab, 70.03% of tariff lines opened to New Zealand, and 131 GW of canal-top solar potential.
- **Thursday, 24 September 2026:** Remember today by four numbers — **0%** crude sunflower oil duty, **₹1.25 lakh crore** VRRR, **7 of 9** planetary boundaries breached, and **15,800** projected excess heat deaths in India.
- **Friday, 25 September 2026:** ONE-LINE REVISION: Make in India at 12 - PLI Rs 2.40 lakh crore, GVA share 15.6%, export share still 1.7%; RBI drains Rs 4.92 lakh crore surplus with Rs 1 lakh crore OMO sales; VARUNA 24th at Toulon; Siang 11,000 MW; CEC removal needs special majority; DDU-GKY 2.0 starts with 34,920 youth.
- **Monday, 28 September 2026:** Mega ports **4** (150 MMT / 7.5 mn TEU) | Laser **30 kW – 5 km** | Agnibaan **TRL-4→8, ₹200 cr** | Pygmy hog **6→190+, Manas** | OECD **7.1%** | TTDI **31st** | Census **32 cr+ families** | Quad-at-Sea **ICGS Shaunak**.
- **Tuesday, 29 September 2026: $107 Brent + ₹96/$** = CAD pressure | **₹1 lakh cr OMO** = liquidity drain | **UPI MDR >₹2,000** from **15 Oct** | **Art 3** = statehood with Parliament | **Tarang Shakti-2**: F-35 debut.
- **Wednesday, 30 September 2026:** Edible-oil duty cut (24 Sep) + net FDI 5-year high (**$7.35 bn**, July) + sulphur shock (**$1,050/t**) + SC on **10x** drug mark-ups + **PRAMAAN** and **BioE3-PLA** = today's must-revise set.