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DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

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1. Trump's New Tariff Measures on Imports

1. Key Announcements

- U.S. President Donald Trump announced 100% tariffs on branded drugs and 25% tariffs on heavy-duty trucks, effective October 1.
- Additional tariffs: 50% on kitchen cabinets and bathroom vanities, 30% on upholstered furniture.
- Justification: Trump cited "large-scale flooding" of foreign goods into the U.S. market.

2. Scope and Uncertainty

 No clarity on whether these tariffs are over and above existing national tariffs.



- Ambiguity remains on exemptions for countries with trade agreements (EU, Japan, etc.).
- Seen as part of Trump administration's move to **rely on established legal authorities** amid a pending Supreme Court case challenging global tariff powers.

3. Definition: Tariff

- A tariff is a tax imposed by a government on imported or exported goods, primarily to:
 - o Protect domestic industries (protective tariffs).
 - o Raise government revenue.
 - o Regulate foreign trade flows.

4. Legal and Constitutional Context (U.S. Focus)

- In the U.S., the power to impose tariffs stems from Congress under the Commerce Clause of the Constitution.
- However, in practice, presidents exercise tariff powers through legislations like:
 - o Trade Expansion Act (1962) Section 232 allows tariffs for national security reasons.
 - o Trade Act (1974) Section 301 permits action against unfair trade practices.
- The **Supreme Court case** on Trump's earlier global tariffs highlights the **judicial check** on executive trade powers.

5. Economic & Industry Implications

- The **pharmaceutical sector** is most affected, as tariffs apply unless companies set up U.S. plants.
- Industry body PhRMA warned tariffs could undermine planned investments worth hundreds of billions.
- Tariffs may increase consumer prices in the U.S., leading to inflationary pressures.
- Possible **trade tensions with allies** like EU, Japan, Canada if exemptions not clarified.

6. Global Trade Dimensions

• These measures fit into a broader trend of **protectionism** and **reshoring of manufacturing**.



- Likely to impact WTO norms on free trade and invite retaliatory tariffs.
- Could disrupt global pharmaceutical supply chains, heavily dependent on India and China.

Conclusion

Trump's tariff escalation reflects a **policy shift toward economic nationalism and protectionism**, seeking to safeguard U.S. industries but risking **trade disputes and higher domestic prices**. With legal scrutiny pending in the Supreme Court, the move also tests the balance between **executive authority and judicial oversight** in trade policy.

UPSC Relevance

- **GS Paper 2 (International Relations):** Trade protectionism, WTO, impact on global trade governance.
- **GS Paper 3 (Economy):** Impact of tariffs on domestic industries, supply chains, inflation.
- Essay Paper: Themes of protectionism vs globalization, "National Interest vs Global Trade Norms."
- Key Concept: Understanding tariffs, protectionism, and legal frameworks regulating trade policies.

2. GST Council and States' Revenue Concerns

1. Background of GST Compensation Issue

• Goods and Services Tax (GST) was introduced in **2017** as a **destination-based indirect tax** subsuming multiple central and state taxes.

- The Union government assured States of **14%** annual revenue growth for five years, compared to the pre-GST growth rate of 14–18%.
- States like **Telangana and Kerala** argue that the **promised 14% revenue growth has not been achieved**; actual growth is around 7–8%.



2. Expenditure-Revenue Mismatch

- According to the 15th Finance Commission:
 - Around 64% of total government expenditure in India is borne by States.
 - o But around 63–64% of total revenue accrues to the Union government.
- This creates a structural imbalance where **States spend more but collect less**.

3. Use of Cess and Reduced Devolution

- The Finance Commission recommended 41% devolution of Union taxes to States.
- However, about 20% of Union revenue comes from cesses and surcharges, which are not shareable with States under Article 270 of the Constitution.
- Effectively, States get only 30–32% of Central taxes, reducing their fiscal space.



4. Lack of Transparency in GST Rate Cuts

- States alleged that the **GST rate rationalisation committee** did not receive any detailed study report before the latest rate cuts.
- Revenue loss projections: For Kerala alone, ₹8,000–₹10,000 crore expected.
- Despite being on the agenda of the GST Council, the issue of compensation to States was not discussed.

5. Kev Definitions

- **GST Council (Article 279A):** Constitutional body chaired by the Union Finance Minister, includes Union and State Finance Ministers. Recommends tax rates, exemptions, and revenue sharing.
- Cess: A tax levied for a specific purpose, not shareable with States (unlike divisible pool taxes).
- GST Compensation Cess: A temporary levy under the GST (Compensation to States) Act, 2017, meant to bridge States' revenue shortfall for five years (till June 2022).

6. Constitutional & Legal Provisions

- Article 270: Distribution of taxes between Union and States; excludes cesses and surcharges.
- Article 279A: Establishment of GST Council and its decision-making framework.
- Finance Commission (Article 280): Recommends distribution of central taxes to States.

Conclusion

The ongoing tussle reflects a serious Centre–State fiscal imbalance. While GST aimed at "One Nation, One Tax", it has increased States' dependence on the Centre and eroded their fiscal autonomy. The non-discussion of compensation in the GST Council undermines cooperative federalism and calls for a rethink on fiscal federalism in India.

UPSC Relevance

- **GS Paper 2 (Polity & Governance):** Issues in federal fiscal relations, functioning of GST Council, cooperative federalism.
- **GS Paper 3 (Economy):** Impact of GST on States' revenues, fiscal deficit management, cess and surcharge implications.
- Essay Paper: Themes of Centre-State relations, federalism, resource sharing.
- Key Concepts: GST, cess, fiscal federalism, devolution, Finance Commission.

3. New Farming Technology to Combat Desertification

1. Background and Problem

- **Desertification:** Land degradation in arid, semi-arid, and dry sub-humid areas due to climatic variations and human activities (UNCCD definition).
- Western Rajasthan's **Thar desert** is expanding towards the **National Capital Region (NCR)** due to:
 - o Destruction of the Aravalli ranges.
 - o Spread of sand dunes and erratic rainfall.



o Unsustainable plantation drives and land degradation.

2. The Innovation – Desert 'Soilification' Technology

- Developed by Central University of Rajasthan (CUoR) researchers.
- Converts desert sand into soil-like structure using polymers and an indigenous bioformulation.
- Benefits:
 - o Enhances water retention capacity.
 - Promotes cross-linking of sand particles to improve soil structure.
 - Stimulates beneficial microbial activity, improving crop stress resistance.



3. Key Experiment Outcomes

- Wheat (indigenous Wheat-4079 variety):
 - o Cultivated on 1,000 sq. metres at Banseli village near Pushkar (Ajmer district).
 - o Yield: 26 kg per 100 sq. metres (1:20 seed-to-harvest ratio, double the normal arid zone).
 - o Required only three irrigations compared to 5–6 in normal wheat farming.
- Other Crops: Bajra, guar gum, and chickpea showed 54% higher yields in polymer-amended sand.
- Supported by Krishi Vigyan Kendra (KVK) and Rajasthan's Horticulture Department.

4. Broader Implications

- Potential to halt desertification and make barren desert land agriculturally productive.
- Reduced irrigation needs \rightarrow efficient water use in drought-prone regions.
- Supports India's commitments under:
 - **o** UNCCD (United Nations Convention to Combat Desertification).
 - Sustainable Development Goal 15 (Life on Land).
- Encourages **crop diversification** (millets, pulses, green gram) in drylands.

5. Constitutional & Legal Context

- Article 48A (Directive Principles of State Policy): State shall protect and improve environment and safeguard forests and wildlife.
- Article 51A(g) (Fundamental Duties): Duty of citizens to protect the environment.
- National Action Plan on Climate Change (NAPCC) and National Mission on Sustainable Agriculture (NMSA): Promote sustainable farming practices in arid regions.
- **Desert Development Programme (DDP):** Government initiative to combat desertification in hot arid areas.

6. Definition: Soilification



• Process of **transforming loose sand into soil-like medium** with higher fertility, water-retention, and microbial activity, enabling sustainable farming in deserts.

Conclusion

This experiment shows how **applied science and biotechnology** can transform barren desert into **productive farmland**, reduce water stress, and strengthen India's fight against desertification. It exemplifies **innovation in sustainable agriculture**, crucial for ensuring food security and combating climate change.

UPSC Relevance

- GS Paper 1 (Geography): Desertification, land degradation, Aravalli ecosystem.
- GS Paper 2 (Governance): Centre–State cooperation in agricultural innovation, role of KVKs.
- **GS Paper 3 (Environment & Agriculture):** Sustainable agriculture, biotechnology, UNCCD commitments, water-use efficiency.
- Essay Paper: Themes of technology for sustainable development, "Combating Desertification for Future Generations."
- Key Concepts: Desertification, soilification, bioformulation, sustainable agriculture.

4. Astronauts with Diabetes and Space Missions

1. Background of the Study

- Conducted during the Axiom-4 (Ax-4) mission at the International Space Station (ISS).
- Indian astronaut Group Captain Shubhanshu Shukla was part of the mission.
- Research partners: **Axiom Space** (U.S.-based private space company) and **Burjeel Holdings** (UAE healthcare provider).

2. Key Findings

- Astronauts with diabetes are capable of undertaking space flights.
- Everyday **diabetes monitoring tools** used on Earth can function effectively in space, enabling **end-to-end diabetes care** from Earth to space and back.
- The initiative opens the possibility for astronauts with previously **disqualifying medical conditions** to participate in missions.

3. Definition: Diabetes Monitoring

- Use of **continuous glucose monitors (CGM)** and related devices to track blood sugar levels in real time.
- Ensures effective management of diabetes, particularly in extreme or remote environments like outer space.

4. Significance of the Research

Marks a breakthrough in space medicine and remote healthcare.





- Supports inclusion of astronauts with diabetes in future missions → greater inclusivity in space exploration.
- Potential applications in telemedicine and healthcare delivery in remote/rural areas on Earth.
- Burjeel Holdings announced its ambition to work towards sending the **first astronaut with diabetes** to space.

5. Constitutional, Legal & Policy Dimensions (India & Global)

- Article 21 (Right to Life): Includes right to health; research enhances medical innovations for all.
- Article 51 & 51A (Promotion of international peace, cooperation, and scientific temper): Encourages global collaboration in scientific advancements.
- Outer Space Treaty (1967): Ensures peaceful use of outer space for benefit of all humankind.
- India's **Space Policy 2023** emphasizes private participation and space-based applications, aligning with such collaborations.

6. Broader Implications

- Advances space medicine, crucial for long-duration missions (Moon, Mars).
- Integrates AI, telemedicine, and biotechnology into astronaut health monitoring.
- Strengthens India's global space footprint by participation in cutting-edge missions.

Conclusion

The Ax-4 study represents a **paradigm shift in astronaut health eligibility**, proving that space travel can become inclusive even for individuals with chronic conditions like diabetes. It also underlines the growing role of **biotechnology and telemedicine** in future space exploration and healthcare on Earth.

UPSC Relevance

- **GS Paper 2 (Governance & IR):** Global collaboration in space research, health rights, and technology diplomacy.
- **GS Paper 3 (Science & Technology):** Biotechnology in space, health tech innovations, implications for India's space program.
- Essay Paper: "Science and Technology for Inclusive Human Progress" or "Space Research and Human Health."
- **Key Concepts:** Space medicine, telemedicine, diabetes monitoring, private sector role in space exploration.

5. The Turmoil in Kathmandu and Nepal's Political Road Ahead

1. Background of the 2025 Gen Z Protests

- On **September 8, 2025**, mass protests by **Generation Z (youth groups)** erupted in Kathmandu against corruption, unemployment, and political instability.
- Harsh police crackdown escalated public anger, forcing **Prime Minister K.P. Sharma Oli** to resign the next day.



- Following talks with the army chief, **former Chief Justice Sushila Karki** was sworn in as **interim Prime Minister** (September 12) to conduct elections on **March 5, 2026**.
- Parliament was dissolved and an **apolitical cabinet of experts** formed.

2. Broader Regional Context

- Political turbulence in South Asia has been frequent in the 2020s:
 - o Myanmar (2021): Military coup.
 - Afghanistan (2021): Taliban return after U.S. withdrawal.
 - Sri Lanka (2022): Aragalaya movement ousted Gotabaya Rajapaksa.



- o Pakistan (2023): Protests after Imran Khan's arrest.
- o Bangladesh (2024): Sheikh Hasina resigned amidst protests.
- A common factor: **youth-led mobilisations** amid high unemployment (youth unemployment in Nepal exceeds **20%**).

3. Nepal's Political Journey

- 1990 Jan Aandolan: Ended Panchayati Raj, introduced multi-party democracy.
- **1996–2006 Maoist Insurgency:** Claimed 17,000 lives; ended with peace process integrating Maoists into politics.
- 2006 Jan Aandolan II: Forced King Gyanendra to restore parliament.
- 2008: Monarchy abolished, Nepal declared a republic.
- **2015 Constitution:** Established a federal republic with bicameral parliament, but since then **7 governments** with recurring leaders (Oli, Prachanda, Deuba).
- Governance plagued by **cronyism**, **nepotism**, **corruption**, and weak economic growth.

4. Constitutional & Legal Dimensions

- Article 61 (Nepal's Constitution): Directs President to protect unity and the Constitution, but does not authorize political role of army → raises legitimacy concerns.
- Electoral System: 275-member House of Representatives with First-Past-The-Post (165 seats) + Proportional Representation (110 seats) → leads to fractured mandates.
- **Proposed Reforms:** Directly elected executive, curbing federalism, altering PR system → risks alienating **Madhesi**, **Janjati**, and **Tharu communities**.
- Interim PM's Priorities: Conduct elections, ensure accountability for police violence, and tackle high-level corruption.

5. India's Role

- India maintained **diplomatic restraint**, avoiding criticism in Nepal's media.
- PM Modi's **September 18 call** to Ms. Karki assured support and expressed condolences.



• India's focus: Ensure free and fair elections to safeguard Nepal's democratic transition.

6. Definition: Gen Z Protests

• Movements led by youth born between the mid-1990s and early 2010s, often demanding accountability, transparency, and jobs, leveraging social media as a mobilisation tool.

Conclusion

Nepal stands at a critical juncture: while the resignation of Oli and installation of an interim government reflects a demand for change, **political uncertainty**, **constitutional dilemmas**, **and youth discontent** continue to challenge stability. The best path forward is to ensure **peaceful**, **inclusive**, **and credible elections** in 2026, without undermining constitutionalism or federal balance.

UPSC Relevance

- GS Paper 2 (International Relations): India—Nepal relations, political instability in South Asia.
- **GS Paper 2 (Polity):** Comparative constitutionalism, role of federalism and proportional representation.
- **GS Paper 3 (Internal Security & Governance):** Role of youth in protests, legitimacy of army in politics.
- Essay Paper: "Youth Movements and Democracy in South Asia" or "Balancing Stability and Inclusivity in Constitutional Democracies."
- **Key Concepts:** Gen Z protests, federalism, proportional representation, cronyism, political instability in South Asia.

6. Ladakh's Demand for Sixth Schedule Status – Key Summary

1. Background of the Issue

- After the bifurcation of Jammu & Kashmir in August 2019, Ladakh became a Union Territory without a legislature.
- The National Commission for Scheduled Tribes (NCST), in September 2019, recommended Ladakh's inclusion under the Sixth Schedule of the Constitution.
- Three Union Ministries Home, Tribal
 Affairs, and Law & Justice conveyed "no objection" to the proposal.



2. Definition of Sixth Schedule

- The Sixth Schedule (Articles 244(2) and 275(1)) provides for the creation of Autonomous District Councils (ADCs) in certain tribal areas of Assam, Meghalaya, Tripura, and Mizoram.
- These councils safeguard land rights, customary practices, and local governance of tribal communities.

3. NCST's Reasoning and Recommendations



- Before UT status, Ladakhis enjoyed certain **agrarian and land rights** that restricted outsiders from buying land.
- Inclusion in the Sixth Schedule was seen as a safeguard to preserve **tribal identity**, **agrarian economy**, **and land rights**.
- NCST emphasized that without such protection, Ladakh's unique demographic and ecological balance may face risks.

4. Government's Position and Political Context

- The Ministry of Home Affairs (2019) argued that the **Ladakh Autonomous Hill Development Council Act**, **1997** already grants powers similar to the Sixth Schedule.
- In 2020, the BJP's Leh Hill Council election manifesto promised Sixth Schedule safeguards.
- However, by December 2022, the Centre stated that developmental needs were being met by UT
 administration and special funding, making separate constitutional safeguards unnecessary.

5. Constitutional & Legal Provisions

- **Fifth Schedule**: Applies to Scheduled Areas in other states, focusing on tribal welfare and Governor's role.
- **Sixth Schedule**: Grants greater autonomy with legislative, judicial, and executive powers to ADCs.
- NCST Role: As per Article 338A, NCST can recommend measures for the welfare and protection of Scheduled Tribes.

6. Key Concerns and Implications

- **Tribal identity & demographic protection**: Fear of land alienation and cultural dilution without Sixth Schedule safeguards.
- Federalism debate: Extending Sixth Schedule beyond North-East could set a precedent.
- **Political promise vs. legal action**: Discrepancy between BJP's assurances and the government's later stance.
- Security & strategic significance: Ladakh's location along sensitive borders (China, Pakistan) adds to the importance of stability and local trust.

Conclusion

The debate over Ladakh's Sixth Schedule inclusion reflects the tension between **developmental assurances** by the Centre and constitutional safeguards sought by tribal communities. While funds and administrative powers are provided, identity, land rights, and local autonomy remain unaddressed concerns.

UPSC Relevance

- **GS-II (Polity & Governance):** Constitutional provisions of Fifth & Sixth Schedule, role of NCST, federal issues.
- **GS-III (Security & Development):** Tribal rights in strategic regions.
- **Essay/Interview:** Themes of tribal identity, federalism, Centre-state relations, and developmental balance.



• Prelims: Articles 244, 275; NCST under Article 338A; Hill Council Act, 1997.

7. India's Response to NATO Chief's Remarks on Modi-Putin Talks

Key Highlights

India rejects NATO Secretary General's remarks

- India dismissed as "factually incorrect and entirely baseless" the claims made by NATO
 Chief Mark Rutte suggesting PM Modi discussed U.S. tariff hikes with Russian President
 Vladimir Putin.
- MEA Spokesperson Randhir Jaiswal emphasized that such speculative remarks misrepresent India's diplomatic engagements.

Clarification on India's energy security policy

 India reiterated its commitment to ensuring predictable and affordable energy costs for its consumers.

- Asserted its right to take "all necessary measures" to safeguard national interests and economic security.
- Definition: Energy Security refers to the uninterrupted availability of energy sources at an affordable price.

Context of U.S. sanctions and tariff hikes

- U.S. President Donald Trump recently announced penalty tariffs on India due to continued crude imports from Russia.
- o India clarified that its decisions on energy purchases are guided by **strategic autonomy** and consumer affordability, not external pressure.

• India-U.S. trade talks in New York

- EAM S. Jaishankar, along with Commerce Minister Piyush Goyal, met U.S. Secretary of State Marco Rubio and U.S. Trade Representative Jamieson Greer on September 22, 2025.
- o Focus areas included:
 - U.S. tariffs on Indian goods.
 - Sharp hike in H-1B visa fees (\$100,000 per application).
 - Broader bilateral trade relations.

• India's diplomatic stand

- India expects responsibility and accuracy from international institutions like NATO in public remarks.
- India continues to balance its relations with major powers while protecting its strategic autonomy.

Constitutional & Legal Dimensions



- Article 51 of the Indian Constitution directs the State to promote international peace, security, and maintain just and honorable relations among nations.
- **Doctrine of Strategic Autonomy** though not explicitly constitutional, it is India's long-standing foreign policy principle ensuring independence in decision-making.
- Vienna Convention on Diplomatic Relations (1961) requires accuracy and responsibility in diplomatic communication between states.

Additional Key Points

- India's foreign policy avoids aligning with military blocs like NATO but engages on issues of common concern.
- The issue reflects India's **energy pragmatism**, balancing affordable energy access with geopolitical considerations.
- The U.S.–India trade friction on **tariffs and visa fees** could influence bilateral ties, but India is pursuing dialogue.

Conclusion

India's rejection of NATO Chief's remarks underscores its commitment to **strategic autonomy, energy security, and responsible diplomacy**. By engaging directly with the U.S. on trade and visa issues, India demonstrates a pragmatic approach in safeguarding its economic and national interests.

UPSC Relevance

- **GS Paper 2 (International Relations):** India's foreign policy, strategic autonomy, and relations with major powers (U.S., Russia, NATO).
- GS Paper 3 (Economic Security): Issues of energy security, tariffs, and economic diplomacy.
- Essay/IR Themes: Balancing great power relations, challenges of multipolar world order, India's position on sanctions and trade wars.

8. AFSPA Extended in Manipur, Nagaland, and Arunachal Pradesh

Key Highlights

- Extension of AFSPA (Armed Forces (Special Powers) Act, 1958):
 - o The Union Home Ministry extended AFSPA for **six months** in parts of Manipur, Nagaland, and Arunachal Pradesh.
 - o In **Manipur**: AFSPA continues across the state, except 13 police station areas in five valley districts (e.g., Imphal, Lamphel, Thoubal, Bishnupur, Kakching).
 - In Nagaland: Extended in 9 districts and 21 police station areas of five districts.
 - In Arunachal Pradesh: Extended in Tirap,
 Changlang, Longding districts and certain police station areas in Namsai district (bordering Assam).





• Definition – AFSPA:

- o Enacted in 1958, it grants special powers to the armed forces in "disturbed areas".
- Powers include:
 - Use of force, including lethal force, against those violating law/order.
 - Arrest without warrant.
 - Search of premises without warrant.
 - Immunity from prosecution except with prior sanction of Union Government.

• Legal & Constitutional Provisions:

- o Article 355: Union's duty to protect states against internal disturbance.
- o **AFSPA**, **1958** (Section 3): Central Government (or Governor) can declare any area as "disturbed."
- Judicial Scrutiny:
 - Naga People's Movement for Human Rights v. Union of India (1997) Supreme Court upheld AFSPA's constitutionality but mandated safeguards against misuse.
 - Protection under Article 21 (Right to Life) remains applicable.

• Criticism and Human Rights Concerns:

- o Allegations of human rights violations, excessive use of force, and lack of accountability.
- Justice Jeevan Reddy Committee (2005) recommended repeal of AFSPA, suggesting its provisions be incorporated into the Unlawful Activities (Prevention) Act (UAPA).
- o Second Administrative Reforms Commission also recommended its repeal.

• Security Rationale:

- o Government cites the persistence of insurgency, arms smuggling, cross-border terrorism, and law-and-order challenges in the Northeast as reasons for AFSPA's continuation.
- o Partial withdrawal in some areas (e.g., Manipur valley districts) reflects gradual normalization efforts.

Additional Key Points

- "Disturbed Area" Definition: An area declared under AFSPA where the use of armed forces is deemed necessary for maintaining public order.
- Balance Between Security & Rights: Debate continues on the need to ensure operational freedom for security forces while safeguarding citizens' fundamental rights.

Conclusion

The extension of AFSPA highlights the continuing **security challenges in the Northeast**, despite some progress in peace talks and reduction of insurgency. While the Act provides essential tools for counterinsurgency operations, it raises concerns about **democratic accountability**, **human rights**, **and federal balance**. A phased withdrawal, coupled with development and dialogue, remains the long-term solution.



UPSC Relevance

- **GS Paper 2 (Polity & Governance):** Constitutional provisions, Centre-State relations, judicial scrutiny of security laws.
- GS Paper 3 (Internal Security): Counter-insurgency, terrorism, and law-and-order mechanisms.
- **Essay Topics:** Balancing national security with human rights, AFSPA debate in democratic governance.
- Ethics (GS Paper 4): Ethical dilemmas in use of force, civil liberties vs. national interest.

9. MiG-21 Fighter Jets Retired After Six Decades of Service

Key Highlights

• Historic Retirement

- The Indian Air Force (IAF) formally decommissioned the MiG-21 jets at Chandigarh Air Force Station after over 60 years of service.
- The last squadron (No. 23, "Panthers") gave a ceremonial farewell, including the final sortic led by Air Chief Marshal A.P. Singh.

Symbol of India–Russia Defence Ties

- Defence Minister Rajnath Singh described MiG-21 as not just a machine but a symbol of India–Russia strategic partnership.
- MiG-21 was India's first supersonic jet and backbone of the IAF for decades.

Operational Legacy

- o Played a decisive role in:
 - 1971 War (liberation of Bangladesh).
 - Kargil conflict (1999).
 - Balakot air strike (2019).
 - Operation Sindoor (air dominance demonstration).
- Earned the nickname "backbone of IAF" for its long-standing service despite being a 3rdgeneration aircraft.

• Definition – Decommissioning:

o In military terms, it refers to formally retiring a system or equipment from **active operational service**, often marked with a ceremonial handover.

• Concerns and Future Path

- o Retirement reduced IAF's fighter squadron strength to 29, lowest since 1960s.
- o Highlights urgent need to expedite indigenous platforms:





- LCA Tejas (operational).
- Advanced Medium Combat Aircraft (AMCA) (under development).
- Defence Minister emphasized MiG-21's "legacy as DNA" for India's future indigenous fighter aircraft.

Constitutional & Legal Provisions

- Article 51A(d) Fundamental Duty: Citizens to defend the country and render national service when called upon.
- Article 73 & 246 Union List: Defence of India and armed forces fall under Union's exclusive domain.
- **Defence Procurement Policy & Atmanirbhar Bharat Abhiyan:** Legal-policy framework to promote indigenous defence manufacturing.

Additional Key Points

- MiG-21 was inducted in the early 1960s and produced under license by **HAL** (**Hindustan Aeronautics Limited**).
- Though celebrated, it also drew criticism due to frequent accidents, earning the label "flying coffin."
- The farewell ceremony featured aerobatic displays by **Surya Kiran team**, **Tejas**, **and Jaguar fighters**, symbolizing continuity from legacy to future platforms.

Conclusion

The retirement of the MiG-21 closes a golden chapter in India's military aviation. While it symbolizes India's deep defence ties with Russia and IAF's historic victories, it also underlines the **strategic urgency to build indigenous fighter capability**. The transition from MiG-21 to Tejas and AMCA represents India's push for **self-reliance in defence and modernisation of air power**.

UPSC Relevance

- GS Paper 2 (International Relations): India–Russia defence ties, strategic autonomy in defence.
- **GS Paper 3 (Internal Security & Defence):** Modernisation of armed forces, indigenisation of defence production, Atmanirbhar Bharat in defence.
- Essay/GS-1 History of Defence: Evolution of IAF and impact of MiG-21 on India's military history.
- Current Affairs: Defence capability, Make in India, and role of indigenous platforms like Tejas and AMCA.

10. Weak Private Sector Response to India's National R&D Survey

Key Highlights

- Postponement of National Science and Technology Survey
 - Science and Technology Ministry conducts a biennial National Science and Technology Survey to assess the state of R&D in India.

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 Due to low response from private firms, the publication of the latest survey analysis is being postponed.

• Scope of the Survey

- o Covers around **8,000 R&D bodies**, both public and private.
- Measures include:
 - Domestic expenditure on R&D.
 - Share of **Gross Domestic Product (GDP)** devoted to R&D.
 - Number of scientists (including women participation).
 - Patents generated and international comparison of research spending.
- Definition Research and Development (R&D): Systematic work undertaken to increase knowledge and apply it to develop new products or processes.

• Response Statistics

- Government R&D institutions: 73% responded.
- o Private industry bodies: 35% responded.
- Multinational companies: only 9% responded.
- Public sector contributes ~75% of India's
 R&D funding, unlike advanced economies where private sector leads.

Challenges Identified by Industry

- o Lack of clarity in defining **R&D spending parameters** in the questionnaire.
- o Comparison with developed nations may be misleading due to **low GDP per capita**, despite relatively impressive R&D spending.
- o Concerns over confidentiality and data sensitivity by private firms.

• Government Measures

- Extension of survey submission deadline to November 30, 2025.
- o Engagement through workshops (e.g., FICCI) to encourage private sector participation.
- Role of National Science and Technology Management Information System (NSTMIS) in data collation and analysis.

Constitutional & Legal Context

- Article 51A(h) Fundamental Duty: Encourage scientific temper, humanism, and spirit of inquiry and reform.
- Section 8 of the Science and Technology Policy Framework: Empowers government to promote R&D and collect related data.





• Supports **Atmanirbhar Bharat Mission** by highlighting gaps in private sector innovation and promoting **indigenous technological capability**.

Additional Key Points

- India's total R&D expenditure is a **percentage of GDP**, currently lower than OECD nations.
- Highlighted need for **public-private collaboration** to strengthen innovation ecosystem.
- Survey outcomes guide policy decisions, incentives, and funding allocations for science and technology development.

Conclusion

The weak response from the private sector underlines the **need for clearer definitions**, **incentives**, **and trust-building** measures in India's R&D ecosystem. Strengthening private sector participation is critical for **enhancing innovation**, **competitiveness**, **and self-reliance** in science and technology.

UPSC Relevance

- **GS Paper 2 (Governance & Science Policy):** Policies promoting research, public-private partnerships in science and technology.
- **GS Paper 3 (Economy & Science & Technology):** R&D expenditure, innovation ecosystem, technology-driven growth, Atmanirbhar Bharat.
- Essay/GS-1 Themes: Science and technology development, innovation for national progress, public-private collaboration.

11. Pakistan Seeks 'Comprehensive and Composite' Talks with India

Key Highlights

- Pakistan's Proposal for Dialogue
 - Pakistan PM Shehbaz Sharif expressed readiness for composite, comprehensive, and result-oriented talks with India on all outstanding issues.
 - Addressed the UN General Assembly, emphasizing the need for proactive, not provocative, leadership in South Asia.

• Role of U.S. in De-escalation

- Sharif lauded former U.S. President Donald Trump for intervening during the May 2025 conflict between India and Pakistan.
- o Claimed timely U.S. action prevented a full-scale war.
- o U.S. Secretary of State Marco Rubio facilitated agreement for talks at a neutral site.

Background of May 2025 Conflict

- o Triggered by terrorist attacks in **Pahalgam**, **Kashmir**, killing civilians.
- o India responded with targeted strikes on Pakistani military sites.
- o Pakistan denied involvement; Sharif claimed India was repulsed with a "bloody nose".

Current Indo-Pak Relations



- o Relations remain **tense**, with India downplaying U.S. mediation role.
- U.S.-India relations have cooled, partly due to Trump-era tariffs on Indian crude oil imports from Russia.
- o Highlights the interplay of regional diplomacy and global power influence in South Asia.

• Definition – Composite Dialogue:

- o A **multi-issue negotiation framework** addressing security, trade, water, terrorism, and other bilateral concerns between nations.
- o Objective: achieve comprehensive and sustainable peace.

• Constitutional & Legal Context

- Article 51 of the Indian Constitution: Promotion of international peace and security, fostering friendly relations with other states.
- o **Simla Agreement, 1972** and **Lahore Declaration, 1999**: Provide legal-diplomatic framework for India-Pakistan dialogue.
- o UN Charter (1945): Obliges member states to settle disputes peacefully.

Additional Key Points

- Pakistan's initiative underscores continued strategic rivalry and territorial disputes over Kashmir.
- Emphasizes the role of **third-party mediation** in regional conflict management.
- Highlights how external factors (U.S. policies, global trade, sanctions) influence bilateral relations.

Conclusion

Pakistan's call for composite talks reflects an ongoing effort to manage tensions with India through diplomacy. While India remains cautious about third-party mediation, the episode underscores the complexity of South Asian security dynamics and the need for pragmatic conflict-resolution mechanisms.

UPSC Relevance

- **GS Paper 2 (International Relations):** Indo-Pak relations, conflict resolution, role of external powers in South Asia.
- GS Paper 3 (Security): Cross-border terrorism, ceasefire agreements, regional stability.
- Essay Topics: Peace diplomacy, strategic rivalry, regional security architecture in South Asia.
- Current Affairs: Impact of global power interventions on bilateral disputes, evolving U.S.–India–Pakistan dynamics.