



MONTHLY CURRENT AFFAIRS MAGAZINE



October 2025 (MAINS)

YOUR SIMPLIFIED GUIDE TO CURRENT AFFAIRS



A Note to Our Readers

Dear Readers,

Welcome to **Simply Current Affairs Magazine** - your **trusted companion** in the ever-evolving journey of UPSC preparation. With UPSC preparation becoming more dynamic each year, the need for a **clear, exam-focused resource** is greater than ever. Our magazine has been designed with this very purpose - to **give you clarity from complexity**.

Each month, we present **two focused editions** - one dedicated **exclusively to Prelims** and the other exclusively to Mains. The content for the Mains Magazine is carefully curated from authentic and diverse sources such as **The Hindu, Indian Express, Business Standard, Economic Times, Economic and Political Weekly, Down To Earth, Press Information Bureau & lot more** ensuring coverage that is both relevant and reliable.

What makes this magazine stand apart is the **integration of Previous Year Questions (PYQs)** and model questions for each topic for your practice.

Our goal is simple - to provide a **concise, self-preparation-friendly comprehensive resource** that empowers aspirants, particularly those preparing independently, to **approach current affairs with confidence and clarity**.

We hope this magazine serves you well in your preparation journey.

With best wishes,
Team Simply Current Affairs



Mr. Guna Mathivanan,
Founder-Director, Simply Current Affairs

 Click to visit Website



www.simplycurrentaffairs.com

Follow Us on
 YouTube



Follow Us on
 Instagram



OUR COURSES

 **SIMPLY Current Affairs**
By Guna Mathivanan

 **STARTS ON
30-11-2025**

75 X 75
Batch-2
A COMPREHENSIVE
CURRENT AFFAIRS COURSE

For UPSC CSE PRELIMS 2026

Key Features

- 1000+ crucial current affairs topics from May 2025 to April 2026 in 75 days.
- Practice Multiple Choice Questions (MCQs) after every class
- Previous Year Question linkage with Current Affairs Topics
- Exclusive coverage of Economic Survey 2025-26 and Budget 2026
- Static linkage with current affairs
- Mapping Related Areas and Places in the News in every class
- Get your doubts cleared directly with Mr. Guna Mathivanan

Mode : Online **Fees : ₹ 5,250/-**

 To Enroll Visit Website
www.simplycurrentaffairs.com

 For Free Learning,
Visit Our Telegram Channel
<https://t.me/GUNAMATHIVANAN>

Mr. Guna Mathivanan,
Founder-Director, Simply Current Affairs

 **SIMPLY Current Affairs**
By Guna Mathivanan

 **LIMITED SEATS**
Enroll Now!

 **ECONOMY**
For UPSC PRELIMS 2026

Course Highlights

- Complete Static Economy Syllabus covering all essential chapters
- NCERT Foundation – Class 9-12 Economy explained
- 1 Year Economy Current Affairs (relevant for Prelims 2026)
- Exclusive sessions on Economic Survey 2025-26 & Union Budget 2026
- 4 Full-Length Economy Tests + Detailed Discussions
- PYQ Sessions – Last 15 years' Economy questions decoded

40+ Power-Packed Classes

Validity: Till Prelims 2026

Mode : Online **Fees : ₹ 4,250/-**

 To Enroll Visit Website
www.simplycurrentaffairs.com

 For Free Learning,
Visit Our Telegram Channel
<https://t.me/GUNAMATHIVANAN>

Mr. Guna Mathivanan,
Founder-Director, Simply Current Affairs



STARTS ON
28-01-2026



Current Affairs & Linked Static

TEST SERIES
(For UPSC Prelims 2026)

"One of its kind program covering Current Affairs + Linked Static through weekly tests for complete UPSC Prelims readiness."

Course Highlights

- Coverage: May 2025 – April 2026 (Current Affairs + Linked Static) through weekly tests for consistent practice & progressive learning
- Exclusive Test on Economic Survey & Union Budget
- 15 Tests in Total with detailed discussion by Mr. Guna Mathivanan → 12 Sectional + 2 Revision + 1 Full-Length

Mode : Online

Fees : ₹ 2,950/-



To Enroll Visit Website
www.simplycurrentaffairs.com



For Free Learning,
Visit Our Telegram Channel
<https://t.me/GUNAMATHIVANAN>



Mr. Guna Mathivanan,
Founder-Director, Simply Current Affairs

Dear All,

You can enroll in our courses, access resources, and track your preparation journey seamlessly.

via our portal www.simplycurrentaffairs.com

Stay connected with us across platforms for our free initiatives:

- YouTube** – Economics Explained, Current Affairs Hit List series and Science Through PYQs series.
- Instagram** – Map Pointers, Current Affairs In-shorts, and Species in Spotlight.
- Telegram** – PYQ Theme-based guidance along with Test Series for both General Studies & CSAT and other exclusive value-addition resources.

We look forward to your continued support.

Team Simply Current Affairs

To Enroll Visit Website
www.simplycurrentaffairs.com



Click to visit Website

Follow Us on



Click to visit YouTube Channel



Follow Us on

Click to visit Instagram

TABLE OF CONTENTS

GS-1	2
1) THE NEED TO ADDRESS CASTE-BASED ATROCITIES	2
2) INDIA'S MIGRATION CRISIS	3
GS-2	5
1) ALTERNATE DISPUTE RESOLUTION MECHANISM	5
2) MENTAL HEALTH IN INDIA	7
3) FISCAL JUSTICE FOR INDIAN CITIES	9
4) Do CASH TRANSFER REALLY BUILD WOMEN'S AGENCY?	11
5) ANTIMICROBIAL RESISTANCE (AMR)	13
6) INDIA'S PROPOSED FRAMEWORK FOR AI-GENERATED CONTENT	14
7) INDIA- AFGHANISTAN RELATIONS	15
8) INDIA- ASEAN RELATIONS	18
GS-3	21
1) NEED FOR CLIMATE FINANCE EXPANSION	21
2) INDIA'S CYBERCRIME CHALLENGE AND THE AI SOLUTION	23
3) INDIA'S ECONOMIC RESILIENCE AND THE ROAD AHEAD:	25
4) 2- DIMENSIONAL MATERIALS- INDIA'S OPPORTUNITIES AND THE FUTURE	27
5) INDIA'S SOVEREIGN WEALTH FUND PROPOSAL	28
6) GLOBAL OIL MARKET AND INDIA	30
7) GREEN CRACKERS	31
8) INDIA'S PRIVATE CORPORATE INVESTMENT Post-2011	33
9) CAN THE STUBBLE BURNING PROBLEM BE SOLVED?	35
RELATED PYQS	37
PRACTICE QUESTIONS	38



GS-1

1) The Need to Address Caste-Based Atrocities

Source: The Hindu | **Syllabus:** GS I: Salient features of Indian Society, Diversity of India.

Introduction:

- Despite constitutional guarantees of equality, caste-based violence and exclusion against Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) remain a persistent and escalating crisis in India.
- Social reformers like **Mahatma Phule, B.R. Ambedkar, Mahatma Gandhi** and **Periyar** fought against caste dominance and caste oppression.
- Their movements, supported by constitutional safeguards like the **Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989**, aimed to dismantle caste hierarchies.
- However, progress has been **uneven and incomplete**, as caste-based superiority and violence persist.
- The **National Crime Records Bureau (NCRB)** reported a significant increase in atrocities. In **2023, cases against SCs rose to 57,789, and cases against STs saw a sharp 28.8% surge to 12,960**.
- From assaults in rural areas for defying caste norms to urban discrimination in housing and employment, caste continues to deny citizens dignity and opportunity.

Political Causes for rising crimes:

- Symbolic Gestures:** The government is often accused of taking only symbolic actions rather than making real changes. For example, Dalits and Adivasis may be included in certain rituals, but these efforts do not address deep-rooted caste hierarchies or social inequalities.
- When marginalized communities advocate for their rights, their efforts are **depicted as being divisive or a threat to social harmony**. This framing can make it difficult for their legitimate concerns to be addressed.
- Ineffective Policies:** Policies designed to promote social justice, such as reservations in education and jobs, are not always properly enforced. Because of this, powerful social elites continue to control important institutions and maintain their dominance.
- Lack of Political Will:** There is no nationwide campaign to actively fight caste prejudice or promote equality. This is partly because political leaders fear losing support from dominant caste groups, which prevents meaningful action.

Systemic and Social Causes:

- Enforcement issues:** Despite strong laws like the **Prevention of Atrocities Act**, enforcement is **weak** due to delayed investigations, societal bias within the police and judiciary, and **extremely low conviction rates**.
- Judicial Backlog:** The justice system is overwhelmed, with a 2023 study noting that over **60% of cases filed under the Atrocities Act remain pending in courts**, denying timely justice to victims.
- Fragmented Social Movements:** Historically powerful anti-caste movements, such as the **Dalit Panthers and the Bahujan Samaj Party**, have become fragmented or pushed to the margins of politics thus diminishing their capacity to challenge systemic injustice.
- Waning Civil Society Response:** The broader engagement from civil society in response to caste atrocities has also waned, weakening the collective pressure for accountability.



Multi-Pronged Approach as Solution:

- **Law Enforcement:** The state must ensure the swift and unbiased enforcement of existing laws and sensitize law enforcement agencies to the ills of the caste system.
- **Promote Egalitarian Values:** Political leaders must champion a national campaign using education and media to challenge caste hierarchies and foster fraternity.
- **Promote Dialogue:** Civil society organizations, academia, and religious institutions must work to bridge divides between communities through sustained dialogue.
- **Affirmative Action:** Policies for affirmative action must be rigorously implemented and transparently monitored to ensure equitable access to resources.
- **Amplify Marginalized Voices:** Most crucially, the voices of Dalit, Adivasi, and Bahujan communities must be amplified, and a revival of anti-caste social movements is needed to re-center the agenda of social justice.

Conclusion:

- The persistence of caste-based atrocities is not merely a matter of individual prejudice but an overall shortcoming of the state and society.
- India's constitutional vision of an egalitarian society can be fulfilled only when a multi-pronged approach is essential to dismantle these enduring hierarchies and ensure dignity and justice for all citizens.

2) India's Migration Crisis

Source: The Hindu | **Syllabus:** GS I: Role of Women and Women's Organization, Population and Associated Issues, Poverty and Developmental issues, Urbanization, their problems and their remedies.

Background:

- Migration has always been a defining force in India's social and economic evolution.
- For millions of young Indians, moving from villages to cities is not merely a dream of prosperity but often a necessity born out of limited opportunities at home.
- According to the **Periodic Labour Force Survey (PLFS) 2020-21**, **29% of India's population** are migrants, with **89% originating from rural areas**.
- Over **half of these migrants are aged 15-25**, indicating that India's most productive demographic is leaving its villages.
- The high rates signal deep **structural issues**: lack of dignified rural jobs, poor education-to-job links, and uneven development.

Gendered Dimensions of Migration:

- **Men** primarily migrate for work, often ending up in insecure or informal jobs.
- **Women**, meanwhile, make up the majority of migrants statistically, but **86.8%** migrate due to marriage, and their movement rarely leads to economic empowerment.

Core Drivers:

- **Poverty and Economic Vulnerability:** Migration is strongly linked to low income and insecure livelihoods.
- **Caste and Social Inequality:** Marginalized communities, particularly **Scheduled Castes (SCs)** and **Other Backward Classes (OBCs)**, record **higher migration rates**, reflecting entrenched structural inequities.
 - Social exclusion and limited local opportunities often **force mobility** rather than enable it as a matter of choice.
- **Education and the Employment Mismatch:** Education, once viewed as a **pathway out of poverty**, no longer guarantees secure employment.



- Many migrants have **limited schooling**, while even degree-holders struggle with **graduate unemployment** due to a mismatch between **education systems and labour market needs**.

Consequences of Migration

Urban Challenges: Rapid urbanization strains city infrastructure. **India is projected to add** 416 million urban residents by 2050.

- Cities like **Delhi, Mumbai, and Bengaluru** face overcrowding, traffic congestion, waste, and pollution.
- Urban labour markets are **highly informal**.
 - **49%** of youth migrants are **daily wage workers**.
 - **39%** work in **short-term or contract-based industries**.
 - Most lack **social security, healthcare, or stable incomes**.
- **Impact on Rural Areas:** Villages are losing their **young, productive population**, leading to economic stagnation.
 - The **Covid-19 reverse migration** briefly revitalized rural areas, proving that agriculture and local enterprise still have potential.
 - A 2020 **39% rise in sown area** showed how returning workers could boost rural productivity.
- **Gender and Social Vulnerability:** During the pandemic, **young women** faced higher job losses and slower recovery rates (International Labour Organisation, 2021).
 - Migrants remain excluded from **urban welfare systems**, lacking access to housing, education, and healthcare.

Solutions and Path to Empowerment:

- **Invest in Rural Futures:** The core solution is to create **dignified, viable livelihoods** at home, moving migration from an escape to a choice.
- **Boost Non-Farm Economy:** Focus on high-potential sectors beyond farming:
 - **Renewable Energy** (e.g., solar maintenance): This includes roles in installing and maintaining decentralized power solutions like microgrids and solar panels.
 - **Agri- and Eco-tourism:** Develop local heritage and natural sites to attract visitors and create hospitality jobs.
 - **Rural BPOs and Digital Gig Work:** Utilise digital infrastructure to provide remote services for urban and international clients.
 - **Artisanal/Processed Foods** businesses using **e-commerce**: Connect local producers of crafts or processed goods directly to larger markets.
- **Empower Enterprise:** Scale up schemes like the **Mudra Yojana** and strengthen **Farmer Producer Organizations (FPOs)** to enable youth entrepreneurship.
- **Portable Social Protection:** Ensure health, education, and security benefits follow migrants regardless of their location.
- **Change Perceptions:** Showcase successful reverse migration stories to dismantle the **stigma** that returning home is a sign of failure.

Conclusion:

- Migration in India is not inherently negative. It embodies ambition, resilience, and adaptability.
- The **concern lies in forced migration**, where rural distress drives people to cities out of necessity, not choice.
- The path forward lies in balanced development and turning migration from a compulsion into a choice. This can help India to transform migration into a story of empowerment and opportunity for its youth.



GS-2

1) Alternate Dispute Resolution Mechanism

Source: The Hindu |Syllabus: GS II: Structure, Organization and Functioning of the Executive and the Judiciary—Ministries and Departments of the Government; Pressure Groups and Formal/Informal Associations and their Role in the Polity.

Definition:

- Alternative Dispute Resolution (ADR) is a set of techniques for **resolving disputes outside of traditional court litigation**, including methods like mediation, arbitration, and negotiation, which aim to achieve amicable settlements efficiently and cost-effectively **with or without the involvement of neutral third parties**.
- 'Conciliation' is a process in which a **third party assists the parties to resolve their dispute** by agreement.
- 'Mediation' is a process for **resolving the dispute with the aid of an independent third person** that assists the parties in dispute to reach a **negotiated resolution**.
- Where **two or more persons agree** that a **dispute** or potential dispute between them shall be **decided** in a legally binding way by one or more **impartial persons in a judicial manner**, that is, after recording evidence, the agreement is called an **Arbitration Agreement**.

Background:

- Recently, the Minister of Law and Justice, Arjun Ram Meghwal, reaffirmed the government's commitment to pursuing **legal reforms rooted in India's civilisational ethos**.
- Drawing on the ancient doctrine of **Panch Parmeshwar**, which emphasises collective consensus in resolving disputes, he highlighted the importance of global cooperation to advance **Alternative Dispute Resolution (ADR)** mechanisms.
- The **India Justice Report 2025** highlights significant challenges in India's justice system, particularly including access, delays, and accountability.
- According to the National Judicial Data Grid (NJDG), the total number of pending cases in India is 4,57,96,239.

Constitutional Basis for ADR:

- The **constitutional foundation** of ADR is found in **Article 39A** of the Constitution of India, which directs the State to ensure **equal justice and free legal aid** for all citizens.
- ADR mechanisms such as **arbitration, conciliation, mediation, and Lok Adalats** are legally recognised under **Section 89 of the Code of Civil Procedure, 1908**.
- The **Arbitration and Conciliation Act, 1996** (amended in **2021**) regulates arbitration and mediation. It empowers parties to resolve civil disputes and certain compoundable offences through binding agreements.
 - The 2021 amendment also established the **Indian Arbitration Council**, giving institutional backing to arbitration in India.
 - Importantly, the law mandates a **maximum period of 180 days** for dispute resolution, promoting **timely justice**.
 - Furthermore, mediation procedures allow dissatisfied parties to withdraw after two sessions, ensuring fairness and voluntariness.
 - The introduction of **pre-litigation mediation** for civil and commercial disputes aims not only to reduce pending cases but also to increase **social harmony and interpersonal understanding**.



Functioning of Lok Adalats:

- **Lok Adalats** are governed by the **Legal Services Authorities Act, 1987** and were conceptualised to fulfil the spirit of **Article 39A**.
- These forums aim to deliver **speedy and accessible justice**, particularly for those **unable to bear the costs of formal litigation**.
- The first Lok Adalat was held in **Gujarat in 1999**, marking the beginning of a people-centric justice movement. Over time, initiatives such as the **Permanent Lok Adalat, National Lok Adalat**, and **e-Lok Adalat** have expanded access and efficiency in dispute resolution.
- A key feature of Lok Adalats is that their **decisions are final and binding**, with **no provision for appeal**.
- This finality, however, applies only because the disputes are settled **before formal litigation**.
- To ensure fairness, any party dissatisfied with a Lok Adalat decision retains the right to **file a suit in a regular court**, preventing arbitrary outcomes while maintaining efficiency.

Importance of Strengthening ADR:

- **Judicial Backlog:** Courts in India have a huge number of pending cases, leading to delays in trial and justice. According to NJDG, there were around **five crore cases pending** in various courts of the country.
- **Reduces Inter-State Disparities:** States vary widely in case pendency and judge availability. By promoting ADR across India, these regional gaps can be narrowed, ensuring uniform access to justice regardless of geography.
 - Judges in Uttar Pradesh, Himachal Pradesh and Kerala have workloads exceeding 4,000 cases.
 - States like Andhra Pradesh, Uttar Pradesh, and Bihar have a considerable number of pending cases.
- **Lengthy Court Procedures:** The procedures in courts are **lengthy and time-consuming**, which adds to the delay in case resolution. The average time for disposal of a case in High Courts is around 4 years and in subordinate courts is around 6 years.
 - ADR mechanisms like **mediation, arbitration, and Lok Adalats** are designed to resolve disputes within a **fixed timeframe (e.g., 180 days)**.
- **Expensive Litigation:** The traditional court system is very expensive, involving court fees, lawyers' fees, and other associated costs, making it unaffordable for many people.
- **Accessibility for the Poor and Illiterate:** A large number of people in India are illiterate and poor, who find the court system too technical, lengthy, and expensive. ADR offers a **simpler and more accessible alternative**.
 - Parties in ADR can choose the date, place, and fee for the neutral third party by mutual consent, making the **process more convenient**.
- **Reducing Court Burden:** Relieving courts from the heavy burden of petty cases allows them to focus on more serious cases, especially those involving heinous crimes.
- **Government Expenses:** Litigation increases the operational expenses of courts, which are funded by Government money. Reducing the number of cases through ADR can help in reducing these costs.
- **Preserving Relationships:** Litigation often harms relationships and causes emotional stress to the litigants. ADR provides a more amicable way to resolve disputes, preserving relationships.
- **Flexibility and Efficiency:** ADR proceedings are flexible. Parties can choose the applicable law, conduct proceedings in any manner and language they agree upon, and settle matters in fewer meetings, thereby reducing expenses and time.

Conclusion:

- According to **former Chief Justice of India Justice D.Y. Chandrachud**, mediation is a **tool for social change**, where social norms are brought in line with constitutional values through the exchange of views and flow of information.



- **Solutions** arrived at **through invaluable discussions during mediation** ensure true justice for individuals and groups **on their terms**, in a language they understand, and provide a platform that protects their sentiments.
- Thus, strengthening **Alternative Dispute Resolution** is no longer just an option but a critical necessity for India to reduce the immense pressure on the traditional court system and **provide a more accessible and efficient avenue for justice**.

2) Mental Health in India

Source: The Hindu | Syllabus: GS II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources.

Background:

- Observed annually on **October 10th, World Mental Health Day** serves as a stark reminder of a silent and escalating crisis.
- Globally, over a billion people suffer from mental illnesses, and **India is a significant part of this, with a 13.7% lifetime prevalence of mental disorders** affecting nearly 200 million citizens.
- Despite having a progressive legal framework, the nation is grappling with a grim reality marked by a high suicide rate, a staggering treatment gap, and deep-seated social stigma.
- Individual tragedies, from farmer suicides to student deaths in coaching hubs, are not anomalies but symptoms of a systemic failure.

The Scale of the Crisis:

- **Prevalence of Mental Disorders:** Approximately 230 million Indians live with mental health conditions, ranging from depression and anxiety to bipolar and substance-use disorders.
- **Suicide Statistics (According to the National Crime Records Bureau's Accidental Deaths and Suicides in India (ADSI) 2023 report):**
 - India recorded 1,71,418 suicides in 2023.
 - The primary drivers were family problems (31.9%) and illness (19%).
 - More than 40% of all deaths were concentrated in five states: Maharashtra, Tamil Nadu, Madhya Pradesh, Karnataka, and West Bengal.
- **High-Risk Groups:**
 - **Gender Disparity:** Men account for a disproportionate 72.8% of all suicide victims, indicating severe gendered social and economic stress.
 - **Youth:** Suicide remains the leading cause of death among Indians aged 15–29.
 - **Agrarian Sector:** Distress persists with 10,786 farmer suicides reported in 2023. Over 100,000 farmers have taken their lives since 2014, driven by debt, crop failure, and institutional neglect.
 - **Homemakers & Caregivers:** Predominantly women, this group faces high rates of depression and domestic violence but remains largely invisible in official statistics.
- **The Economic Burden:** The economic loss due to untreated mental illness is estimated to exceed \$1 trillion by 2030. Employers already lose over ₹1.1 lakh crore annually to absenteeism, burnout, and attrition.

Legal Framework and Government Initiatives:

- **The Mental Healthcare Act, 2017:** This landmark legislation guarantees the right to mental healthcare, decriminalises suicide, mandates insurance coverage, and enshrines patient dignity and autonomy.
- **Supreme Court Verdict:** In the *Sukdeb Saha vs State of Andhra Pradesh* case, the Supreme Court declared mental health a fundamental right under Article 21, legally binding the government to ensure accessible and affordable care.



- **District Mental Health Programme (DMHP):** This program aims to **decentralise** mental health services by expanding access to counselling and outpatient care across approximately 767 districts.
- **Tele MANAS:** A 24x7 national mental health helpline that has enabled over 2 million tele-counselling sessions, improving reach in underserved areas.
- **Manodarpan:** A school-based government program for psychosocial support, which has reached 11 crore students.
- **National Suicide Prevention Strategy (2022):** This policy aims to reduce suicide mortality by 10%.

Persistent Challenges:

- **The Massive Treatment Gap:** A staggering **70%-92% of individuals with mental disorders do not receive any formal care.** For common disorders like depression and anxiety, the gap is 85%.
- **Critical Workforce Shortage:** India has **only 0.75 psychiatrists** and 0.12 psychologists **per 100,000 people.**
 - This is drastically below the WHO-recommended minimum of three psychiatrists per 100,000 population.
- **Poor Implementation and Funding:** The **DMHP functions poorly** in many states, with frequent stockouts of essential psychotropic medicines at primary health centres.
 - School-based support like Manodarpan is often tokenistic or inactive.
 - India's **mental health budget is a mere 1.05% of the total health expenditure**, compared to 8%-10% in developed nations. This insufficient budget is also frequently underutilized.
- **Deep-Seated Stigma:** Over 50% of Indians attribute mental illness to personal weakness or shame, which acts as a major barrier to seeking help.
- **Institutional Collapse and Rise of AI:** The scarcity of human professionals has led millions to turn to unregulated AI tools like ChatGPT for emotional support. This reflects not a trust in technology but a collapse of institutional support systems, posing serious risks related to privacy and the lack of crisis intervention.

The Path Forward

- **Prioritization and Funding:** The first step is for mental health to be treated as **a national emergency**. This necessitates a significant increase in the **mental health budget to at least 5% of the total health expenditure**, facilitating improvements in infrastructure, workforce recruitment, and medicine supply.
 - Furthermore, the **establishment of a cross-ministerial task force**, spanning health, education, agriculture, and social welfare, is crucial for creating a unified response with clear accountability.
- **Workforce and Infrastructure Development:** To address the critical shortage of professionals, **India must scale up the training and deployment of mid-level providers.**
 - This strategy would help surpass WHO workforce density minimums and bridge the severe **urban-rural divide**.
 - The full integration of mental health services into **primary healthcare and universal health insurance schemes** is essential to guarantee accessible and affordable care nationwide.
 - A key reform would be to make **trained, full-time counsellors a public infrastructure, ensuring their presence** in every school, college, and district hospital.
- **Policy Modernization and Monitoring:** **National diagnostic manuals and policies** need to be updated to include disorders from the **WHO's International Classification of Diseases (ICD)-11**, such as complex post-traumatic stress disorder and gaming disorder.
 - This would enable focused interventions for emerging mental health conditions.



- To ensure accountability and guide resource allocation, a rigorous cascade-based monitoring and evaluation system should be established at the district and State levels to track treatment dropouts and measure outcomes.
- **Stigma Reduction and Targeted Outreach:** A concerted effort is required to combat deep-seated social stigma.
 - This can be achieved by **expanding anti-stigma campaigns, particularly within schools and workplaces**, to encourage early help-seeking.
 - Additionally, special outreach programs must be **developed for high-risk groups, linking counselling with tangible support**, such as providing debt relief for farmers or building community-based therapy networks for isolated homemakers.
- **Regulation of the Digital Ecosystem:** Given the increasing reliance on technology for support, there is **an urgent need to regulate the digital mental health ecosystem**.
 - Frameworks must be created for **AI tools and emotional-support apps that mandate privacy disclosures, carry disclaimers, embed crisis-response redirections, and provide real-time access to licensed professionals**, ensuring they **supplement rather than replace** qualified human care.

Conclusion:

- India stands at a critical juncture where the moral, social, and economic fabric of the nation is at stake. The cost of inaction is measured not just in trillions of dollars of lost GDP but in silenced voices, broken families, and futures cut short.
- To be a truly modern and humane nation, India must move beyond policies on paper and build a robust, accessible, and compassionate mental health infrastructure.
- It is a collective responsibility to create a system where the words "**You matter**" are backed by meaningful action, saving the countless lives now slipping away in silence.

3) Fiscal Justice for Indian Cities

Source: The Hindu | Syllabus: GS II: Functions and Responsibilities of the Union and the States, Issues and Challenges Pertaining to the Federal Structure, Devolution of Powers and Finances up to Local Levels and Challenges Therein.

Background:

- Urban India contributes nearly **two-thirds of the national GDP**, yet municipalities control **less than 1% of tax revenue**.
- This gap is not due to inefficiency but a **failure of India's fiscal architecture**, which restricts local taxation powers.
- Municipal finances depend heavily on **transfers from State and Central Governments, loans, and government schemes**, limiting financial autonomy.
- The core issue lies in the **centralisation of taxation powers** in the hands of State and Central Government, leaving cities with responsibilities but few resources.

The Centralisation of Taxation and its Impact:

- The **Goods and Services Tax (GST)** subsumed traditional municipal revenue sources like **octroi, entry tax, and local surcharges**.
- This led to Indian **cities losing approximately 19% of their own revenue** sources.
- Promised GST compensation has largely bypassed municipalities, increasing their **dependence on State and Central grants**.
- This has created a system where **responsibility is decentralised, but taxation power is centralised**.



- Cities are **expected to deliver crucial services** (waste management, housing, etc.) without adequate financial resources.

The Limitations of Municipal Bonds:

- National initiatives like **NITI Aayog's urban strategy** promote **Municipal bonds** as a **key solution for local finance**, but their credibility in India is extremely low.
- The framework for assessing a city's creditworthiness, which determines the value of municipal bonds, is skewed.
- **Credit ratings are narrowly based on a city's "own revenue"** (property tax, user fees) and discount the regular flow of government grants.
- **Treating grants as "non-recurring income"** is an ideological error that portrays cities as surviving on charity.
- These grants are **legitimate constitutional entitlements** under the **74th Constitutional Amendment**, which views cities as equal tiers of governance.

Self-Reliance through Property Taxes:

- International institutions like the **World Bank and Asian Development Bank** often advise cities to focus on **property tax and user fees** to become "self-reliant."
- This approach is **inadequate** as property tax only accounts for 20-25% of a city's revenue potential and faces political hurdles.
- It is **unjust** because it places **a disproportionate financial burden on residents**, especially those in low-income areas.
- The "user pays" logic incorrectly **treats public goods** like clean water, sanitation, and mobility **as private commodities** instead of **collective entitlements**.

Need for Fiscal independence of Indian Cities:

- **Underinvestment:** Urban regions received investments of only 0.6% of GDP between 2011–2018. This is just a quarter of what is required.
 - Existing **systems cannot keep pace with population growth**. Service delivery struggles under rising demand.
- **Inadequate Spatial Planning:** Urban planning in India is mostly based on outdated frameworks which does not accommodate the rapid population growth and urbanization trends.
 - This has led to **overcrowding, in peri-urban areas**, where displaced workers and migrants settle in poorly planned neighborhoods.
- **Climate Change Impacts:** Indian cities face extreme climate-related challenges, including **urban flooding** during heavy rains, **heat island effects** from unregulated urban sprawl, and high levels of pollution.
- **Massive Migration:** Economic distress based migration, both from rural to urban areas and between urban centers places put pressure on already stretched infrastructure.
- **Housing Shortages:** Around 40% of India's urban population lives in slums without essential services such as water, sanitation, and secure housing.
- **Weak private sector participation:** The **Smart Cities Mission**, launched in 2015 to drive innovation and modernisation in urban areas was **ambitious to bring in private investments**.
 Only 6 per cent of its projects were implemented through **public-private** partnerships (PPPs).
 - This shows challenges such as low investor confidence and lack of viable revenue models.

Way Forward:

- India should democratise its fiscal contract, learning from **Scandinavian countries** where cities have direct income tax levying powers.
- **Municipalities in Denmark, Sweden, and Norway** have the right to levy and collect income taxes directly.
- This decentralised model **promotes transparency, accountability**, and long-term planning between citizens and local governments.



- **Key Reforms Needed in India:**
 - **Recognise Grants as Income:** Government grants and shared taxes should be considered as legitimate income to build a trustworthy balance sheet for cities. This can help cities to raise municipal bonds easily.
 - **Reform the Rating System:** Credit ratings must include governance metrics like transparency and citizen participation, not just financial data.
 - **Empower Municipal Borrowing:** Cities should be allowed to use a portion of their GST compensation or State revenue share as **collateral for borrowing**.
- These reforms would restore the principle of **cooperative federalism**.

Conclusion:

- India's urban future depends on achieving **fiscal justice** and empowering cities as equal partners in governance.
- Cities are not **cost centres** but the **economic engines** driving national prosperity.
- True reform will begin when India ensures **fiscal autonomy and fair revenue sharing**, making cities central to national development.

4) Do Cash Transfer Really Build Women's Agency?

Source: The Hindu | **Syllabus:** GS II: Government Policies and Interventions for Development in various sectors and Issues arising out of their Design and Implementation.

Introduction:

- In India, the landscape of welfare politics has seen a **significant shift towards gender-focused policies**, with **cash transfers becoming a key instrument for both social support and electoral appeal**.
- While this has led to a revolutionary increase in women's access to formal banking, a critical question remains: does this access translate into genuine economic empowerment?
- The journey from being a **welfare recipient to an empowered economic agent is complex, hindered by several deep-rooted social and structural barriers**.

The Rise of Women-Centric Cash Transfers:

- **Political and Social Strategy:** Cash transfers targeted at women are increasingly used by state governments as a dual-purpose tool for **social policy and electoral campaigns**.
 - **Recent Example:** The Bihar government's *Mukhyamantri Mahila Rojgar Yojana* provides a ₹10,000 transfer to 75 lakh women as seed capital for self-employment.
 - **Nationwide Trend:** This follows similar schemes across the country, including **Karnataka's Gruha Lakshmi, West Bengal's Lakshmir Bhandar, and Madhya Pradesh's Ladli Behna Yojana**.
- **Enabling Infrastructure:** These programs are powered by **India's Direct Benefit Transfer (DBT) system**, which relies on the '**JAM trinity**' of **Jan Dhan bank accounts, Aadhaar identification, and mobile phones**.

A Milestone in Financial Inclusion:

- **Universal Access:** India has achieved a remarkable milestone, with 89% of women now holding a bank account, a figure on par with developed nations.
- **Government Role:** A 2025 World Bank database indicates that 54% of Indian women opened their first bank account primarily to receive government benefits.
- **Female-Led Accounts:** As of August 2025, women own 55.7% of the 56 crore Pradhan Mantri Jan Dhan Yojana accounts.



- **Formal Recognition:** This mass inclusion formally recognizes women as economic actors with a financial identity.

The Gap Between Access and True Agency:

Despite impressive numbers in account ownership, the transition to active economic participation of women remains incomplete.

- **Dormant Accounts and Limited Engagement:** Nearly 20% of women's Jan Dhan accounts remain inactive due to insufficient funds, a low perceived need for banking, or discomfort with formal financial institutions. This reduces the overall impact of welfare transfers.
- **Challenges in Rural and Semi-Urban Areas:** Women living in rural and semi-urban regions face obstacles such as **long distances to bank branches, poor digital infrastructure, and limited confidence** in using banking services, which restrict their financial participation.
- **Limited Use of Financial Tools:** Despite having access to RuPay cards and digital payment options, most women use their accounts **mainly for cash withdrawals rather than for savings, credit, or digital transactions**, showing a gap between access and active usage.

Other Barriers to Financial Autonomy:

- **The Digital Divide:** Indian women are **19% less likely than men to own mobile phones**, which limits their ability to independently access, monitor, and manage their bank accounts or use digital payment systems.
- **Low Financial and Digital Literacy:** Many women lack adequate knowledge about formal banking and digital tools, which discourages them from using these services confidently and independently.
- **Dependence on Male Relatives:** Over two-thirds of Indian women rely on male family members to handle their financial transactions, which **restricts their control over money and limits their decision-making power**.
- **Safety Concerns:** Fear of **cyber fraud, lack of privacy**, and the widespread practice of shared phone usage combined with social norms discourage women from fully engaging in digital financial activities.

The Path to Build Genuine Agency:

- **Provide Asset Control:** Granting women secure property rights and joint land titles is crucial for them to leverage credit and participate in markets.
- **Accessible Infrastructure:** Offering subsidised smartphones and affordable data plans can help bridge the digital gender gap and promote independent banking.
- **Women-Centric Products:** Financial institutions should co-create products that cater to the realities of women's informal or sporadic incomes and caregiving duties.
- **Community Networks:** Initiatives like "digital banking sakhis" and secure peer groups (e.g., on WhatsApp or UPI) can provide a safe space for learning and support.
- **Female Banking Agents:** The number of female business correspondents of banks should be expanded, as they currently make up less than 10% of the total.

Conclusion:

- India has made **significant progress** in financial inclusion through its DBT and JAM systems, but **financial access alone does not equal empowerment**.
- Real progress lies in enabling women to **control, grow, and sustain** their financial resources.
- For welfare schemes like Bihar's to truly empower women, they must **combine financial inclusion with agency-building**, ensuring women are **not just recipients of aid**, but **active participants in economic growth**.



5) Antimicrobial Resistance (AMR)

Source: Indian Express | Syllabus: GS II: Issues Relating to Development and Management of Social Sector/Services relating to Health, Education, Human Resources.

Definition

- **Antimicrobial Resistance (AMR)** occurs when microbes, including bacteria, viruses, fungi, and parasites, evolve to become resistant to the drugs designed to kill them, **rendering these medications ineffective**.

Causes for AMR

- **Irrational Use of Drugs:** Overuse or misuse of antibiotics in humans, animals, and agriculture. Over-the-counter availability of antibiotics without prescriptions helps this overuse of antibiotics.
- **Incomplete Treatment:** Patients not completing prescribed antibiotic courses and stopping antibiotics after the subsidence of symptoms.
- **Environmental Contamination:** Effluents from healthcare facilities and pharmaceutical manufacturing units contaminating water sources can lead to AMR.
- **Lack of Infection Control:** Poor sanitation, hygiene, and infection control measures such as disease surveillance in healthcare facilities and communities.

Dangers in AMR

- **Increased Mortality and Morbidity:** Infections caused by drug-resistant pathogens are harder and sometimes impossible to treat leading to death and long term disabilities.
- **Economic Burden:** Extended illness durations, higher healthcare costs, and loss of productivity leads to high economic burden and this may affect the weaker sections to a greater extent.
- **Threat to Global Health:** AMR is a global issue, not confined by borders, making it a significant public health threat.

Measures to address AMR

- **A global public awareness campaign:** It is crucial to educate our societies about the danger behind the overuse and misuse of antimicrobials, as patients still commonly demand them from doctors or buy them over-the-counter.
 - An efficient and well-delivered public campaign in the long-term could reduce the number of prescribed antimicrobials by 36%.
- **Improve sanitation and prevent the spread of infection:** Prevention is better than cure – by improving healthcare systems and living standards we can markedly reduce the demand for antibiotics and therefore give less chance for new resistance strains to develop.
 - It is estimated that improving sanitation in low-income countries would decrease the use of antibiotics to treat diarrhea by 60%.
- **Reduction in Agriculture:** Reduce unnecessary use of antimicrobials in agriculture and their dissemination into the environment
 - The vast majority of global antimicrobial consumption comes from agriculture and aquaculture.
 - The use of antibiotics solely for infection prevention and more importantly, growth promotion, should be considered dangerous and unnecessary.
 - Moreover, recent data suggest that 75-90% of antibiotics are excreted from animals unmetabolized and leak into the environment.
- **Improve global surveillance:** Three areas require better structure and information: antibiotic consumption among humans and animals, resistance rates for the available drugs and research knowledge on the molecular foundations of AMR.
- **Promote development and use of vaccines and alternatives:** With increasing vaccination, the number of infected people needing antibiotic treatment would reduce.



- Although there are currently no licensed vaccines against the most urgent pathogens, there are promising clinical candidates coming up against Clostridium difficile and Pseudomonas aeruginosa.
- However, greater investment in early stage research for development of new vaccines is recommended.
- **Quality Workforce:** Addressing AMR requires a qualified workforce to implement them. There is a shortage of key professional figures such as microbiologists, infectious disease specialists, infection control specialists, pharmacists, nurses, veterinarians and epidemiologists, for example. Therefore, countries need to invest in training and rewarding these specialists.
- **A global innovation fund:** Higher private and public investment in early-stage research in drug discovery is crucial for development of new treatments. However, it is less attractive for commercial funders because of substantial risks. Therefore, a global innovation fund for support of less commercially attractive research is needed.
- **Global coalition:** Putting AMR on the international political agenda and tackling it using **One Health principles** is important for impacting change. For example, actively engaging with the G20 or the United Nations could help to put AMR on the political agenda.

Conclusion

- So far, India has shown commitment to containing AMR. India was among the first few countries to launch a National Action Plan (NAP) on AMR in 2017.
- Now the need is to create a new NAP which addresses the current challenges and opportunities in addressing the problem of AMR.

6) India's Proposed Framework for AI-Generated Content

Source: Indian Express | Syllabus: GS II: Government Policies and Interventions for Development in various sectors and Issues arising out of their Design and Implementation.

Background:

- India is at a critical juncture in its digital evolution, with the Ministry of Electronics and Information Technology (MeitY) proposing **draft amendments to the IT Rules, 2021**, to regulate **synthetic content**—including AI-generated videos, images, and voices, commonly **known as deepfakes**.
- This move, open for public consultation until November 6, positions India to become **one of the first democracies to formally address** the societal dangers of AI-driven misinformation.
- The **core objective is to establish accountability and transparency for the creators and platforms behind this content**, recognizing that the integrity of truth is now an infrastructure challenge.

Key Provisions of the Draft Amendments:

- **Defining Synthetic Information:** The rules formally define "**synthetically generated information**" as content created or altered by algorithms to resemble authentic media.
- **Mandatory Labeling and Disclaimers:** Platforms that create or host synthetic content must **clearly label it**. This is proposed to be done with significant disclaimers, such as dedicating at least **10% of the visual space** or the first 10% of the audio to the warning.
- **Detection and Declaration:** Platforms are required to implement **automated detection systems** for synthetic media, and users must issue declarations when uploading such content.
- **Accountability and Safe Harbour:** The rules aim to **preserve safe-harbour protection** for intermediaries that promptly remove harmful synthetic content, while simultaneously **penalizing** those that fail to act against such content.



Challenges in Enforcement and Governance

- **Translating Intent into Enforcement:** The government's goal to curb fraud and misinformation without stifling innovation requires an **unprecedented level of governance expertise**.
- **The Technology Paradox:** Deepfake tools can **empower creators, educators, and entrepreneurs**. A small business can use AI to make multilingual ads; a filmmaker can restore lost footage.
 - But the **same technology can also destroy reputations, manipulate elections**, or incite violence.
 - Government Regulations should **balance these two aspects**. Businesses should not be stifled by regulations and at the same time, ill-effects should also be controlled.
- **Weak Technical Provisions:** The proposed "**10% visual disclaimer**" is criticized as being symbolically strong but technically weak and easily circumvented or overlooked.
- **Risk of Over-Legislation:** There is a need to resist the temptation to **legislate faster than the nation can enforce**, which could lead to ineffective or counterproductive rules.
- **Unique Digital Environment:** India's vast, multilingual digital population, heavily reliant on social media for news, creates an **exponentially higher risk** of viral misinformation compared to other nations.

Way Forward:

- To create a framework that is both competitive and compliant, **India must pioneer a "third way"** avoiding both **USA's laissez-faire approach and China's state control**. The durable path forward rests on three strategic pillars and broad consultation.
- **Establish a Verification Infrastructure:** Build a **digital provenance framework** similar to Aadhaar for identity, where every piece of content carries an **invisible, verifiable signature** of its authenticity.
- **Implement Tiered Accountability:** Differentiate responsibility by the platform's role (hosting, generating, or monetizing synthetic media), ensuring that **influence correlates with accountability**.
- **Boost AI Literacy:** Equip citizens with the knowledge and tools to **detect manipulation**, recognizing that informed citizens, not just technology, are the ultimate defense for democracy.
- **Conduct Broad Consultation:** Consult widely with **startups, academics, technologists, and civil society groups** to ensure regulation guides innovation instead of stifling it.
- By focusing on institutionalizing transparency and regulating authenticity, India has a chance to **export a model of digital responsibility** and **lead the world in ethical AI governance**, moving the focus from fighting "**fake news**" to securing against "**fake reality**."

7) India-Afghanistan Relations

Source: Indian Express | Syllabus: GS II: India and its Neighborhood - Relations.

Background:

- India has shared long historical ties with Afghanistan. India was one of the non-communist countries to accept the legitimacy of the Communist government in the country.
- After its downfall, India continued to extend its support to the successive governments until the Taliban came into power in 1996.
- With the downfall of the Taliban and the establishment of the international government in 2001, India restarted its ties with Afghanistan.
- **India's model of development cooperation** follows a **demand-driven 'soft power' approach** where assistance is provided as per the needs and requests of the Afghan Government.



- In 2017, India was amongst the top ten international donor countries with assistance worth USD 30.45 million.
- The bilateral trade between the two countries received a significant boost with the **Bilateral Trade Agreement signed in 2003**.
- The **total bilateral trade in 2017-18** was valued at **USD 1.14 billion**, with exports amounting to USD 709.75 million and imports amounting to USD 433.78 million.
- The developmental and humanitarian assistance received a **setback** with the **coming back of the Taliban in 2021** following the withdrawal of US troops.
- India has maintained a low key and minimal relations with the Taliban led Afghanistan from that period.

Recent Developments:

- In **January 2025**, Foreign Secretary Vikram Misri held the highest-level officially acknowledged meeting with the Taliban's acting Foreign Minister, Amir Khan Muttaqi, in Dubai, UAE.
 - The meeting focused on bilateral ties, regional developments, and promoting the use of the **Chabahar Port** for trade and humanitarian aid.
- The acting Foreign Minister **Amir Khan Muttaqi visited New Delhi in October 2025**, marking the most senior Taliban official visit since 2021.
- Following the high-level visit, India announced the **upgrade of its "technical mission" in Kabul to the status of an Embassy** (while maintaining a policy of "engagement without formal recognition" of the Taliban government).
- India committed to **deepening development cooperation**, announcing support for new health projects (e.g., an Oncology and Trauma Centre) and expressing interest in **mining opportunities** and hydroelectric projects in Afghanistan

India's Pragmatic Rationale for Engagement:

- New Delhi's decision to engage is based on practical, **pragmatic and strategic logic**.
- **Security:** A stable Afghanistan that refuses to **support anti-India militants** is a strategic imperative, especially given the history of cross-border terrorism and proximity to Pakistan.
- **Geopolitical Hedging:** Failure to engage would cede critical regional space to rivals like **Pakistan and China**, undermining India's interests.
- **Connectivity and Trade:** Afghanistan serves as a gateway to Central Asia. India has invested in projects like the **Chabahar Port** in Iran and the **Zaranj-Delaram Highway** to enhance trade and connectivity, bypassing Pakistan.
- **Geopolitical Influence:** Strong ties with Afghanistan helps **India counter Pakistan's influence in the region**. Pakistan was once a strong supporter of the Taliban regime in Afghanistan.
 - The **relations have soured recently due to Pakistan's attacks** within Afghan territories, sending back Afghan refugees and border demarcation conflicts along the Durand Line.
 - **Afghanistan has historically refused to recognize the Durand Line** as a legitimate border, claiming that it was imposed under British pressure.
- **Development and Soft Power Diplomacy:** India has played a major role in Afghanistan's reconstruction through investments in infrastructure, education, healthcare, and humanitarian aid, gaining goodwill among Afghans.
 - **Protecting Investments:** India has long-standing ties and development footprints, having been Afghanistan's largest aid recipient (totaling **\$2.3 billion**).
 - India has helped in construction of many **High Impact Community Development projects** which give tangible benefits to common Afghan people.
 - India has also built projects like the **Salma Dam, Parliament building and Indira Gandhi Children Hospital**.



Challenges in this Upgraded Relationship:

- **Moral Compromise and Constitutional Values:** Engaging and hosting the Taliban regime, which systematically enforces "gender apartheid" (banning women's education, work, and basic freedoms), directly goes **against India's constitutional commitments to gender equality** and democratic, secular values.
 - The high-profile meetings and diplomatic courtesies, like the press event that excluded women journalists, create **an civic unease** and force domestic audiences to confront the sacrifice of Indian principles for strategic gains.
- **Unreliable Security Guarantees:** Despite the Taliban's public assurances that Afghan territory will not be used for anti-India activities, doubts persist due to their **incomplete disengagement** from militant outfits like **Lashkar-e-Taiba (LeT)** and Jaish-e-Mohammed (JeM).
 - Key figures within the Taliban regime, particularly the **Haqqani Network**, have **a history of hostility towards India** (linked to past attacks on Indian diplomatic missions), making the long-term security challenge for Indian staff and assets.
- **Legitimizing an Unrecognized Regime:** By upgrading its diplomatic mission to an "embassy" and engaging in high-level talks, India is giving **legitimacy** to a regime that is not formally recognized by the **United Nations**.
 - This policy, while practical, can attract **criticism from democratic partners** who view relations through the angle of shared values and human rights.
- **Investment and Infrastructure Risk:** Afghanistan's extreme poverty, security concerns, and the **ongoing sanctions** against the Taliban government **hinder** the security and successful completion of India's **long-term development projects and potential new investments (like in the mining sector)**.
- **The Pakistan-Centric Trap:** Framing the engagement primarily as a means to exploit the growing friction between the Taliban and Pakistan (the "enemy of my enemy" logic) can be short termed .
 - It makes India's foreign policy predictable and risks strengthening a volatile regime that may eventually turn its focus back against India.

Measures to build a better relationship:

- **Conditional Recognition:** India should avoid automatic formal recognition of the Taliban regime.
 - Engagement must be **calibrated and reversible**, utilizing the upgraded embassy status as a lever to secure interests and demand adherence to human rights benchmarks.
- **Targeted Aid Transparency:** Humanitarian and development assistance should be channeled with **explicit transparency and safeguards**.
 - Aid must **prioritize women's needs**, such as access to health and education, ensuring it is not misappropriated by the regime.
- **Enforce Security Assurances:** India should insist and publicly report specific, actionable **counter-terrorism guarantees** from the Taliban.
 - India must hold the **regime accountable** for preventing Afghan soil from being used by **anti-India militant groups**.
- **Uphold Constitutional Values:** India should refuse to tolerate or import the Taliban's male centric practices onto Indian soil.
 - **Diplomatic protocol must reflect India's constitutional commitment** to gender equality, maintaining clear ethical red lines in official interactions.
- **Prioritize Connectivity Projects:** Maximum cooperation on economic initiatives like the **Chabahar Port** should be encouraged. This maintains a vital trade route, facilitates humanitarian aid, and strengthens India's long-term regional influence.



Conclusion:

- India faces a difficult choice: it must balance its **values** (principles) with its **practical needs** (pragmatism).
- The goal is to keep the nation safe while also respecting the rights and dignity of the Indian people.
- **As the land of Mahatma Gandhi, who taught us that noble ends do not ever justify ignoble means**, India must remain true to itself.

8) India- ASEAN Relations

Source: Indian Express |Syllabus: GS II: Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests.

Background:

- **ASEAN (Association of Southeast Asian Nations)** is a regional organisation comprising ten Southeast Asian countries, aimed at promoting political, economic, and security cooperation among its member states.
- The 11 members of ASEAN (Association of Southeast Asian Nations) are:
 - Brunei Darussalam
 - Cambodia
 - Indonesia
 - Laos (Lao People's Democratic Republic)
 - Malaysia
 - Myanmar
 - Philippines
 - Singapore
 - Thailand
 - Vietnam
 - Timor Leste (from October 2025)
- India began formal engagement with **ASEAN** in 1992 as a “Sectoral Dialogue Partner” (Secretary level interaction) and subsequently as a “Dialogue Partner” in 1995.
- In 2002, it was upgraded to Summit level interaction and in 2012, it was upgraded to a strategic partnership.
- India's engagement with the ASEAN has been driven by **three goals**:
 - (i) **enhancing connectivity** between India and ASEAN in the broadest sense of the term (ie, physical, digital, people-to-people, business etc.);
 - (ii) **strengthening the ASEAN organisation**;
 - (iii) **expanding practical cooperation** in the **maritime** domain.
- ASEAN and India share both land and maritime borders. They are civilizational partners.
- ASEAN and India together **share 7 per cent of the world GDP and 26 per cent of the world population**.
- ASEAN is currently **India's 4th largest trading partner**, and **India is ASEAN's 7th largest trade partner**. India faces a significant trade deficit with ASEAN.
- The 47th ASEAN Summit and Related Summits concluded in Kuala Lumpur on October 28, 2025.

Opportunities for India in this relation:

- **Dynamic Economic Market:** ASEAN is highly significant for India because its member states are **rapidly growing economies**, collectively forming a **very dynamic market**. This offers immense potential for Indian exports, investments, and economic integration, fueling growth for both regions.



- **Unified Geopolitical Voice:** ASEAN has emerged as a **significant player on the global stage** because its members **tend to speak with one voice**. For India, engaging with ASEAN means collaborating with a single, influential bloc that can collectively address regional security, political, and strategic concerns in the Indo-Pacific.
- **Indo-Pacific Security Anchor:** India can **collaborate on maritime security and safety** with ASEAN nations. This strategic cooperation addresses common concerns in the **Indo-Pacific region**, positioning India as a vital partner for regional stability, particularly given uncertainties in the South China Sea.
- **Connectivity and Infrastructure Integration:** A key focus is on accelerating the development of major infrastructure projects such as the **India-Myanmar-Thailand Trilateral Highway** and the **Kaladan multi-modal project**. Completion of these projects will physically integrate India's Northeast with Southeast Asia, significantly boosting cross-border trade and movement.
- **Digital Economy Leadership:** India is well-placed to **drive cross-border e-commerce and Fintech innovations** within the ASEAN bloc. This opportunity allows India to leverage its technological expertise for digital cooperation, particularly enabling Indian **MSMEs** to expand and thrive.
- **Academic and Cultural Soft Power:** India can significantly expand its **educational exchanges and scholarship programs** (e.g., those affiliated with Nalanda University) and support cultural preservation projects. This strengthens the **soft power** generated by India's deep historical and civilisational links, reinforcing people-to-people connections.
- **R&D and Capacity Building:** Utilizing the ASEAN-India Science and Technology Development Fund, India can **strengthen Science and Technology collaboration**. This promotes joint research and development (R&D), fosters **innovation**, and builds capacity across various advanced sectors.
- **Counter-Terrorism and Law Enforcement:** The relationship provides a platform to **enhance collaboration to combat transnational crime and terrorism**. Dialogue forums, such as the Delhi Dialogue, allow for improved security coordination and collective action against shared regional threats.

Challenges in this Relation:

- **Trade Imbalance and FTA Exploitation:** The **India-ASEAN Trade in Goods Agreement (AITIGA)** has created a persistent and widening trade deficit for India.
 - Since the agreement came into effect, the deficit has significantly expanded, surging from a deficit of **\$9.66 billion in 2016-17** to approximately **\$43.57 billion in 2022-23**.
 - This is due to the low tariff protection in ASEAN **not helping Indian exports** much, while their goods gained massive entry into India.
 - **Weak rules of origin in the FTA** enable **Chinese goods to be routed** via ASEAN countries to exploit lower tariffs, directly harming India's domestic manufacturing.
- **Political Instability:** The **democratic backsliding and internal instability in Myanmar** present a direct challenge to **India's Act East goals**.
 - ASEAN has been criticized for its inability to act on this member state's political turmoil.
 - For India, this instability toughens the completion of crucial physical connectivity projects, such as the **India-Myanmar-Thailand Trilateral Highway** and the **Kaladan Multi-Modal Project**, which are essential for linking India's Northeast to Southeast Asian markets.
- **ASEAN's Hesitancy in Picking Geopolitical Sides:** The US-China trade dispute and strategic rivalry put intense pressure on ASEAN.
 - Because China has emerged as the **biggest trading, investment, and technology partner** for the bloc, **ASEAN members are deeply reluctant to align themselves solely with the US or India**.
 - This **balancing act limits India's ability** to build a robust, cohesive strategic partnership with the entire grouping, reducing its leverage as a democratic counterbalance in the region.



Way Forward:

- **Trade Agreement Reform:** India needs to revise the **AITIGA** to secure reciprocal market access and implement **stricter Rules of Origin**.
 - This rectifies India's substantial **trade deficit** while ensuring genuine ASEAN industries receive legitimate trade benefits.
 - Negotiations have already started to sort out these issues.
- **Connectivity:** India should **fast-track physical links** (Trilateral Highway, Kaladan Project) and **digital integration** (Fintech, e-commerce). This transforms India's Northeast into a trade corridor, empowering **MSMEs** and boosting regional commerce.
- **Maritime Security:** India must **elevate cooperation** with joint exercises and **Maritime Domain Awareness** initiatives. This strengthens a **rules-based Indo-Pacific** and provides ASEAN with a reliable partner against regional maritime instability.
- **Sustained Policy Consistency:** India must ensure the **Act East Policy** maintains **sustained diplomatic focus** and consistently supports **ASEAN Centrality**. This builds crucial trust and credibility, positioning India as a predictable and reliable long-term partner.
- **Diversify Trade and Investment:** India must actively **shift trade focus beyond Singapore** to other ASEAN members. This spreads economic risk and strengthens ties by tapping new high-growth **ASEAN markets** and investment hubs.



GS-3

1) Need for Climate Finance Expansion

Source: The Hindu | Syllabus: GS III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Background:

- **Climate finance** refers to funding from public, private, and international sources aimed at addressing climate change.
- It aims to support both **mitigation**, by reducing greenhouse gas emissions through renewable energy and sustainable infrastructure, and **adaptation**, by enhancing resilience to climate impacts.
- Climate finance is essential for transition to cleaner forms of energy in developing and underdeveloped countries.
- Finance has been a major point of climate change negotiation since the launching of the United Nations-led climate change negotiations which led to the **United Nations Framework Convention on Climate Change (UNFCCC) 1992**.
- The Convention, the **Kyoto Protocol and the Paris Agreement** call for financial assistance from Parties with more financial resources to those that are less endowed and more vulnerable.
- **Article 4 (7) of the UNFCCC** clearly says “that the extent to which the developing country Party will be fulfilling their climate action commitments is contingent on how much finance and technology they get from developed country Parties”.
- The **Paris Agreement retains, in Article 9(1)**, the provision relating to finance, binding the developed countries to mobilise finance for the developing countries.
- In pursuance of their responsibility, the developed countries agreed in 2009 that they would collectively mobilise \$100 billion a year by 2020.

Instruments of Green Finance:

- **Green Bonds:** Debt instruments used to raise funds exclusively for environmentally friendly projects.
- **Sustainability Bonds:** Bonds that finance projects with positive environmental and social impacts.
- **Sustainability-Linked Bonds (SLBs):** Bonds tied to achieving specific sustainability or ESG performance targets.
- **Concessional Finance:** Loans or funding provided at below-market interest rates for green projects.
- **Grants:** Non-repayable funds offered to support climate and sustainability initiatives.
- **Blended Finance:** Combination of public and private capital to fund projects with higher risks.
- **Green Loans:** Loans specifically earmarked for environmentally sustainable projects.
- **Carbon Credits and Trading:** A carbon credit is a certificate showing a company has reduced pollution. **Companies that pollute less can sell extra credits** to others.
 - **Buyers can legally offset their own greenhouse gas emissions** by purchasing credits, helping them meet environmental targets, comply with regulations, and show commitment to fighting climate change.
- **Risk Mitigation Instruments:** Tools like guarantees or insurance that reduce investment risk in green projects.
- **Equity Investments:** Direct investments in green companies or projects to earn financial returns while supporting sustainability.



India's Transition and Financing:

- India's clean energy transition is gaining momentum. In 2024, India added 24.5 gigawatts (GW) of solar energy capacity, making it the third largest contributor globally after China and the United States.
- The United Nations Secretary-General's 2025 Climate Report recognises India**, alongside Brazil and China, as a leading developing country in scaling solar and wind energy.
- In 2023, the renewable energy sector employed over a million people, contributing to 5% of GDP growth.
- By **December 2024**, India's cumulative aligned green, social, sustainability, and sustainability-linked (GSS+) debt issuance reached **\$55.9 billion**, marking a **186% increase since 2021**.
- Green bonds accounted for 83%** of the total GSS+ issuance, while the **private sector contributed 84%** of the total.

Challenges in India's Green Finance Ecosystem:

- Financing Gap:** India requires \$1.5 trillion by 2030 to stay on a 1.5°C pathway (IRENA estimate) and \$2.5 trillion by 2030 to meet national targets (Ministry of Finance).
 - Current climate finance flows remain far below the required levels to meet renewable energy and sustainability targets.
- Overdependence on Private Sector:** The private sector accounted for 84% of green bond issuance, leaving limited public sector contribution.
- Limited Access for Small Players:** Micro, small, and medium enterprises (MSMEs), agri-tech innovators, and local infrastructure developers struggle to access green finance.
- Infrastructure Deficiencies:** Expansion of renewables requires strengthening of the electricity grid, deployment of large-scale battery storage, scaling up green hydrogen, and transitioning transport and agriculture.
- Regional Investment Risks:** Tier II and III cities face governance and delivery risks, deterring investors from financing clean energy projects.
- Adaptation and Damage Finance Gap:** Financing for climate adaptation and loss and damage is inadequate compared to clean energy funding.

Measures Required to improve Green Financing in India:

- Public Finance Mobilisation:** National and State governments must use budget allocations and fiscal tools to de-risk investments and attract private capital.
- Blended Finance Expansion:** It is a funding approach that combines public and private money to support projects that are too risky for private investors alone.
 - It can be done by **concessional finance, partial guarantees, subordinated debt, and loan or performance guarantees** to improve the risk-return profile of green projects.
- Institutional Capital Utilisation:** Funds can be mobilised from domestic institutional investors such as pension funds, insurers, sovereign wealth funds, EPFO, and LIC to invest in climate-aligned projects.
- Carbon Market Development:** Government should take measures to implement the Carbon Credit Trading Scheme with transparency, equity, and strong regulation to unlock new finance streams.
- Innovation in Climate Finance:** Deployment of blockchain for finance tracking, artificial intelligence for risk assessment, and blended models tailored to India's social and economic realities can attract more green funds.
- Expansion of Green Bonds** can be done through strengthening sovereign and private green bond markets. This can ensure broader access for MSMEs and mid-sized developers, and target \$100 billion sustainable finance by 2030.
- International Collaboration:** India's leadership in the International Solar Alliance (ISA) can be used to attract global concessional finance and share best practices in increasing renewables.



Conclusion:

- To achieve its climate goals, India must lead not only in **clean energy production** but also in **climate finance innovation**.
- Success depends on creating scalable and visible financial models tailored to India's unique social and economic landscape.

2) India's Cybercrime Challenge and the AI Solution

Source: The Hindu | Syllabus: GS III: Challenges to Internal Security through Communication Networks, Role of Media and Social Networking Sites in Internal Security Challenges, Basics of Cyber Security; Money-Laundering and its prevention.

Background:

- **India's digital transformation**, powered by affordable Internet, digital banking, and e-commerce, while enhancing convenience and inclusion has also created **a fertile ground for cybercrime**.
- **Cybercrime** is criminal activity that either targets or **uses a computer, a computer network or a networked device**.
 - Most cybercrime is committed by cybercriminals or hackers who want to make money or with a goal of **economic gain**.
 - However, occasionally cybercrime aims to damage computers or networks for **personal or political reasons**.
- Fraudsters exploit system loopholes and human psychology, using tactics such as **phishing, OTP/UPI frauds, identity theft, loan scams, and increasingly, digital arrests**.
- These frauds rely less on hacking skills and **more on manipulation of fear and trust**.

Evolution of Cybercrimes:

- **From Simple Theft to Sophisticated Strategies:** Cybercrime has moved far beyond earlier, simpler offenses like fraudulent ATM withdrawals.
 - Today, criminals use more sophisticated and targeted strategies like phishing, remote access scams, and complex UPI frauds.
- **Shift from Hacking to Psychological Manipulation:** The evolution shows a move away from pure technical hacking skills. Modern frauds rely more heavily on **social engineering**.
- **Emergence of New and Alarming Trends:** Criminals are constantly adapting and creating new types of scams.
 - There is a rise of "**digital arrests**", where fraudsters impersonate police or government officials to psychologically pressure and extort money from their targets.
- **Organized and Patterned Attacks:** Large-scale frauds show recurring patterns with multiple high-value transactions, mule accounts, and layering across banks to complicate the tracking process.
 - Fraudulent transfers are frequently many times larger than a customer's normal transactions. It will also have multiple high-value debits executed within a short span of time.
 - In a good monitoring system, both should trigger critical alerts. **Yet banks often fail to send SMS, email, or phone verifications**.
 - Money is then funnelled into **mule accounts with incomplete or fake KYCs**, often with negligible balances before suddenly receiving massive inflows.
 - These **funds are quickly dispersed** across smaller or cooperative banks in a **process known as layering**, making recovery nearly impossible.



Use of Social Engineering:

- The primary method for cybercrime in recent times is **social engineering**, which involves manipulating people psychologically to make them give away confidential information.
- Vulnerable Targets:** Criminals primarily target groups like **elderly citizens, rural populations, and financially distressed individuals** (e.g., job seekers) who may have lower digital literacy.
- Emotional Exploitation:** Scams are designed to prey on powerful emotions like **fear, greed, and urgency**, using leaked personal data to make the threats or offers seem legitimate.

Reasons for Increasing Cybercrimes in India:

- Rapid Digital Adoption:** India's push for affordable internet, digital banking, and e-commerce has made financial services widely accessible, but it has also expanded the attack surface for criminals.
- Human Vulnerability:** Cybercriminals rely heavily on social engineering, manipulating fear, trust, greed, or urgency.
 - Even educated individuals can fall prey under sustained psychological pressure, showing how deeply human behavior is exploited.
- Leaked and Unsecured Data:** Fraudsters often obtain **leaked personal or banking data** to identify and target vulnerable customers.
 - Customer information** that is meant to be secure sometimes circulates freely across **banks**, enabling identity theft, phishing, and targeted scams.
 - This **breach of data privacy** allows criminals to tailor scams precisely to a victim's profile.
- Weak Institutional Safeguards:** Banks frequently fail to monitor abnormal transactions or enforce strict **Know Your Customer (KYC)** norms.
- Rapid Adaptation:** Criminals adapt and learn the loopholes faster than institutions. Then they misuse the loopholes in monitoring systems and weak KYC practices.
- Under-Resourced Cyber Police:** India's cyber police lack sufficient technology, training, and manpower, limiting their ability to respond swiftly.
 - Delays prevent recovery within the **crucial 24-hour window**. A lawmaker's wife who reported the crime immediately was able to recover ₹14 lakh quickly but a retired banker who lost ₹23 crore could not because of late reporting and late action.

Possible Interventions using Artificial Intelligence:

- Shift from Reactive to Proactive** The core idea is to move away from a reactive approach (acting only after a complaint) and adopt a proactive one, using Artificial Intelligence (AI) to prevent fraud before it succeeds.
- Personalized Customer Monitoring** AI can create personalized transaction profiles for each customer by learning their typical financial behavior. It can then instantly flag any activity that deviates from their normal patterns.
- Real-Time Alerts and Intervention** When the system detects unusual patterns, like an abnormally large transfer, it can trigger instant alerts to the customer or temporarily block the transaction until it is verified.
- Shared Fraud Intelligence** An AI-powered network would allow banks, payment systems, and telecom providers to share fraud information in real-time, instantly notifying all institutions about suspicious accounts to close security gaps.
- Empowering Law Enforcement** AI provides law enforcement with automated alerts and real-time data. This helps them act much faster, especially within the critical 24-hour window for recovering stolen funds.

Conclusion:

- To secure its digital future, India must adopt a "**protection-first**" framework where citizen safety and digital trust are paramount.



- For **banks**, this means tightening **KYC audits, securing customer data with technologies** like Blockchain, and implementing AI-driven monitoring.
- They must also ensure **victims receive swift compensation** as mandated by the Reserve Bank of India (RBI), without being unfairly blamed.
- For **law enforcement**, the focus must be on **speed, tools, and capability**. This includes establishing 24/7 rapid-response units and building stronger cross-border cooperation to tackle globalized fraud networks.
- By sincerely pursuing these reforms, **India can transform its digital economy from vulnerable to resilient**, creating an ecosystem where technology and trust work in tandem to protect every citizen.

3) India's Economic Resilience and the Road Ahead:

Source: Business Standard | Syllabus: GS III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Background:

- At the Kautilya Economic Conclave in Delhi, **Finance Minister Nirmala Sitharaman** highlighted India's remarkable economic resilience amid global turmoil.
- The **RBI Governor** reinforced this view, noting that India has reached a "resilient growth equilibrium," providing stability despite global volatility.
- While these statements inspire confidence, they also call for a **reality check**. Overreliance on domestic consumption may not be sufficient to achieve long-term, developed-economy status.

India's Economic Strengths:

- India has transformed from being among the "**fragile five**" to one of the **fastest-growing large economies**.
- The economy has shown the ability to withstand external shocks, including:
 - Global conflicts and commodity price volatility,
 - Shortages of essential raw materials and
 - Supply chain disruptions.
- Domestically, India is now less dependent on monsoon outcomes and has built a **stable financial system**.
- The **RBI** has raised its growth forecast for **2025-26** to **6.8%**, up from 6.5%, backed by strong quarterly growth figures.

Challenges in the Growth Model:

- **Dependence on domestic consumption:** India's recent growth has been primarily driven by household spending, which provides short-term stability but limits long-term expansion potential. A stronger investment push is needed to diversify growth sources.
- **Subdued private investment:** Despite increased government capital expenditure, private sector participation remains weak. This imbalance restricts the economy's ability to generate jobs and sustain momentum.
- **Rising overseas investment:** Indian firms are increasingly investing abroad. It was up by 40% in 2024-25 to \$36 billion thus indicating limited confidence in domestic investment opportunities and policy stability.
- **Unsustainable reliance on internal demand:** Excessive dependence on local consumption risks stagnation. Without strengthening investment, productivity, and exports, India cannot maintain durable high growth.



Risks of Protectionism:

- **Shift toward isolationist policies:** Relying mainly on domestic consumption while facing global uncertainty could push India toward inward-looking, **protectionist economic measures**. Such a shift may reduce global engagement and **weaken competitiveness**.
- **Overemphasis on “Atmanirbhar Bharat”:** While self-reliance is valuable, taking it to extremes may **protect inefficient industries**.
 - This would discourage innovation, reduce quality standards, and make domestic markets less dynamic.
- **Impact on producers and consumers:** Shielding local producers from competition often leads to **higher costs and lower quality for consumers**.
 - Exporters also suffer as they lose the incentive to upgrade products for global markets.
- **Long-term economic consequences:** Protectionism may seem appealing for short-term stability, but it undermines efficiency and productivity. In the long run, it can slow India’s journey toward developed-country status and global economic relevance.

Policy Imperatives and Structural Reforms:

- **Increase investment and efficiency:** India must raise both the **volume and productivity of investments to sustain high growth**. Improved efficiency will enhance competitiveness and create better-quality jobs across sectors.
- **Labour and land market reforms:** Simplifying labour regulations and making land acquisition easier are essential to attract private investment. These reforms can help industries expand and generate employment more effectively.
- **Fiscal policy and capital costs:** Continued **fiscal consolidation will lower the cost of borrowing for businesses**. A disciplined fiscal approach strengthens investor confidence and supports sustainable growth.
- **Disinvestment and privatisation:** Reviving the government’s disinvestment programme can **fund new public projects**. Privatisation also improves operational efficiency and reduces the financial burden on the state.
- **Public administration reform:** Strengthening **governance is key to enforcing contracts** and protecting property rights. Transparent and accountable institutions build trust and encourage both domestic and foreign investment.
- **Turning challenges into opportunities:** India should view **global economic challenges as a call for deeper reforms**. Adapting and innovating in this environment will make the economy stronger and more globally competitive.

Conclusion:

- India’s economy has indeed proven resilient, but **resilience alone is not enough**.
- Long-term prosperity requires **deep structural changes, stronger global integration, and enhanced competitiveness**.
- True **self-reliance** means building the capability to **compete globally**, not retreating into protectionism.
- By embracing reform and openness, India can convert current challenges into a foundation for sustained, inclusive, and globally respected growth.

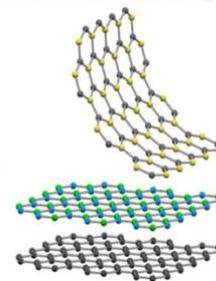


4) 2- Dimensional Materials- India's Opportunities and the Future

Source: Business Standard |Syllabus: GS III: Science and Technology- Developments and their Applications and Effects in Everyday Life.

Definition:

- Two-dimensional (2D) materials are substances that are **only one atom thick**, which is approximately **1/80,000th the width of a human hair**.
- Despite their extreme thinness, 2D materials **possess extraordinary properties** that exceed those of silicon, enabling new possibilities for electronics and energy systems.
- Graphene**, discovered in 2004, is **200 times stronger than steel and conducts electricity more efficiently than copper**, sparking a global revolution in material science.
- Over 700 2D materials have been identified**, including transition metal dichalcogenides (TMDCs), hexagonal boron nitride (h-BN), and Xenes.
- 2D materials have progressed from lab discovery to full-chip demonstrations in under 20 years, compared to over 50 years for silicon.



Characteristics:

- Electrical Conductivity:** 2D materials exhibit superior electrical and thermal conductivity, outperforming traditional materials like copper.
- Mechanical Strength:** They possess exceptional mechanical strength and flexibility, allowing **stretchability of up to 20%** without breaking.
- Semiconductor Properties:** TMDCs and other 2D materials can work as semiconductors, making them useful for next-generation computer chips, artificial brain-like computing, and memory devices.
- Quantum Potential:** 2D materials can be used to make tiny quantum bits (qubits) for powerful quantum computers.
- Wide Applications:** Applications include next-generation semiconductors, AI accelerators, quantum processors, flexible electronics, ultrathin sensors, and advanced energy systems.

Opportunities for India:

- Talent Pool:** India has a strong global talent pool in chip design, which provides a solid foundation for leadership in 2-D technologies.
- Policy Support:** The country has emerging semiconductor and quantum initiatives, including the **India Semiconductor Mission and the National Quantum Mission**, which can be utilised for 2D materials research.
- Leapfrog Potential:** India has the potential to quickly surpass global competitors in 2D materials by focusing on mission-driven research and development, thus establishing **sovereign intellectual property**.
- Research Progress:** Institutions such as the **Indian Institute of Science (IISc) and select Indian Institutes of Technology (IITs)** have already demonstrated progress in device prototypes, memory circuits, and material growth techniques.

Risks for India

- Technology Exclusion:** If India delays action in 2D materials, it risks exclusion from high-value semiconductor and quantum technology stacks.
- Supply Dependence:** Continued reliance on fragile global supply chains could compromise India's technological and economic security.
- IP Loss:** A lack of decisive investment could result in the **loss of intellectual property (IP)** and diminish India's ability to set future global technology standards.



- **Economic Lag:** Economically, India could remain stuck in **low-margin legacy semiconductor devices**, missing the opportunity to benefit from high-value computing and advanced energy systems.

Way Forward

- **National Mission:** India should **launch a National 2D Materials Mission**, structured as a **10-year, milestone-driven program** integrated with existing semiconductor and quantum initiatives.
- **Innovation Hubs:** India should establish national innovation hubs focusing on semiconductors and quantum devices, energy and thermal management solutions, and other applications of 2D materials.
- **Lab-to-Market:** India must accelerate lab-to-market pathways by building **co-located facilities for prototyping, testing, and startup incubation**, supported by public-private partnerships.
- **Indigenous R&D:** Sustained indigenous research and scale-up should be prioritized, with **continuous funding** from discovery to deployment, focusing on sovereign intellectual property in 2D-scale electronics and quantum devices.
- **Global Collaboration:** India should forge **strategic global collaborations** with leaders such as **IMEC, the Graphene Flagship**, and 2D research centers in the US, UK, and Singapore to gain access to advanced infrastructure while simultaneously developing domestic capabilities.
 - *IMEC is the world's largest independent research and innovation center for nanoelectronics and digital technology.*

Conclusion

- **Global power is shifting from traditional measures such as GDP**, industrial output, and control over natural resources **to frontier technologies** including semiconductors, algorithms, data flows, rare minerals, and clean energy.
- Mastery of these advanced technologies determines a nation's economic competitiveness, national security, and global influence.
- The **opportunity for India to lead in 2D materials is rapidly closing**, and immediate, mission-driven action is essential.
- **Bold investment** in 2D materials will secure India's economic growth, national security, and global technological influence.
- Acting decisively now will enable India to **shape the future of computing, quantum technologies, and energy systems**.

5) India's Sovereign Wealth Fund Proposal

Source: Business Standard | Syllabus: GS III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Background:

- A **Sovereign Wealth Fund (SWF)** is a **state-owned investment fund established to manage a nation's surplus wealth**, aiming to generate long-term financial returns and secure economic prosperity for future generations.
 - These funds typically **invest globally and domestically** in diverse assets like **stocks, bonds, and infrastructure**.
- India is reportedly considering the establishment of a **Sovereign Wealth Fund (SWF)**, a move that would fundamentally **reshape how the government manages its vast portfolio** of public assets.



- This proposal is about adopting a professional, commercially-driven approach to national economic strategy, drawing inspiration from **successful global models like Singapore's Temasek**.

The Global SWF Landscape:

- Sovereign Wealth Funds collectively manage over **\$11 trillion** globally, with their origins tied to key economic shifts:
- **First Wave (1970s-1980s):** Fueled by oil-rich nations (like Kuwait and Abu Dhabi) seeking to stabilize volatile commodity revenues, and by nations like Singapore aiming for fiscal prudence.
- **Second Wave (2000s):** Driven by fast-growing, export-led economies (like China and Russia) looking to diversify massive foreign exchange reserves and secure better long-term returns.
- A **standout model is Temasek of Singapore**. It did **not rely on oil or foreign reserves** but was created by **pooling government-owned companies** (e.g., Singtel, Singapore Airlines).
 - Temasek pioneered the "**state-as-shareholder**" model, proving that public ownership can align with professional commercial performance, **inspiring later funds like Malaysia's Khazanah Nasional and Saudi Arabia's Public Investment Fund**.

The Need for an Indian SWF

- **Unlocking Massive Dormant Wealth:** India's current listed government equity holdings (in PSUs and banks) are valued at about **₹44 trillion (\$495 billion)**.
 - Pooling this scattered wealth under a single, professionally managed SWF would instantly create a global financial giant, ranking among the world's top 10.
- **Professionalizing Management and Governance:** The SWF would enforce the **separation of ownership and management**.
 - It moves control away from various government ministries (designed for policymaking) to **professional fund managers**, leading to **improved corporate performance** and efficiency for state-owned enterprises (the "**state-as-shareholder**" model).
- **Strategic Domestic Investment:** The fund would evolve from a passive asset holder into an **active economic strategist**.
 - It can dedicate capital to long-term, high-priority domestic sectors like the **clean energy transition, semiconductor ecosystem, and infrastructure**, which are critical for future global competitiveness.
- **Attracting Foreign Capital:** A professionally run SWF, adhering to international governance standards, acts as a powerful signal of confidence.
 - It would attract **global co-investors and partners**, leveraging India's own assets to draw in tens or hundreds of billions in foreign capital over time (the multiplier effect).
- **Fiscal Health and Non-Debt Resources:** By generating better returns and facilitating strategic divestment, the fund can create a consistent source of **non-debt financial resources**.
 - Even a small annual divestment percentage could raise over \$10 billion, significantly helping to reduce the fiscal deficit.
- **Modernizing an Outdated System:** The current fragmented system of managing state equity across **numerous ministries** was designed nearly 70 years ago.
 - Establishment of an SWF can help to modernize India's wealth management structure and give the nation greater **economic heft and global influence** by moving "from ministries to markets."

Conclusion:

- The immediate priority for India is to adopt a governance structure that **separates ownership from political control**, mirroring successful models like Temasek.
- The SWF must be given a **professional, long-term mandate** focused on **maximizing commercial returns** and adhering to global standards of transparency (like the **Santiago Principles**) to unlock its full potential value.



- The "Santiago Principles" are a set of 24 voluntary guidelines for Sovereign Wealth Funds (SWFs) that promote transparency, good governance, and prudent investment practices.
- The SWF must evolve beyond passive asset holding to become an **active engine for national growth**. It should strategically channel capital into critical sectors such as the **clean energy transition, semiconductors, and large-scale infrastructure**.
- This can help attract international co-investment, thereby **turning India's existing wealth into a powerful catalyst for its future economic development**.

6) Global Oil Market and India

Source: The Hindu | Syllabus: GS III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Background:

- While global attention is often drawn to geopolitical flashpoints such as Gaza, Ukraine, or U.S. tariff disputes, a more important struggle is unfolding through the battle for dominance in the **global oil market**.
- The contest between **OPEC+ producers and non-OPEC exporters**, shaped by evolving consumption and production trends, carries profound implications for India, the world's **third-largest oil importer**.
 - OPEC, stands for the **Organization of the Petroleum Exporting Countries**, is an intergovernmental organization of **12 major oil-exporting nations** that coordinates their petroleum policies.
 - OPEC+ is a broader, informal coalition that includes the **OPEC members plus 10 other major non-OPEC oil-producing countries**, notably **Russia**, to influence global crude oil prices and supply.

Global Oil Market Dynamics

- The global oil market, responsible for over 100 million barrels per day (mbpd) of production and a daily trade value topping \$3 billion, is currently defined by a significant oversupply.
- **Supply Enhancements:** New technologies like **shale, horizontal drilling, and ultra-deep continental shelf drilling** have greatly enhanced crude oil production over the past two decades.
- **Surging Production:** September 2025 production surged by **5.6 mbpd** over the previous year (September 2024).
 - OPEC+ contributed **3.1 mbpd** by breaking the COVID-19-era production cuts.
 - The remaining growth came mainly from non-OPEC+ producers, including the **U.S., Canada, Brazil, Guyana, and Argentina**.
- **Approaching Peak Demand:** Global demand appears to be nearing a peak, largely due to stagnation in industrialized countries.
 - Factors curbing demand in industrialised nations include a slow **post-COVID-19 economic recovery, climatic concerns**, and the rising popularity of **Electric Vehicles (EVs)**.
 - Only about a tenth of the expected **1.3 mbpd** global demand growth in 2025 is projected to come from the 38 countries of the **Organisation for Economic Co-operation and Development (OECD)** with **46% of the world's GDP**.
 - **China's** consumption has been curbed by an **economic slowdown** and the growth of EVs, which now account for **half of the vehicles sold** there.

The Price Decline:

- The resulting **supply-demand imbalance** has led to a noticeable decline in crude prices, despite various geopolitical factors that would typically exert upward pressure.



- **Price Drop:** Brent oil prices, currently around **\$61 a barrel**, have declined by **16%** since the start of the year.
 - **Brent Crude is the benchmark** used for the oil originating from **oil fields in the North Sea** between the Shetland Islands and Norway.
 - It is used to **set the price for about two-thirds of the world's internationally traded crude oil**.
- **Market Disagreements:** There is a significant dispute between major energy forecasters:
 - **OPEC** projects a small supply shortage of about **50,000 bpd** in 2026.
 - The **IEA (International Energy Agency)** projects an unprecedented oversupply of **4 mbpd**.
 - Most other think-tanks align with the IEA, predicting an oversupplied market and Brent prices dropping a further **10% to 20%**.
- **Geopolitical Factors:** The price decline has occurred despite disruptions like the **China-U.S. tariff war** and Ukrainian drone attacks on **Russian oil infrastructure**.
- **Internal OPEC+ Dynamics:** The looming glut has created tension within OPEC+:
 - **Saudi Arabia** wants to quickly unwind production cuts to regain market share and reverse revenue shortfalls.
 - **Russia**, facing severe sanctions, favors a more gradual reduction of cuts.

Potential Impact on India:

- **Positive Economic Impact:** The simultaneous decline in both the **oil price** and the **U.S. dollar** (the pricing currency) is a net positive for India.
 - A dollar's decline in oil prices improves India's **current account deficit** by **\$1.6 billion**.
 - It also reduces the government's **subsidy burden** and **inflation**.
 - Improved fiscal balance, due to the government retaining gains, can **boost capital expenditure** and enhance **growth**.
- **Reduced Geopolitical Friction:** Oversupply(leading to decline in prices) could lessen India's dependence on **discounted Russian crude**, potentially removing the cause for **tariff frictions with the U.S.**
- **Risks:** The weakening of West Asian economies due to lower oil prices could cause a stagnation in India's **remittances, exports, and investments**.

Conclusion:

- The current oil surplus offers India a **temporary economic reprieve**, with potential gains in fiscal and external stability.
- However, given the **cyclical and volatile** nature of the oil market, this relief may not last.
- India must **stay focused on energy diversification and consumption reduction strategies**, through renewables, efficiency measures, and EV adoption, to build resilience against future oil market shocks.

7) Green Crackers

Source: Indian Express | **Syllabus:** GS III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Definition and Background:

- **Green Crackers** were developed by scientists at the **Council of Scientific and Industrial Research-National Environmental Engineering Research Institute** (CSIR-NEERI) to combat the thick, hazardous smog caused by traditional firecrackers during festivals.



- These crackers branded as **SWAS (Safe Water Releaser)**, **STAR (Safe Thermite Cracker)** and **SAFAL (Safe Minimal Aluminium)**, use safer chemistry to reformulate traditional mixtures by **reducing toxic metals and introducing dust suppressants**.
- They replace highly toxic **barium nitrate** (responsible for the green flame) with alternatives like **potassium nitrate or strontium salts**, limit aluminium content, and add compounds such as **zeolite and iron oxide** to capture soot.
- India is the **only country** with a formal, government-backed program for developing and certifying these low-emission fireworks.

Advantages:

- Lower Emissions:** Green crackers achieve a **30-40 percent reduction in particulate matter** and gas emissions compared to conventional fireworks.
- Reduced Toxicity:** They significantly cut the use of highly soluble and toxic metals. Specifically, they reduce the **barium load** in airborne particulate matter by **30-60 percent**.
- Marginally Safer Manufacturing:** The reformulated chemistry makes the production process slightly safer.
- Authenticity System:** Each approved batch includes a logo and **Quick Response code** for consumers to verify the product's low-emission certification.

Concerns

- Ultrafine Particle Paradox:** Despite the lower overall mass of emissions, some studies report a **rise in the number concentration of ultrafine particles** (smaller than 100 nanometers), which are highly penetrative and pose serious health risks.
- Residual Contamination:** They are **not pollution-free**. Analysis shows that residual toxins like aluminium, copper, and strontium are still present in the ash and contaminate the soil, although to a lesser extent than traditional crackers.
- Persistent Health Risks:** Emissions are still linked to respiratory, cardiovascular, and neurological problems. Medical professionals warn that **any form of smoke inhalation remains unsafe**, especially for vulnerable groups.
- Implementation Failure:** The system is undermined by the **proliferation of counterfeit products**, making it difficult for consumers to guarantee they are purchasing a certified low-emission cracker.

Way Forward

- Transitional Measure:** Green crackers should be treated as a **transitional measure**, a necessary improvement over old formulations, but not the final solution. A 30 percent emission cut is insufficient for safety in heavily polluted cities.
- Focus on Daily Emissions:** While the short-term impact of firecrackers is severe, their usage is seasonal. Long-term air quality solutions require addressing the **dominant, year-round contributors** to pollution, such as **vehicles, industries, and waste burning**.
- Achieving net-zero goals requires a **societal transformation** that extends beyond festivals to embrace broader behavioral changes in daily choices, including how **energy is consumed, waste is managed, and travel is undertaken**.



8) India's Private Corporate Investment Post-2011

Source: Business Standard | Syllabus: GS III: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Background:

- Private corporate investment plays a crucial role in sustaining economic growth, employment, and productivity.
- In India, however, investment trends over the past decade have raised concerns. Few causes reflect this structural slowdown since 2011–12.

Trends in Private Corporate Investment:

- **Structural Break and Growth Deceleration:** Private corporate investment in India experienced a clear structural break around 2011–12, marking a regime shift in its behavior and momentum.
 - **Growth in private gross fixed capital formation (GFCF) decelerated sharply**, from 40.7 per cent during 2003–08 and 25.2 per cent during 2003–12 to only 10.3 per cent during 2012–24.
 - This slowdown **coincided with a period of economic stress** characterised by **high inflation, a widening current account deficit, capital outflows, and significant pressure on the exchange rate**.
 - The resulting macroeconomic instability led to **India** being classified among the “**Fragile Five**” **emerging economies** in 2013.
- **Weakening of the Accelerator Effect:** The accelerator effect, which measures the responsiveness of private investment to economic growth, has weakened significantly since 2011–12.
 - A one per cent increase in GDP growth now results in only a 1.5 per cent rise in private capital expenditure, compared with nearly 3 per cent during the earlier period between 2003 and 2012.
 - This suggests that **output growth is no longer generating a proportionate increase in private investment as it once did**.
 - The reduced sensitivity **reflects lower business confidence** and a diminished ability of GDP growth to stimulate new private investment activity.
- **Decline in Public–Private Investment Linkages:** The once strong relationship between public capital expenditure and private investment has deteriorated markedly in the post-2012 period.
 - The correlation between public investment and one-year-forward private investment declined from 0.54 during 2003–12 to just 0.13 after 2012–13.
 - This collapse implies that **higher public spending on infrastructure and capital projects is no longer increasing private investment** effectively.
- **Global Context:** While a **deceleration in private investment** has been a common trend across **emerging market and developing economies (EMDEs)** after the **2008 financial crisis**, India's slowdown has been notably more severe.
 - Unlike other EMDEs, **India is less dependent on external demand**, suggesting that global factors alone cannot explain its investment weakness.
 - Moreover, **public capital expenditure in India remained relatively robust** even during fiscal consolidation, and the **business environment stayed favorable** with better **financial access, structural reforms, and political stability**.
 - The persistence of **low private investment despite these advantages** highlights deeper structural and demand-side challenges within the domestic economy.



Causes for Weakening Private Investments:

- **Weak Demand Conditions:** Private investment has been constrained by **weak domestic and external demand**, as businesses face limited prospects for expanding capacity.
 - **Capacity utilisation in key industries** such as steel, cement, and passenger vehicles **remains low, at around 70–75 per cent**, compared with the **80 per cent** benchmark generally required to **trigger new investments**.
 - The reduced demand environment has therefore acted as a major drag on private corporate investment in India since 2011–12.
- **Moderate Private Consumption Growth:** Although real private final consumption expenditure (PFCE) grew marginally faster at 6.1 per cent during 2012–24 compared with 6 per cent in 2002–12, nominal consumption growth slowed notably to 11.6 per cent from 13.5 per cent earlier.
 - The apparent improvement in real consumption has been **overstated due to the use of the wholesale price index (WPI) and consumer price index (CPI) as deflators** instead of the producer price index, leading to an inaccurate reflection of actual purchasing power.
 - Consequently, **household spending power has not been as strong as headline figures suggest**, dampening demand for new investments.
- **Structural and Policy Factors:** **Slow wage growth** in both the formal and informal sectors has **reduced disposable income** and, in turn, consumption-driven demand for goods and services.
 - **High goods and services tax (GST) rates, until** their recent rationalisation, further constrained household spending and business profitability.
 - Together, these factors have weakened purchasing power and **reduced overall demand** in the economy.
- **Weak External Demand:** India's external sector has faced prolonged weakness, reflected in a **sharp slowdown in non-oil exports**, which grew at an annual average of only 8.1 per cent during 2012–24 compared with 19.9 per cent during 2003–12.
 - The **post-2008 global environment of sluggish trade growth**, declining foreign direct investment inflows, and **economic uncertainty** has further aggravated the slowdown in India's private investment cycle.

Steps to Revive Private Investment:

- **Tax Relief:** Measures like providing **direct tax relief** (seen in the last Union Budget) help boost private consumption.
 - The recent **rationalization of GST rates** is a key step that should help spur private consumption.
- **Accurate Economic Measurement:** The government should promote the use of the **Producer Price Index (PPI)** and apply **double deflators** to obtain an accurate picture of economic activity.
- **Utilizing Financial Health of Companies and Banks:** Companies have paid down old debt, reducing financial risk and making them attractive borrowers for future projects.
 - **Banks fixed their balance sheets** by managing bad loans, so they are now able and eager to offer new credit.
 - This positive situation should be utilized properly to boost private investments.
- **Trade Agreements:** India should fasten its **Free Trade Agreements (FTAs)** negotiations with key partners like the US and the European Union on mutually beneficial terms.

Conclusion:

- The revival of the private investment cycle is **dependent on sustained demand growth** and a favourable business environment.
- Therefore, the **recent rationalisation of GST rates** is one of the most significant steps taken by the government, as it could help spur private consumption.
- It should now be **followed up with structural reforms** that could be initiated to boost productivity and unleash the "animal spirits" of corporate India.



9) Can the Stubble Burning Problem be Solved?

Source: Business Standard | Syllabus: GS III: Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Background:

- Stubble burning is the practice of **intentionally setting fire to the straw and residue** left on agricultural fields after the harvest of crops like paddy (rice) or wheat.
- This practice is typically carried out by farmers to quickly clear the fields for the next planting cycle, especially when the time window between harvesting one crop and sowing the next is very short.
- It is a major issue in parts of North India, particularly Punjab and Haryana, following the Kharif season harvest (especially of rice).
- Despite various measures tried over the past seven years, including machine distribution and fines, the polluting practice persists due to **economic constraints and systemic inefficiencies** faced by farmers.

Problems due to Stubble Burning:

- **Severe Air Pollution and Smog:** Stubble burning is a major contributor to **air pollution** in North India, especially the National Capital Region (NCR).
 - It releases large amounts of **Particulate Matter (PM2.5 and PM10)**, carbon monoxide, methane, and other harmful pollutants, creating a dense layer of **smog** that chokes cities and severely reduces visibility.
- **Major Health Hazards:** The resulting air pollution significantly worsens **respiratory and cardiovascular health issues**.
 - Exposure to the high concentration of PM can lead to **asthma, bronchitis**, reduced lung capacity, and increased risk of heart disease and even cancer, affecting millions of people, particularly children and the elderly.
- **Loss of Soil Fertility and Nutrients:** Burning the stubble destroys the **essential nutrients** and **organic matter** in the top layer of the soil.
 - This diminishes soil fertility over time, leading to lower crop yields and increasing the farmers' dependence on **expensive chemical fertilizers** to compensate for the lost natural soil richness.
- **Destruction of Soil Microorganisms:** The heat from the fires kills beneficial **microorganisms, fungi, and bacteria** vital for soil health and decomposition.
 - These organisms help in nutrient cycling and soil structure, and their loss further degrades the agricultural land.
- **Risk of Uncontrolled Fires:** Open field burning carries the constant risk of fires spreading **out of control**.
 - These accidental fires can damage neighboring fields, structures, stored materials, and even electrical equipment, causing a direct threat to property and life.

Comprehensive Roadmap to Control the problem:

- **On-Farm Crop Residue Management (CRM):** The current infrastructure of **Custom Hiring Centres (CHCs)**, which own over 250,000 straw-handling machines, is severely **underperforming due to inefficient and opaque rental systems**.
 - Only about 40% of the fleet is operational, leaving many farmers with limited access.
 - State governments must mandate a minimum operational target for each machine annually for each CHC to ensure that the usage is at the maximum level.
 - **Improve Access and Efficiency:** Farmers and CHCs should be connected through **mobile apps** like Punjab's **Unnat Kisan** for easy machine booking.



- Technical training on machine maintenance is also crucial to reduce downtime.
- By 2026, the government should redesign the subsidy scheme to provide operational **support to top-performing CHCs** that consistently meet minimum service targets.
- **Farmer Confidence Building:** Misinformation and skepticism about using CRM machines (e.g., fears of pest attacks and low yields) remain significant barriers to adoption.
 - States should allocate up to **5 per cent of their annual CRM budget** (a major increase from the current 0.5% allocation) to **strategic Information, Education, and Communication (IEC) activities**.
 - Agricultural departments should organize **myth-busting exercises** and field demonstrations that provide farmers with checklists of **best practices** and concrete evidence of cost savings.
- **Scaling Up Ex-Situ Residue Utilization:** Developing infrastructure to **use crop residue off-site (ex-situ) as fuel or feedstock** (e.g., for compressed biogas (CBG) and biochar) is crucial, but targets are unmet.
 - **Supply chains** to utilize at least **30 per cent of paddy residue** should be rapidly **developed**. Targets remain unmet due to high biomass delivery costs and a **lack of machinery, storage, and skilled workers**.
 - States must undertake a **price discovery study** this year to determine a feasible pricing range for paddy straw-based plants that ensures project viability and fair returns for farmers.
 - By 2026, state energy development agencies must **standardize biomass storage guidelines** to minimize losses and fire risks.
- **Developing Circular Markets :** Sustaining ex-situ projects requires **creating viable markets** for their by-products and reducing the amount of straw produced.
 - Promotion of commercial markets for **fermented organic manure** (from CBG plants) and **biochar** to secure the financial viability of these sectors should be taken up.
 - The Union government must notify quality standards for biochar and use the global demand for **carbon credits** to unlock new revenue streams for farmers.
 - **State agricultural universities** should **establish application guidelines** (dosage, frequency) for fermented manure and biochar, supported by field trials and training.
 - Starting with the next sowing season, states should focus on **reducing straw generation** by promoting **short-duration paddy varieties** like PR 126 over high-residue varieties like PUSA 44.
 - The Union government must mandate a **per-acre paddy procurement cap** equivalent to the yield of short-duration varieties, thus making high-residue varieties economically unattractive.

Conclusion:

- The end of stubble burning is not an idealistic notion but a **pragmatic and achievable road map** that can deliver cleaner air across the NCR.
- The measures explained above are specific and time-bound. Success lies in a **collaborative effort** involving policymakers, farmers, industry, and academia, replacing "outcries of despair" with a determined "**can-do attitude**" starting this winter.



RELATED PYQS

1. What are the different elements of cyber security? Keeping in view the challenges in cyber security, examine the extent to which India has successfully developed a comprehensive National Cyber Security Strategy. (2022)
2. “Caste system is assuming new identities and associational forms. Hence, caste system cannot be eradicated in India.” (2018)
3. “The states in India seem reluctant to empower urban local bodies both functionally as well as financially.” Comment. (2023)
4. Discuss the changes in the trends of labour migration within and outside India in the last four decades. (2015)
5. Can overuse and free availability of antibiotics without Doctor’s prescription, be contributors to the emergence of drug-resistant diseases in India? What are the available mechanisms for monitoring and control? Critically discuss the various issues involved. (2014)



PRACTICE QUESTIONS

1. Alternate Dispute Redressal mechanisms can help in increasing the access and affordability of justice for common people of India. Analyse in detail.
2. Finance is essential for enabling the green transition of the developing countries. Analyse this statement in India's context.
3. Artificial Intelligence has the ability to give an effective solution for the rising cybersecurity challenges in India. Examine critically.
4. India's growth model is fragile and can be affected by many global factors. Analyse this statement in the context of rising protectionism.
5. Mental health crisis is a rising problem and a persistent challenge which requires proper care at individual level and societal level. Elaborate.
6. "Financial access is not synonymous with economic empowerment." Analyze the statement with respect to women-centric cash transfer schemes in India.
7. Caste based crimes are increasing not only due to social reasons but also due to political reasons in India. Examine.
8. Define 2-Dimensional (2D) materials. What opportunities does it provide for India? Explain in detail.
9. Urban local bodies of India are underfunded and under-powered. Examine.
10. Analyse the need for an Indian Sovereign Wealth Fund.
11. The evolving dynamics of the global oil market, characterized by surging production, approaching peak demand, and internal OPEC+ tensions, present a complex scenario for India. Analyse.
12. Internal migration in India is due to multiple factors and also has multiple impacts. Elaborate.
13. Green crackers have the ability to solve the problem of air pollution in India caused due to crackers. Critically analyse.
14. In India and on a global level, many measures have been taken to address Anti-microbial resistance. What is the need and what are the problems associated with this Anti-microbial resistance.
15. Regulating the content generated using Artificial Intelligence (AI) is an emerging challenge. Explain.
16. Trace the trend of corporate private investment in India in the last decade and analyse the causes for the dominant trend in the period.



17. Stubble burning is an important reason for rising air pollution in the National Capital Region (NCR). Suggest practical solutions to address this problem.

18. India-Afghanistan relations have seen many ups and downs over the last two decades. Analyse the recent impediments in this relation.

19. Examine the recent issues in India's relation with the ASEAN bloc. Also suggest pragmatic pathways to overcome the issues.

**The Best Tunes of All—
Move to Carnegie Hall**

Includes Birthday Friday, Feb. 11

10:00 P.M. EST

10:30 P.M. EST

11:00 P.M. EST

11:30 P.M. EST

12:00 A.M. EST

12:30 A.M. EST

1:00 A.M. EST

1:30 A.M. EST

2:00 A.M. EST

2:30 A.M. EST

3:00 A.M. EST

3:30 A.M. EST

4:00 A.M. EST

4:30 A.M. EST

5:00 A.M. EST

5:30 A.M. EST

6:00 A.M. EST

6:30 A.M. EST

7:00 A.M. EST

7:30 A.M. EST

8:00 A.M. EST

8:30 A.M. EST

9:00 A.M. EST

9:30 A.M. EST

10:00 A.M. EST

10:30 A.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 P.M. EST

11:30 P.M. EST

12:00 A.M. EST

12:30 A.M. EST

1:00 A.M. EST

1:30 A.M. EST

2:00 A.M. EST

2:30 A.M. EST

3:00 A.M. EST

3:30 A.M. EST

4:00 A.M. EST

4:30 A.M. EST

5:00 A.M. EST

5:30 A.M. EST

6:00 A.M. EST

6:30 A.M. EST

7:00 A.M. EST

7:30 A.M. EST

8:00 A.M. EST

8:30 A.M. EST

9:00 A.M. EST

9:30 A.M. EST

10:00 A.M. EST

10:30 A.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:00 P.M. EST

4:30 P.M. EST

5:00 P.M. EST

5:30 P.M. EST

6:00 P.M. EST

6:30 P.M. EST

7:00 P.M. EST

7:30 P.M. EST

8:00 P.M. EST

8:30 P.M. EST

9:00 P.M. EST

9:30 P.M. EST

10:00 P.M. EST

10:30 P.M. EST

11:00 A.M. EST

11:30 A.M. EST

12:00 P.M. EST

12:30 P.M. EST

1:00 P.M. EST

1:30 P.M. EST

2:00 P.M. EST

2:30 P.M. EST

3:00 P.M. EST

3:30 P.M. EST

4:0