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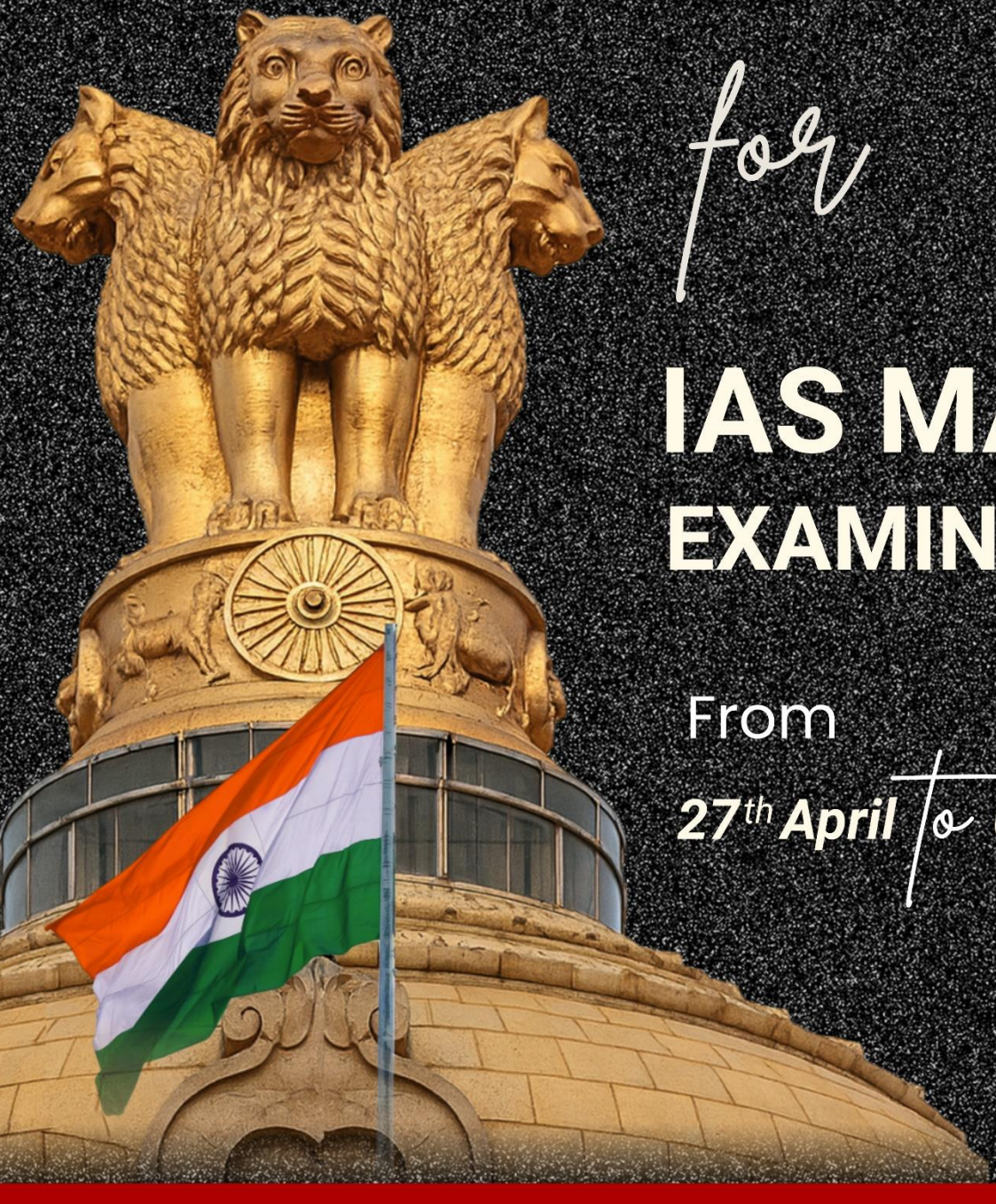

for

IAS MAINS EXAMINATION

From

27th April to 02nd May 2026

INDEX

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GENERAL STUDIES 2

1.1. POLITY & GOVERNANCE

1.1.1. DIGITAL VIGILANTISM

Context:

The Delhi High Court raised concerns over **"digital vigilantism"**. High Court Observed that social media posts can **transcend free speech** and become tools of **public shaming**.

What is Digital Vigilantism?

Digital vigilantism refers to the phenomenon where private citizens use digital tools primarily social media platforms to investigate, identify, and "punish" individuals they perceive as having committed a legal or moral offense.

Unlike traditional vigilantism, which might involve physical confrontation, digital vigilantism operates through the **weaponization of information**.

Key Characteristics of Digital Vigilantism

- **Crowdsourced Action:** It often involves a "pile-on" effect where thousands of strangers share, comment on, and amplify an allegation.
- **Doxxing:** A common tactic where a target's private information (home address, phone number, workplace) is published online to encourage real-world harassment.
- **Public Shaming:** The primary goal is often "social death" destroying a person's reputation, livelihood, or social standing.
- **Bypassing Due Process:** It functions outside the formal legal system, acting as investigator, judge, and executioner simultaneously.

Legal & Constitutional Dimensions of Digital Vigilantism

- **Fundamental Rights: Article 19(1)(a)** grants the right to expression online, while **Article 19(2)** allows the State to impose "reasonable restrictions" to prevent defamation or threats to public order and morality.
- **Right to Reputation:** The Supreme Court has consistently held that an individual's reputation is an inseparable facet of the **Right to Life and Liberty under Article 21**, protecting it from arbitrary social shaming.
- **Principles of Natural Justice:** These ensure a **fair hearing** for the accused and uphold the **presumption of innocence**, both of which are fundamentally bypassed by the immediate "verdict" of a digital mob.
- **Relevant Legal Provisions: IPC Sections 499–500** provide criminal remedies for defamation, while the **IT Act** regulates platform accountability through intermediary liability and mandates the removal of illegal content via takedown norms.

Why Does Digital Vigilantism Emerge?

Digital vigilantism emerges primarily as a **byproduct of institutional failure**. When formal systems do not provide timely or effective solutions, the public "crowdsources" justice.

- **Systemic Apathy:** A perceived lack of faith in the police, judiciary, or corporations to address grievances (e.g., sexual harassment or corruption) swiftly or fairly.
- **The "Accountability Gap":** Social media acts as a bridge where legal mechanisms fail, using public shaming to force an immediate response from otherwise slow-moving organizations.
- **Collective Helplessness:** Individuals feel powerless against systemic issues; digital "mob" action provides a sense of agency and immediate emotional catharsis.
- **Technological Ease:** The anonymity, speed, and reach of the internet allow for low-cost, high-impact "retributive action" that bypasses traditional gatekeepers.
- **Search for Solidarity:** Victims seek validation and support from a digital community when they feel ignored or blamed by formal authorities.

Positive Aspects of Digital Vigilantism

- **Voice to the Voiceless:** It democratizes justice by allowing marginalized individuals to bypass biased legal barriers and reach a global audience directly. This "great equalizer" ensures those without social capital can secure public validation and support.
- **Accountability Mechanism:** Viral exposure creates reputational risks that compel apathetic authorities and corporations to take immediate corrective action. It bridges the gap where formal internal grievance cells or oversight bodies have failed to deliver.
- **Awareness Generation:** Bringing private ordeals into the public square forces societal conversation on systemic issues like workplace harassment and discrimination. This collective visibility often acts as a catalyst for long-term policy changes and legal reforms.
- **Speed:** While legal trials often take years, the "court of public opinion" delivers an almost instantaneous social response. This rapid feedback provides immediate emotional catharsis and can halt ongoing misconduct in real-time.

Challenges of Digital Vigilantism

- **Violation of Natural Justice:** The principle of *"Audi alteram partem"* is often ignored as the internet acts as a one-sided tribunal without allowing the accused to present a defense. This results in a "guilty until proven innocent" environment that undermines the core tenets of a fair legal system.
- **Trial by Media:** Public opinion and viral outrage effectively replace the formal judicial process, delivering "verdicts" before any evidence is legally examined. This creates immense pressure on formal institutions and often leads to pre-judged outcomes in the eyes of society.
- **False Allegations:** The lack of robust verification mechanisms on social media allows unverified or malicious claims to spread unchecked. This creates a significant risk of irreversible reputational damage, where the "correction" rarely reaches the same audience as the original viral lie.

- **Mob Mentality:** Online outrage can rapidly escalate into a "digital lynching," where collective anger transforms into targeted harassment, stalking, and death threats. This aggressive environment prioritizes emotional catharsis over constructive justice or reform.
- **Privacy Violations:** "Doxxing" involves the malicious publication of private information, such as home addresses or personal contacts, to incite real-world harm. Such misuse of personal data puts individuals and their families at physical risk, violating the fundamental right to privacy.
- **Chilling Effect on Free Speech:** The fear of being targeted by a digital mob or a "shaming" campaign can discourage individuals from expressing dissenting or unpopular views. This leads to self-censorship, as the threat of social annihilation silences open dialogue and shrinks the space for healthy public discourse.

Case Study

Airline misconduct case (2022): A male passenger allegedly urinated on a senior citizen in the business class of an Air India flight.

➢ Action was taken **only after social media outrage**.

Way Forward

- **Strengthening Institutional Redress:** Implement robust, time-bound grievance mechanisms (like efficient Internal Complaints Committees or "No-Fly" lists) to close the "justice gap" that drives victims toward social media.
- **Judicial & Police Reforms:** Accelerate formal legal processes and sensitize police to restore public faith in due process, ensuring the judiciary remains the primary arbiter of justice.
- **Digital Literacy & Responsible Influence:** Encourage media and influencers to adopt a "Verification-First" approach, fact-checking allegations before amplification to prevent misinformation and irreversible reputational harm.
- **Enforcement of DPDP Act & RTBF:** Strictly implement the **DPDP Act, 2023**, and the "Right to be Forgotten" to allow removal of false or outdated shaming content, protecting long-term dignity.
- **Balancing Article 19 and 21:** Develop clear guidelines to distinguish between legitimate online activism and digital vigilantism, ensuring free expression does not trample the right to a fair trial.

Conclusion

Digital vigilantism is a symptom of failing institutional redressal. To uphold the rule of law, we must strengthen formal justice systems, ensuring they are swift and empathetic enough to make "mob justice" unnecessary.

Q. *"Digital vigilantism is less a problem of social media excess and more a reflection of institutional failure." Critically examine. 15 Words*

1.2. INTERNATIONAL RELATIONS

1.2.1. UAE EXIT FROM OPEC: IMPLICATIONS FOR GLOBAL OIL POLITICS & INDIA

Context:

The recent announcement that the **United Arab Emirates (UAE)** driven by Abu Dhabi will exit **OPEC and OPEC+** effective **May 1, 2026**, marks a seismic shift in global energy geopolitics.

Reasons Behind UAE's Exit from OPEC

- **Monetizing 'Peak Oil':** With global demand expected to plateau, Abu Dhabi aims to extract and sell its **100 billion barrels** of reserves now to maximize revenue before the transition to EVs and renewables devalues hydrocarbons.
- **Funding 'Vision 2031':** Surplus oil revenue is critical to financing the UAE's transition into a **knowledge-based economy**, focusing on technology, tourism, and non-oil logistics.
- **Idle Capacity & ROI:** Having invested **$150 billion** to reach a **5 million barrels per day (mbpd)** capacity, the UAE views OPEC-mandated production cuts as a waste of infrastructure and a loss of potential profit.
- **Strategic Autonomy from Saudi Arabia:** The exit marks a break from Saudi-centric policy, allowing the UAE to compete freely against Riyadh's **'Project HQ'** (requiring multinational firms to move their regional bases to Riyadh) and assert its own regional leadership.
- **Preference for Bilateralism:** By bypassing OPEC's collective bargaining, the UAE can now offer **direct discounts and long-term supply guarantees** to key partners like India in exchange for strategic investments.
- **Green Energy Rebranding:** Leaving the "oil cartel" helps the UAE pivot its image toward a **diversified energy superpower**, prioritizing Green Hydrogen and Nuclear power while distancing itself from OPEC's climate-action resistance.

Implications for Global Energy Order

- **Weakening of the Cartel:** The loss of the UAE's ~14% production capacity diminishes OPEC's ability to manipulate prices, shifting the global market from a **Cartel-led** to a **Competitive-market** model.
- **Volume over Price:** Abu Dhabi's shift to high-volume production challenges the Saudi-led strategy of artificial price inflation, triggering a "race to monetize" reserves before the **Peak Oil** era.
- **Geopolitical Fragmentation:** The move signals the breakdown of **OPEC+ consensus**, paving the way for a fragmented energy landscape dominated by **bilateral strategic partnerships** (e.g., UAE–India).
- **Energy Transition Subsidy:** The UAE is using maximized oil revenues to fund its pivot into a **Renewable Energy Superpower**, setting a global precedent for using hydrocarbons to subsidize green hydrogen and nuclear futures.

- **Market Pressure on Rivals:** Increased independent supply puts downward pressure on global prices, benefiting importers while stressing the fiscal stability of other major producers like the **USA, Brazil, and Guyana**.

Significance for India

1. **Economic Stability & Lower Import Bill**
   - **Fiscal Relief:** Every $1 drop in the price of crude oil reduces India's import bill by approximately **₹10,000 crore**. A UAE producing at full capacity (5 mbpd) puts downward pressure on global prices, helping India manage its **Current Account Deficit (CAD)**.
   - **Inflation Control:** Lower fuel costs have a cooling effect on logistics and food prices, assisting the RBI in maintaining its **CPI inflation** targets.
2. **Enhanced Energy Security**
   - **Diversification:** India can now negotiate **direct, long-term supply contracts** with the UAE without the constraints of OPEC's production quotas. This reduces dependence on the more volatile "OPEC+ consensus."
   - **Proximity Advantage:** The UAE is geographically closer to India than Russia or the US. This ensures lower freight costs and faster turnaround times for Indian refineries.
3. **Strategic Petroleum Reserves (SPR)**
   - India and the UAE already cooperate through **Abu Dhabi National Oil Company** storing crude in Mangaluru's strategic reserves, strengthening energy security. Post-OPEC exit, the UAE can expand storage in India, ensuring **assured supply during global disruptions and geopolitical crises**.
4. **Strengthening the CEPA Framework**
   - The **Comprehensive Economic Partnership Agreement (CEPA)** signed in 2022 is the bedrock of India-UAE ties. India can offer the UAE guaranteed demand in exchange for the UAE investing oil revenues back into Indian infrastructure and the **India-Middle East-Europe Economic Corridor (IMEC)**.
5. **Support for "Refining Hub" Ambitions**
   - India aims to expand its refining capacity to **450 mmtpa** by 2030. An independent UAE can act as a steady supplier of specific crude grades required for Indian refineries, supporting India's goal of becoming a global exporter of refined petroleum products and petrochemicals.
6. **Transition to Green Energy Cooperation**
   - Both United Arab Emirates and India are aligning oil monetisation with major investments in green hydrogen and solar energy. This complements India's **National Green Hydrogen Mission**, enabling joint R&D and clean energy partnerships beyond the "Peak Oil" era.

Potential Challenges for India

- **Market Volatility:** The decline of OPEC's stabilizing influence could lead to **extreme price swings**, making it difficult for India to maintain predictable budgetary allocations and fiscal planning.

- **Geopolitical Tightrope:** India must carefully balance its deepening strategic ties with an independent UAE without alienating **Saudi Arabia**, which remains a critical energy partner and leader of the remaining OPEC bloc.
- **Asset Stranding Risk:** A sudden surge in cheap oil from the UAE might slow India's domestic momentum for **Renewable Energy (RE) adoption**, potentially delaying the long-term goal of Net Zero by 2070.
- **Regional Instability:** If the exit triggers a "price war" or deepens the rift between Gulf monarchies, it could lead to **regional friction** in the Middle East, threatening the security of the 9 million-strong Indian diaspora.
- **Supply Chain Vulnerability:** Increased reliance on bilateral deals over a regulated cartel system means India's energy security becomes more sensitive to the **domestic policy shifts** or political stability of a single nation (the UAE).

Way Forward

- **Deepening Bilateral Energy Diplomacy:** India should leverage the **CEPA framework** to move beyond a buyer-seller relationship, securing long-term, fixed-price contracts and expanding joint ventures in **upstream exploration** within the UAE.
- **Expansion of Strategic Reserves:** Capitalize on the UAE's production flexibility to fill India's **Phase II Strategic Petroleum Reserves (SPR)** at Padur and Chandikhole, ensuring a robust buffer against global supply shocks or maritime disruptions.
- **Balancing West Asian Ties:** Adopt a **"de-hyphenated" diplomatic approach** to maintain strong ties with both the UAE and Saudi Arabia, ensuring that energy competition between the two does not adversely affect India's regional security interests.
- **Integrated Energy Transition:** Use the period of potentially lower oil prices to redirect fiscal savings into the **National Green Hydrogen Mission**. Collaborating with the UAE on carbon capture and storage (CCS) technology can help decarbonize India's heavy industries.
- **Strengthening the IMEC Route:** Accelerate the development of the **India-Middle East-Europe Economic Corridor (IMEC)** to integrate energy grids and pipelines, turning the UAE's "Peak Oil" exit into a permanent logistical and energy highway for India.
- **Refining Hub Optimization:** Modernize Indian refineries to handle the specific crude grades that the UAE will now market independently, positioning India as the primary **downstream processing hub** for the UAE's expanded output.

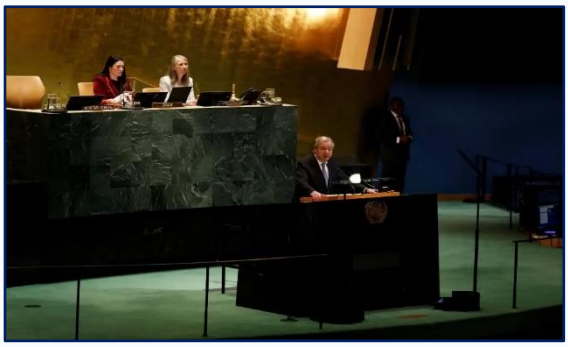
Conclusion

The UAE's OPEC exit marks a shift toward market-driven energy realism. For India, this offers a strategic opportunity to secure affordable crude, strengthen bilateral ties, and leverage UAE investments to fuel its green transition.

Q. *In the context of the United Arab Emirates exit from Organization of the Petroleum Exporting Countries, examine its implications for India's energy security and India–UAE strategic partnership. (10 marks)*

1.2.2. THE UN SECRETARY-GENERAL (UNSG)

Context:



The UNSG is the highest administrative officer of the United Nations, often described as the "world's most impossible job." As the UN faces its 80th year, the role has evolved from a mere manager to a vital global mediator.

Constitutional and Legal Framework

- **Article 97 (UN Charter):** Defines the UNSG as the "Chief Administrative Officer" of the Organization, appointed by the General Assembly upon the recommendation of the Security Council.
- **Article 99:** A unique political power that allows the UNSG to bring to the Security Council's attention any matter which, in their opinion, may threaten the maintenance of international peace and security.

The Appointment Process of the UN Secretary-General

- **Selection:** Appointed by the UNGA upon the recommendation of the UNSC.
- **The Veto Power:** Since the UNSC must recommend a candidate, any of the **P5 members** can veto a nomination. This traditionally leads to "compromise candidates" from middle powers.
- **Customs:**
  - **Regional Rotation:** The post typically rotates among five regional groups. The current 2026-27 cycle is looking toward **Latin America and the Caribbean (LAC)**.
  - **Term:** Usually a 5-year term, renewable once.
- **Gender Gap:** To date, no woman has served as UNSG, making gender parity a central theme in the 2026 election.

Role of the UN Secretary-General

1. **Administrative Roles (The "CEO" functions)**
   - **Head of the Secretariat:** Oversees the day-to-day operations of the UN's executive arm, managing a global staff of over 36,000.
   - **Budgetary Management:** Responsible for preparing the UN budget and ensuring the efficient allocation of resources across various programs and funds.
   - **Personnel Appointments:** Exercises the power to appoint senior UN officials (Under-Secretaries-General) and staff, ensuring high standards of efficiency and geographical diversity (**Article 101**).
   - **Reporting:** Mandated under **Article 98** to submit an annual report to the General Assembly on the work of the Organization, assessing past actions and setting future priorities.
2. **Political & Diplomatic Roles (The "Diplomat" functions)**
   - **The "Good Offices":** The UNSG uses their independence and impartiality to act as a neutral mediator in international disputes. This includes "Good Offices" (preventive diplomacy) to prevent conflicts from escalating.

- **Article 99 Powers:** This is the most significant political authority. It allows the UNSG to proactively bring to the Security Council's attention any matter that, in their opinion, may threaten international peace and security.
- **Appointment of Envoys:** The authority to appoint "Special Representatives" or "Personal Envoys" to lead peace negotiations or oversee political missions in conflict zones.
- **Global Advocacy:** Acts as the "World's Conscience," speaking out on critical global issues such as climate change, pandemics, and human rights violations.

3. **Institutional Roles (The "Civil Servant" functions)**
    - **Inter-Organizational Coordination:** Serves as the Chair of the **UN System Chief Executives Board for Coordination (CEB)**, ensuring synergy between all UN agencies (WHO, IMF, World Bank, etc.).
    - **Participation in Organs:** Must attend and act in a secretarial capacity for the General Assembly, Security Council, ECOSOC, and the Trusteeship Council (**Article 98**).
    - **Implementation of Mandates:** Executes the decisions and resolutions passed by the principal organs of the UN.

Key Issues in the Current Election

- **Geopolitical Paralysis:** Escalating acrimony among the **P5 (Permanent Five)** over Ukraine, Gaza, and Sudan has led to frequent vetoes, rendering the Security Council ineffective in high-stakes security matters.
- **Financial Liquidity Crisis:** Persistent non-payment or delays in "assessed contributions" by major member states have triggered an unprecedented financial strain, forcing austerity and hindering field operations.
- **Institutional Legitimacy:** A widening trust deficit between the **Global North and Global South** has intensified demands for "Reformed Multilateralism," specifically regarding UNSC expansion and gender-balanced leadership.
- **SDG Stagnation:** With only **18% of targets on track**, the UNSG must bridge massive funding gaps and combat "SDG fatigue" to meet the 2030 Agenda goals.
- **Erosion of Peacekeeping:** The forced withdrawal of missions (e.g., Mali) and failure to prevent major wars necessitate a "return to basics" through **Article 99** and rejuvenated preventive diplomacy.
- **Governance of "Global Commons":** Rapid advancements in **AI, Bio-tech, and Space technology** outpace international law. The UNSG must lead the creation of global norms to prevent these from becoming new tools of warfare or inequality.

India's Stand on "Reformed Multilateralism"

1. **Core Pillars of India's Demand**
    - **Expansion of the UNSC:** India seeks permanent membership in an expanded **UN Security Council (UNSC)**. It opposes a "two-tier" system (permanent seats without veto) and insists on the same powers as current P5 members to ensure equity.

- **Voice of the Global South:** As a self-proclaimed leader of the **Global South**, India demands that developing nations from Africa, Asia, and Latin America have a decisive say in global decision-making.
- **Comprehensive Reforms:** Beyond the UN, India advocates for the reform of **International Financial Institutions (IFIs)** like the IMF and World Bank to bridge the $4 trillion SDG financing gap.

2. Strategic Flexibility on the Veto

While India believes the veto is essential for permanent membership, it has shown strategic flexibility in 2026 by supporting the **G4 proposal** (India, Brazil, Germany, Japan):

- **Veto Deferral:** Proposing to defer the exercise of veto power for new permanent members for a review period (e.g., **15 years**) to break the current negotiation deadlock.

Way Forward

- **Enhancing Political Legitimacy:** Move toward **"Reformed Multilateralism"** by expanding the UNSC to include permanent representation for the Global South (Africa, Latin America, and India), ensuring the UN reflects current geopolitical realities.
- **Financial Sustainability:** Implement a more robust mechanism for the collection of **assessed contributions** and diversify funding sources to shield the Secretariat from the "liquidity crisis" and political leverage of major donors.
- **Activating Article 99:** The next UNSG must transition from a "technocratic manager" to an **"activist mediator,"** proactively using Article 99 powers to force the Security Council to address neglected or escalating conflicts.
- **Prioritizing Preventive Diplomacy:** Shift the UN's focus and resources from reactive peacekeeping to **proactive conflict prevention** and "behind-the-scenes" parley to mitigate wars before they trigger humanitarian catastrophes.
- **Governance of New Frontiers:** Establish universal, binding norms for **Emerging Global Commons**—specifically AI ethics, space security, and deep-tech—to prevent technological disparities from fueling future international discord.

Conclusion

The next Secretary-General must transform the UN from a paralyzed bureaucracy into a resilient, inclusive mediator. Success depends on balancing P5 interests while championing Global South priorities to restore institutional legitimacy and global peace.

Q. *"Discuss the significance of the election of the United Nations Secretary-General in the context of the ongoing crisis of multilateralism. Examine the key challenges faced by the UN and suggest reforms to enhance its effectiveness." (15 Marks)*

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2.1. ECONOMY

2.1.1. RUPEE DEPRECIATION AND ITS IMPACT ON INVESTMENTS

Context:

Rupee Depreciation refers to the decrease in the value of the Indian Rupee (INR) relative to major foreign currencies (primarily the USD) in a market-determined exchange rate system. In 2026, the Rupee has faced significant volatility, recently breaching the **₹94/$1** mark due to global geopolitical tensions and rising crude oil prices.

Reasons for Rupee Depreciation

1. **Global (Exogenous) Factors**
   - **Geopolitical Conflict:** Tensions in West Asia (Israel-USA vs. Iran) drive investors toward **"Safe-Haven" assets** like the USD and Gold, abandoning emerging market currencies.
   - **Crude Oil Surge:** Prices exceeding **$115/barrel** increase India's import bill, creating a massive demand for Dollars.
   - **Monetary Divergence:** While the RBI maintains a pause (**Repo at 5.25%**), higher interest rates in the US attract capital away from India toward the US Federal Reserve.
   - **Dollar Strength:** A rising **Dollar Index (DXY)** naturally weakens the Rupee relative to the global "anchor" currency.
2. **Domestic (Endogenous) Factors**
   - **FPI Outflows:** Sustained selling by foreign investors in Indian equity and debt markets creates a supply-demand mismatch.
   - **Widening CAD:** A high merchandise trade deficit (energy/electronics) outweighs service export gains, putting structural pressure on the Rupee.
   - **Inflation Differentials:** Higher domestic inflation compared to trading partners lowers the Rupee's value (based on **Purchasing Power Parity**).
   - **Debt Servicing:** Increased corporate demand for Dollars to repay **External Commercial Borrowings (ECBs)** intensifies spot market pressure.
3. **Market Sentiment & Technicals**
   - **REER Correction:** The Rupee's **Real Effective Exchange Rate** falling below its average (~92.72) indicates it is becoming "undervalued" to boost export competitiveness.
   - **Speculative Behavior:** "Leads and Lags" in trade—where importers buy USD early and exporters delay repatriation—accelerate the currency's slide.

Impact of Rupee Depreciation

The relationship between currency value and foreign capital is cyclical and sensitive to "macro-economic signaling."

1. **Impact on Foreign Corporate Investments**
   - **Foreign Portfolio Investment (FPI):**
   - **Capital Outflow:** Depreciation often triggers "flight to safety." As the rupee weakens, the real returns for foreign investors (when converted back to dollars) diminish. This leads to mass selling in Indian equity and debt markets.
   - **Valuation Risk:** Continuous depreciation signals economic instability, causing FPIs to pause fresh allocations.
   - **Foreign Direct Investment (FDI):**
   - **Cost Advantage:** A weaker rupee makes Indian assets (land, labor, and local machinery) cheaper for foreign companies. This can incentivize "Greenfield" investments in manufacturing (e.g., PLI scheme-related projects).
   - **Long-term Uncertainty:** While entry is cheaper, persistent volatility makes future profit repatriation unpredictable, which may deter risk-averse long-term investors.
2. **Impact on Domestic Corporate Investments**
   - **External Commercial Borrowings (ECBs):**
   - Indian firms often borrow in dollars due to lower interest rates abroad. Depreciation increases the **debt-servicing burden**, as more rupees are needed to repay the same dollar debt. This "balance sheet stress" reduces the capital available for fresh internal investments.
   - **Input Cost Inflation:**
   - Industries dependent on imported raw materials (e.g., Electronics, Fertilizers, and Chemicals) face higher production costs. This "margin squeeze" often leads to a slowdown in **Private Capital Expenditure (CapEx)**.
   - **Export-Oriented Sectors:**
   - Sectors like **IT services, Textiles, and Pharmaceuticals** benefit. Their dollar earnings translate into higher rupee revenues, providing them with more "investible surplus" to expand operations.
3. **Impact on Retail/Individual Investments**
   - **Equity Markets:** Generally, a falling rupee is viewed negatively by the stock market due to the high correlation with FPI outflows. However, "Export-Heavy" stocks may outperform.
   - **Gold:** Since India imports most of its gold, a weaker rupee makes gold more expensive domestically. This often leads to a rise in the value of existing gold investments (Gold ETFs, Sovereign Gold Bonds).
   - **International Mutual Funds:** Investors in US-based funds or global indices gain from "currency play." Even if the underlying stock price remains flat, the depreciation of the rupee increases the NAV (Net Asset Value) of these funds in rupee terms.

Policy Measures to Address the Rupee Depreciation

1. **RBI Measures (Monetary & Regulatory)**
   - **Forex Market Intervention:** The RBI actively sells Dollars from its **Foreign Exchange Reserves** to curb excessive volatility and prevent a "one-way" slide of the Rupee.

- **Derivative Market Curbs:** Imposed a **$100 million cap** on banks' daily net open currency positions and restricted **Non-Deliverable Forwards (NDFs)** to eliminate speculative "shorting" of the Rupee.
- **Trade Credit Extension:** Prolonged the enhanced **export credit tenor to 450 days** (until June 30, 2026) to support exporters facing disruptions due to West Asia geopolitical tensions.
- **Incentivizing Inflows:** Easing norms for **External Commercial Borrowings (ECBs)** and encouraging FPIs by deferring revised capital market exposure guidelines to maintain liquidity.

2. **Government Measures (Fiscal & Structural)**

- **Import Rationalization:** Promoting **Import Substitution** in strategic sectors (Semiconductors, Electronics, Defense) through **ISM 2.0** and expanded **PLI schemes** to reduce Dollar demand.
- **Energy Security:** Mandating State-run oil marketing companies to reduce "spot" Dollar purchases, instead using **special credit facilities** and increasing **Ethanol blending** to cut crude oil bills.
- **Rupee Internationalization:** Facilitating **International Trade Settlement in INR** (using Vostro accounts) with bilateral partners like the UAE and Russia to bypass Dollar dependency.
- **Fiscal Discipline:** Focusing on the **Current Account Deficit (CAD)** management by incentivizing high-value exports (e.g., Biopharma SHAKTI) and rationalizing non-essential luxury imports.

Way Forward

1. **Short-Term: Tactical Stability**

- **Calibrated Intervention:** The RBI should continue "smoothing" the Rupee's decline rather than defending a specific level, preserving **Forex Reserves** for extreme shocks while preventing panic-driven speculative attacks.
- **Tighter Derivative Oversight:** Strengthening the 2026 restrictions on **Non-Deliverable Forwards (NDF)** to ensure that the offshore market does not dictate onshore Rupee pricing.
- **Special Swap Windows:** Providing a dedicated FX swap window for **Oil Market Companies (OMCs)** to source Dollars directly from the RBI, reducing sudden demand pressure on the spot market.

2. **Medium-Term: Strengthening the External Sector**

- **Rupee Internationalization:** Aggressively operationalizing **Special Rupee Vostro Accounts (SRVA)** with more trading partners to reduce the "hard currency" (Dollar) requirement for trade invoicing.
- **Diversifying Inflows:** Shifting focus from volatile FPIs (hot money) to **"Sticky" Foreign Direct Investment (FDI)** by improving regulatory predictability and completing the implementation of the **Four Labour Codes**.
- **Export Competitiveness:** Leveraging the slightly "undervalued" Rupee to boost labor-intensive exports (Textiles, Leather, and MSME products) to offset the rising import bill.

3. **Long-Term: Structural Resilience**
    - **Energy Decoupling:** Accelerating the **National Green Hydrogen Mission** and Ethanol blending targets to reduce the "Crude Oil dependence" which remains the primary trigger for Rupee volatility.
    - **Import Substitution 2.0:** Moving beyond assembly to "Deep Manufacturing" in high-value imports like **Semiconductors** and **Active Pharmaceutical Ingredients (APIs)** to structurally narrow the Trade Deficit.
    - **Deepening Local Bond Markets:** Encouraging the inclusion of Indian Government Bonds in more global indices (like Bloomberg/JP Morgan) to attract steady, long-term capital that is less sensitive to short-term currency fluctuations.

Conclusion

The Rupee's depreciation, driven by global volatility, necessitates a shift from tactical intervention to structural resilience. By reducing energy imports, internationalizing the Rupee, and boosting export competitiveness, India can ensure currency stability and achieve its long-term goal of strategic economic autonomy.

Q. *Currency depreciation acts as a double-edged sword for an emerging economy. Discuss how a weakening Rupee influences India's trade balance, and suggest structural measures beyond RBI intervention to ensure long-term exchange rate stability. (15 Marks)*

2.2. SCIENCE & TECHNOLOGY

2.2.1. INDIA'S SPACE DIPLOMACY

Context:

India's space programme, led by Indian Space Research Organisation, has evolved from self-reliance to **strategic international cooperation**. Space diplomacy today serves **scientific, economic, geopolitical, and security objectives**.

Evolution of India's Space Cooperation

Phase I: Technological Foundations (1960s–1970s)

- **The "Seeker" Era:** Focused on infrastructure building via international aid.
- **Key Milestones:** Launch of the US-made **Nike-Apache** rocket (1963); building **Aryabhata** (indigenous satellite) launched by the **USSR** (1975).
- **Social Impact:** The **SITE** program used a **US satellite** to demonstrate space technology's utility in rural education.

Phase II: Growth & Geopolitical Friction (1980s–1990s)

- **Propulsion Gains:** Successfully adapted **French Viking technology** to create the **Vikas Engine**.

- **The Cryogenic Crisis:** US sanctions under **MTCR** blocked a Russian engine deal, forcing India toward **indigenization** and self-reliance in heavy-lift technology.
- **Commercial Reliance:** Used **French Arianespace** for launching heavy INSAT satellites.

Phase III: Global Service Provider (2000s–2019)

- **Reliability:** The **PSLV** became a global workhorse, famously launching **104 satellites** in one mission (2017).
- **Scientific Synergy: Chandrayaan-1** carried foreign payloads (NASA/ESA) to discover water on the Moon; **Mangalyaan** utilized NASA's Deep Space Network for tracking.
- **Soft Power:** Gifted the **South Asia Satellite** to SAARC nations, establishing "Space Diplomacy."

Phase IV: Strategic Partner & Commercial Actor (2020–2026)

- **Collaborative Design:** Transitioned from "buyer" to "co-developer" (e.g., **NISAR** with NASA and **LUPEX** with Japan).
- **Human Spaceflight: Gaganyaan** supported by Russian training and French/US space medicine; the **Axiom-4** mission (2025) marks a joint Indo-US ISS flight.
- **Institutional Reform:** New entities like **NSIL** and **IN-SPACe** have opened the sector to **100% FDI** and private global players like OneWeb.

Pillars of India's Space Diplomacy

1. **Net Provider of Space Services (Global South Leadership)**
   - **Capacity Building:** Sharing "frugal innovation" with developing nations through programs like **UNNATI** (nanosatellite training).
   - **Space for Development:** Utilizing satellites for disaster management (**Sentinel Asia**), telemedicine, and weather forecasting for the Global South.
   - **Regional Connectivity:** The **South Asia Satellite (GSAT-9)** serves as a diplomatic "gift" to neighboring countries, enhancing communication and regional goodwill.
2. **Strategic Autonomy & Parity**
   - **Balanced Alliances:** Engaging in high-end co-development with the West (e.g., **Artemis Accords** and **NISAR** with NASA) while maintaining historical ties with Russia and emerging blocs like **BRICS**.
   - **Dual-Use Capabilities:** Leveraging space for **Maritime Domain Awareness** and surveillance to secure the Indo-Pacific.
3. **Commercial Expansion & Governance**
   - **Market Share:** Using **NSIL** and **IN-SPACe** to capture a larger slice of the $400B+ global space economy through low-cost, reliable launch services (**PSLV/SSLV**).
   - **Rule-Shaping:** Transitioning from a "rule-taker" to a "rule-maker" in global space governance, advocating for equitable access and sustainable use of outer space.
4. **Sustainability & Safety (Space Ethics)**
   - **Space Situational Awareness (SSA):** Leading initiatives like **Project NETRA** to track space debris, ensuring the long-term sustainability of the orbital environment.

- **Global Responsibility:** Adhering to and promoting international norms (e.g., Liability Convention) to prevent the weaponization of space.

Key Bilateral and Multilateral Engagements

1. **Bilateral Engagements**
   - **United States (NASA):**
   - **NISAR:** A joint Earth-observation mission (launching 2026) to monitor global environmental changes.
   - **Artemis Accords:** India's participation in the US-led lunar exploration program.
   - **Axiom-4:** Collaborative mission to send an Indian astronaut to the International Space Station (ISS).
   - **France (CNES):**
   - **TRISHNA:** A joint thermal infrared imaging mission for climate and water management.
   - **Space Medicine:** Cooperation on life-support systems for the **Gaganyaan** mission.
   - **Japan (JAXA):**
   - **LUPEX:** The Lunar Polar Exploration mission, a joint rover-lander project to explore the Moon's South Pole.
   - **Russia (Roscosmos):**
   - Historical partner in **Gaganyaan** (astronaut training and flight suits).
2. **Multilateral Engagements**
   - **BRICS Space Council:**
   - Development of a **Remote Sensing Satellite Constellation** for shared data on disaster management and climate monitoring.
   - **The Global South & SAARC:**
   - **South Asia Satellite:** Provided free communication services to neighboring nations.
   - **UNNATI Program:** ISRO's training program for officials from developing nations in nanosatellite assembly.
   - **QUAD (Space Working Group):**
   - Focus on **Maritime Domain Awareness (MDA)** and climate monitoring in the Indo-Pacific.
   - **International Charter on Space and Major Disasters:**
   - India provides high-resolution satellite data to help the global community respond to natural calamities.

Strategic Significance of India's Space Cooperation

1. **Strategic Autonomy:** Balancing high-tech partnerships with the **US (Artemis Accords)** alongside deep ties with **Russia and France** prevents bloc dependency and maintains India's independent geopolitical stance.
2. **National Security Multiplier:** Joint initiatives like **NISAR** and **QUAD** cooperation enhance **Maritime Domain Awareness** and border surveillance, providing critical data to track "dark shipping" and monitor sensitive frontiers.

3. **Global South Leadership:** Using space as "Soft Power" through the **South Asia Satellite** and **UNNATI** program, India offers a "frugal" alternative to China's Space Silk Road, cementing its role as a leader for developing nations.
4. **Commercial & FDI Growth:** International partnerships with firms like **OneWeb** and **Axiom**, backed by **100% FDI** policies, aim to scale India's global market share from **2% to 10% by 2033**, turning the country into a global launch hub.
5. **Governance Rule-Shaper:** Active roles in **COPUOS** and the **Artemis Accords** have transitioned India from a "rule-taker" to a "rule-shaper" in global space ethics, debris management, and resource sustainability.

Challenges of India's Space Cooperation

1. **Geopolitical & Strategic Risks**
   - **The "Technology Denied" Legacy:** Despite signing the **Artemis Accords**, high-end technology transfer (e.g., radiation-hardened chips, advanced semiconductors) remains restricted by Western export control regimes and the **MTCR**.
   - **Strategic Balancing Act:** Deepening ties with the **USA** risks alienating traditional partners like **Russia** (crucial for Gaganyaan) or being caught in the "Cold War" dynamics between the US and **China**.
   - **Regional Competition:** China's **"Space Silk Road"** offers massive infrastructure funding to developing nations, challenging India's "frugal" diplomacy in the Global South.
2. **Commercial & Economic Constraints**
   - **Market Share Gap:** Despite being a reliable launcher, India holds only **~2%** of the $540B global space economy. Over-reliance on the aging **PSLV** workhorse and slow production of the **SSLV** have allowed SpaceX to dominate the small-satellite market.
   - **FDI & Private Participation:** While **100% FDI** is now permitted, global investors remain cautious due to a lack of a clear, codified **National Space Act** to address liability and insurance for private missions.
3. **Sustainability & Governance Issues**
   - **Orbital Congestion:** The rise of mega-constellations (like Starlink) has increased the risk of collisions. India's **Project NETRA** and **IS4OM** are evolving but still lag behind the US and Russia in comprehensive **Space Situational Awareness (SSA)**.
   - **Legal Lacunae:** There is no international consensus on **Space Resource Mining** or "Orbital Squatting." As India plans its own station (**BAS**), it faces a "first-come, first-served" disadvantage in prime Low Earth Orbits (LEO).
4. **Technical & Infrastructure Bottlenecks**
   - **Single Spaceport Dependency:** Almost all international launches rely on **Sriharikota**. While a second port at **Kulasekarapattinam** is under development (2025-26), the delay impacts India's ability to provide rapid, high-frequency launch services.
   - **Component Dependency:** "Atmanirbhar Bharat" notwithstanding, India remains twelve times more dependent on **imports** for high-grade space electronics than it earns from space exports.

5. **Ethical & Humanitarian Dilemmas**
    - **Resource Prioritization:** Critics often question high-expenditure international missions (like Mangalyaan-2 or Shukrayaan) against domestic socio-economic needs.
    - **The "Kessler Syndrome":** Increased international launches from Indian soil contribute to the global debris problem, necessitating a difficult balance between commercial profit and the "Long-term Sustainability" (LTS) of outer space.

Way Forward

1. **Strengthening the Legal & Regulatory Pillar**
    - **Codifying the Space Act:** The immediate priority is passing a comprehensive **National Space Act** to provide legal certainty on liability, insurance, and intellectual property. This will boost investor confidence and facilitate deeper integration with global private giants.
    - **Streamlining IN-SPACe:** Transitioning **IN-SPACe** into a more robust "single-window" clearing house to reduce the gestation period for international joint ventures and satellite constellations.
2. **Transitioning to "Industrial Cooperation"**
    - **Co-Production over Procurement:** Shifting from just buying technology to co-manufacturing. Initiatives like the **iCET (Indo-US)** should be used to establish semiconductor plants in India specifically for radiation-hardened, space-grade chips.
    - **Global Supply Chain Integration:** Encouraging Indian MSMEs to become Tier-1 and Tier-2 suppliers for global entities like Boeing, Airbus, and SpaceX, moving India from a "launch destination" to a "manufacturing hub."
3. **Expanding the "Space Diplomacy" Horizon**
    - **Space for the "Viksit" Global South:** Beyond just gifting satellites, India should lead a **"Space-G20"** secretariat to standardize disaster-response protocols and climate-tracking data for developing nations.
    - **Trilateral Alliances:** Exploring trilateral partnerships (e.g., **India-France-UAE** or **India-Japan-Australia**) to secure the Indo-Pacific through shared Maritime Domain Awareness (MDA) and satellite-based secure communications.
4. **Leadership in Space Sustainability (LTS)**
    - **Rule-Making in SSA:** India should lead the development of international norms for **Space Situational Awareness (SSA)**. By championing "Zero Debris" missions and active debris removal (ADR) technologies, India can position itself as a responsible custodian of the "Global Commons" in space.
    - **Managing Orbital Crowding:** Taking a firm stand in the UN and **COPUOS** against "orbital squatting" by mega-constellations to ensure equitable access to Low Earth Orbit (LEO) for all nations.

5. Future-Proofing through R&D

- **Quantum & Deep-Tech:** Prioritizing international collaboration in **Quantum Key Distribution (QKD)** and high-thrust electric propulsion. These are the "frontier technologies" that will define space superiority in the next decade.
- **Bharatiya Antariksha Station (BAS):** Utilizing the experience from the **Axiom-4 mission (2025-26)** to accelerate the modular development of India's own space station, envisioned for 2035.

Conclusion

India's space cooperation has transitioned from dependency to strategic parity. By fostering global partnerships, India is evolving into a "Net Provider" of space services, cementing its leadership in the quest for a **Viksit Bharat**.

Q. *"India's space cooperation has evolved from a developmental necessity to a strategic instrument of foreign policy." Discuss in the context of recent global partnerships. (15 Marks)*

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