

FWD

FORTUNE WEEKLY DIGEST



> HEALTH GOVERNANCE

> INDUS WATER TREATY

> THE GIG FORCE IN INDIA

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EDITOR'S NOTE

As UPSC aspirants, it is essential to stay updated on current affairs to excel in the examination. This **Fortune Weekly Digest (ForWarD)** brings you the latest news and developments from around the world, carefully curated and analyzed to help you prepare for the Civil Services (Main) Examination.

We understand that time is precious, and we have made sure to present the information in a concise and easy-to-understand manner.

The magazine is divided into different sections. Mains relevant topics have been covered in detail with a UPSC previous year question perspective. The jot downs are examples and interesting facts to enrich your answer writing. Cherrypicks has some key words from the week, helpful again in answer writing and essay. We have also included essay topics and sample questions to help you gauge your preparation.

We have designed this magazine to best supplement the daily current affairs notes we have launched by the name of **FIND (Fortune IAS News Daily)** and **FINDER (Fortune IAS News Daily Explainer)** and the **Fortune Prelims Precise** monthly compilation. This magazine will be explained in detail and your queries addressed in a live class we conduct.

At a time when there is no dearth of current affairs materials, our hope is help you get a one-stop solution for all your current affairs needs.

This magazine is a work in progress and your feedback will be appreciated.

We hope that this magazine will serve as a valuable resource for your exam preparation and contribute to your success in the UPSC examination.

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**FIRST ATTEMPT TOPPERS FROM
OUR PRELIMS CUM MAINS BATCH**

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MANJIMA P
AIR 235

FABI RASHEED
AIR 71

SWATHI S BABU
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THE GIG FORCE IN INDIA

Syllabus: GS III - Indian Economy

PYQ MAPPING

Q) Examine the role of 'Gig Economy' in the process of empowerment of women in India (2021)

WHY IN NEWS

A recent **The Hindu** data report highlights that **most of India's gig workers remain outside the government's social-security framework**, with only **8.58 lakh registered on the e-Shram portal** as of January 2026.

INTRODUCTION

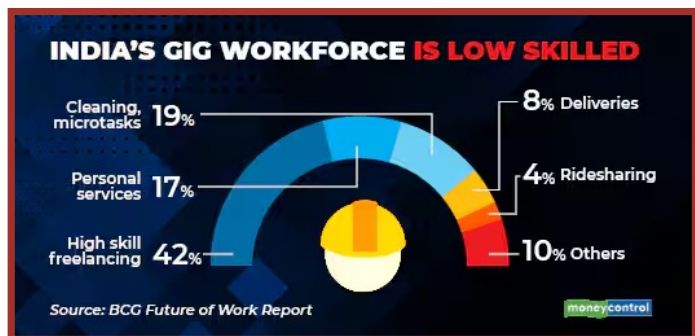
The **gig economy is transforming India's labour market** by creating flexible, technology-enabled employment outside the traditional employer–employee relationship. With India's gig workforce projected to rise from **1.2 crore in FY2024-25 to 2.35 crore by 2029-30**, ensuring social security and decent working conditions has become an important policy challenge.

ABOUT GIG WORK

- 🔗 **Definition:** A gig worker earns income through work arrangements outside the traditional employer–employee relationship, usually on a task or contract basis.
- 🔗 **Platform Work:** A subset of gig workers whose work is mediated through online platforms or apps, such as ride-hailing, food delivery and online freelancing.

Nature of Work- Gig work includes **delivery, transportation, logistics, domestic and personal services, freelancing and professional services.**

STATUS OF GIG WORK IN INDIA



- 🔗 **Rapid Growth:** India's gig workforce increased from **77 lakh in FY2020-21 to 120 lakh in FY2024-25**, registering a **55% rise**.
- 🔗 **Share in Workforce:** Gig workers now account for

over **2% of India's total workforce.**

- 🔗 **Economic Contribution:** The non-agricultural gig economy could contribute around **₹2.35 lakh crore to GDP by 2029-30.**

FACTORS DRIVING GIG WORK

- ➔ **Urbanisation:** Rapid urbanisation has increased demand for **mobility, food delivery, home services and logistics.**
 - o **Example:** Porter App for localized logistics in Tier-1 and Tier-2 cities.
- ➔ **Smartphone Penetration:** More than **80 crore smartphone users** have created a large digital market for platform-based services.
- ➔ **UPI Ecosystem:** Around **15 billion UPI transactions per month** support rapid digital payments and platform-based economic activity.
- ➔ **Worker Flexibility:** Flexible working hours attract students, migrants, women and people seeking supplementary income.
- ➔ **Business Demand:** Platforms can access workers on demand without maintaining a conventional permanent workforce.
- ➔ **Changing Consumer Behaviour:** Demand for **instant delivery, ride-hailing, e-commerce and app-based services** has expanded gig employment.

BENEFITS

- ☀️ **Employment Generation:** Creates large numbers of livelihood opportunities, particularly in urban services.
- ☀️ **Flexible Employment:** Allows workers to choose working hours and potentially combine gig work with other employment.
- ☀️ **Low Entry Barriers:** Many platform jobs require relatively limited formal qualifications, enabling the **democratisation of work.**
- ☀️ **Women's Participation:** Flexible work arrangements can help women participate in the labour market.
- ☀️ **Consumer Convenience:** Provides quick and affordable access to transport, delivery, logistics and household services.
- ☀️ **Economic Growth:** The expanding gig economy contributes to **productivity, services-sector growth and economic diversification**

CHALLENGES

- ✧ **Lack of Social Security:** Irregular workers are highly vulnerable to sudden **out-of-pocket expenditure** due to illness or accidents.
- ✧ **Income Insecurity:** Earnings can fluctuate according to demand, incentives, working hours and platform policies which result in a severe **living wage deficit**.
- ✧ **Algorithmic Control:** Automated allocation of tasks and algorithm-based incentives can influence workers' earnings and often result in **arbitrary deactivation** of accounts.
- ✧ **Weak Bargaining Power:** The dispersed, app-based nature of the work causes the **atomisation of labour** and limits the ability to negotiate wages or working conditions.
- ✧ **Absence of Traditional Employer Relationship:** : By deliberately labelling workers as **"independent contractors" or "partners,"** platforms operate in a **regulatory gray zone**.
- ✧ **Gender and Safety Concerns:** Women workers may face harassment, unsafe working conditions and inadequate support mechanisms.

GOVERNMENT INITIATIVES

- 🇮🇳 **Labour Codes:**
 - o The four Labour Codes came into effect from **21 November 2025**, extending social-security coverage to gig and platform workers.
 - o For the first time, it legally recognised **gig workers and platform workers** and provided for social-security measures.
 - o The Code provides for a **Social Security Fund** to finance welfare schemes for unorganised, gig and platform workers.
- 🇮🇳 **e-Shram Portal:** Launched in **August 2021**, it provides a National Database of Unorganised Workers and includes gig and platform workers.
- 🇮🇳 **Budget 2025-26:** Announced **e-Shram registration, identity cards and healthcare under Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)** for online platform workers.
- 🇮🇳 **State-Level Protection:**
 - o **Rajasthan** is the **first state** to enact Platform-Based Gig Workers Act, 2023.

- o **Karnataka Platform Based Gig Workers (Social Security and Welfare) Act, 2025**, providing for a Welfare Board, welfare fund, registration, occupational safety and transparency in automated decision-making.
- o Telangana introduced a landmark **₹5 lakh accidental insurance and compensation scheme** for the families of gig workers.

WAY FORWARD

- ✧ **Universal Social Security:** Ensure portable social-security benefits covering **health, accident, maternity, disability and old age**.
- ✧ **Platform Accountability:** Establish clear obligations for aggregators regarding wages, safety, insurance and worker welfare.
- ✧ **Algorithmic Transparency:** Ensure transparency and accountability in **automated ratings, task allocation, incentives and deactivation**.
- ✧ **Skill Development:** Integrate gig workers with **reskilling and upskilling programmes** to enable movement towards higher-value employment.
- ✧ **Worker Representation:** Facilitate collective representation and effective grievance-redressal mechanisms.
- ✧ **Gender-Sensitive Policies:** Improve safety, maternity protection, childcare support and equal opportunities for women gig workers.

CONCLUSION

Gig work can become an important source of **employment, flexibility and inclusive growth** in India, but its expansion should not come at the cost of worker security. A balanced framework combining **social protection, fair remuneration, platform accountability and skill development** is essential for building a future-ready and equitable labour market.

SAMPLE QUESTION

Q) The gig economy is emerging as a major source of employment in India, but it also raises concerns regarding social security and decent work." Discuss. **(10 marks, 150 words)**

GDP DEBATE IN INDIA

Syllabus: GS III - Indian Economy

PYQ Mapping

Q) “Explain the difference between computing methodology of India’s Gross Domestic Product (GDP) before the year 2015 and after the year 2015.” (2021)

Why in the News?

India’s GDP estimates have come under renewed scrutiny after **7.8% real GDP growth was reported for Q1 FY 2026-27**, alongside significant revisions under the new **2022-23 base-year GDP series**, triggering debate over rebasing, double deflation and statistical transparency.

Introduction

Gross Domestic Product (GDP) measures the monetary value of final goods and services produced within a country and remains a key indicator of economic performance. India’s current GDP debate is therefore not merely about the growth rate, but also about the **methodology, quality of underlying data, revisions and credibility of national accounts statistics**.

For a detailed comparison between the new GDP series and the old GDP series, refer to FWD (23 February–1 March 2026).

What Triggered the Latest Controversy?

- ➔ **Higher-than-expected growth:** India reported **7.8% real GDP growth in Q1 FY27**, higher than the RBI’s projection of around 7%, attracting scrutiny over how the figure was calculated.
- ➔ **Revision of previous year’s GDP:** The previous year’s Q1 nominal GDP level was revised substantially downward under the new series, reducing the statistical base against which the latest growth was calculated.
- ➔ **Subhash Chandra Garg’s criticism:** Former Finance Secretary Subhash Chandra Garg argued that using the earlier GDP level would produce much lower growth and cited a nominal growth figure of around **2.6%**.
- ➔ **Old-versus-new series problem:** Economists countered that the 2.6% calculation compared figures from the **old 2011-12 series with the new 2022-23 series**, which is methodologically inappropriate because the two series use different prices, datasets and estimation techniques.

- ➔ **Legitimate concern over revisions:** Although cross-series comparison is invalid, the magnitude of the downward revision itself raised questions about **why earlier GDP estimates changed substantially and how revisions affect subsequent growth rates**.
- ➔ **Double-deflation debate:** The simultaneous introduction of **double deflation, a new Producer Price Index and revised industrial indicators** led economists to question whether India has sufficiently detailed input and output price data for accurate implementation.
- ➔ **Government’s response:** MoSPI and NITI Aayog maintained that revisions are a normal consequence of rebasing and that double deflation represents an improvement rather than manipulation of GDP estimates.

Why is India’s GDP Measurement Debated?

- 🇮🇳 **Change in Base Year:**
 - o India has shifted the GDP base year from **2011–12 to 2022–23** to reflect structural changes in production, consumption, technology and relative prices. However, rebasing also involves changes in datasets, sectoral weights and estimation methods, making direct comparison with the old series difficult.
- 🇮🇳 **Double Deflation:**
 - o Double deflation separately adjusts **output prices and input prices** while estimating real GVA. This is theoretically superior because input and output prices may move differently, but it requires detailed and reliable price data across sectors.
- 🇮🇳 **Quality of Deflators:**
 - o Real GDP depends heavily on appropriate **price deflators**. If the deflator does not accurately represent the prices faced by a particular sector, real growth may be overestimated or underestimated even when nominal data are accurate.
- 🇮🇳 **Large Revisions:**
 - o GDP estimates are revised as more comprehensive data become available. Such revisions are normal internationally, but large revisions can change the previous year’s growth rate and affect the interpretation of the current year’s growth. **Greater transparency about the reasons for revisions** is

therefore important.

Informal Economy:

- o India's large informal and unincorporated sector often lacks regular financial records. Using organised-sector indicators as proxies can therefore be problematic, particularly during **demonetisation, GST implementation and COVID-19**, when formal and informal sectors were affected differently. Surveys such as **ASUSE** can improve estimation.

MCA-21 Database Concerns:

- o The 2011–12 series made greater use of the **MCA-21 corporate database**. Although it expanded corporate-sector coverage, concerns were raised regarding inactive companies, shell firms and the quality of corporate filings. These limitations can affect estimates of corporate output and value added.

Back-Series Problem:

- o A methodological change ideally requires a **consistent back series** so that historical growth can be compared using the same methodology.
- o Differences in the availability and quality of historical datasets make such reconstruction difficult and have generated controversy.

Divergence from Other Indicators:

- o At times, GDP growth has appeared difficult to reconcile with indicators such as **employment, consumption, exports, industrial production and rural wages**.
- o This has generated debate over whether GDP fully captures underlying economic activity. However, other indicators such as corporate profitability, investment and vehicle sales may support stronger growth.

GDP–GVA Divergence:

- o **GVA = value created by producers**, while GDP additionally incorporates net taxes on products.
- o **GDP = GVA + Taxes on Products – Subsidies on Products**
- o Therefore, GDP can grow faster or slower than GVA because of changes in taxation and subsidies.

Statistical Discrepancies:

- o GDP can theoretically be measured through **production, expenditure and income approaches**. In practice, differences in data sources create discrepancies. **Supply and Use Tables (SUTs)** can help reconcile production, consumption, investment and trade data.

Arguments Supporting the New GDP Methodology

- 👍 **Updated economic structure:** The 2022-23 base year better reflects the increasing importance of services, digital activity and newer sectors of the economy.
- 👍 **Better informal-sector data:** ASUSE and PLFS reduce dependence on old benchmark estimates and organised-sector proxies.
- 👍 **Improved price measurement:** PPI and more granular price indices can better distinguish inflation from actual production growth.
- 👍 **Double deflation:** Separately deflating inputs and outputs can provide a more accurate estimate of real value addition.
- 👍 **International compatibility:** India broadly follows the **UN System of National Accounts**, where periodic rebasing and methodological improvement are standard practices.

Major Concerns

- 👎 **Transparency:** Sector-wise assumptions, deflators and revision methodology should be made easily accessible for independent scrutiny.
- 👎 **Data quality:** Sophisticated methodologies cannot compensate for weak corporate, informal-sector or price data.
- 👎 **Comparability:** A reliable back series is necessary to compare economic growth across different periods.
- 👎 **Institutional credibility:** Statistical institutions must remain professionally independent because GDP data influence policy, investment and financial markets.
- 👎 **GDP versus welfare:** High GDP growth does not automatically indicate higher employment, lower inequality or improved household welfare.

Way Forward

- ✳️ **Strengthen National Statistical Office (NSO) and the National Statistical Commission (NSC):** Greater institutional autonomy, professional capacity and statistical independence can improve credibility.
- ✳️ **Explain revisions transparently:** MoSPI should publish simple sector-wise explanations whenever major revisions alter GDP significantly.
- ✳️ **Improve informal-sector surveys:** More frequent enterprise and household surveys can capture rapid changes in India's economy.
- ✳️ **Strengthen price indices:** Reliable producer and service-sector price indices are necessary for effective double deflation.

- * **Release a consistent back series:** Historical GDP based on comparable methodology will enable meaningful long-term analysis.
- * **Promote independent scrutiny:** Wider access to anonymised microdata can allow academics and researchers to independently evaluate official estimates.
- * **Use complementary indicators:** GDP should be assessed alongside **employment, consumption, inequality, productivity, investment and human development indicators.**

Conclusion

India's GDP controversy reflects the difficulty of measuring a large, diverse and rapidly changing economy rather than merely a dispute over a single growth number. **Credible GDP statistics require strong underlying data, methodological transparency, independent institutions and continuous professional scrutiny.**

Sample Questions

Q) "India's GDP debate is as much about statistical capacity and transparency as it is about economic growth." Discuss. **(10 marks)**

INDUS WATER TREATY: PAST, PRESENT AND FUTURE

Syllabus: GS II - India and its neighborhood- relations

PYQ MAPPING

Q) Present an account of the Indus Water Treaty and examine its ecological, economic and political implications in the context of changing bilateral relations. **(2016)**

Q) The situation today is far different to that prevalent fifty years back when the Indus Water Treaty was signed.” Highlight the complexity of the current challenges on both sides of the border in this regard. Do you think that a review of the Treaty is in India’s best interests? **(2012)**

SHORT TAKES

➤ Permanent Court of Arbitration (PCA):

- An intergovernmental organisation established in **1899** to facilitate dispute-resolution mechanisms between states and other parties.
- Its headquarters are in **The Hague, Netherlands**.
- **India became a PCA member on 29 July 1950** but membership does not automatically mean India accepts PCA jurisdiction in every dispute.

WHY IN NEWS

India has **rejected the decision of the Hague-based Permanent Court of Arbitration** concerning the Indus Waters Treaty, stating that the Court has **no jurisdiction to pronounce on India’s sovereign decisions** regarding the Treaty.

INTRODUCTION

The **Indus Waters Treaty (IWT)** was signed between India and Pakistan on **19 September 1960** to establish a framework for sharing the waters of the Indus river system. Despite wars and prolonged political tensions, the Treaty has remained a key framework for managing transboundary water resources between the two countries.

HISTORICAL BACKGROUND

- **1947:** Partition divided the Indus river system between India and Pakistan, transforming the management of a common river system into an international water dispute.
- **1952:** The World Bank began mediation efforts, led by its then President Eugene Black.
- **1960:** India and Pakistan signed the Treaty bringing the prolonged water dispute to a negotiated framework.

ABOUT THE INDUS WATER TREATY (IWT)

- ➔ **Nature:** The Indus Waters Treaty (IWT) is a water-sharing agreement between India and Pakistan, signed in **Karachi on 19 September 1960**, with the **World Bank** as a signatory for specified purposes.
- ➔ **Eastern Rivers:** The **Ravi, Beas and Sutlej** were allocated for India's unrestricted use, subject to specified Treaty provisions.
- ➔ **Western Rivers:** The **Indus, Jhelum and Chenab** were allocated primarily for Pakistan's unrestricted use, while India retained specified rights for uses such as domestic use, agriculture and hydroelectric power generation subject to Treaty conditions.
- ➔ **Permanent Indus Commission:** The Treaty established a **Permanent Indus Commission (PIC)** with one Commissioner from each country for cooperation, information exchange and addressing questions related to the Treaty.
- ➔ **Dispute Resolution:** **Questions** are addressed through the Commission, **differences** can be referred to a Neutral Expert, and **disputes** can be referred to a Court of Arbitration.
- ➔ **Modification:** The Treaty can be modified through a **duly ratified treaty concluded by both governments**.

IMPORTANCE

- ☀ **Water Security:** Provides a stable framework for sharing the waters of the Indus river system between India and Pakistan.
- ☀ **Agriculture:** Ensures predictable water availability for the heavily irrigation-dependent agricultural sectors of both countries.
- ☀ **Regional Stability:** Has maintained a mechanism for water cooperation despite wars and prolonged political tensions.
- ☀ **Dispute Resolution:** Provides institutional mechanisms such as the **Permanent Indus Commission, Neutral Expert and Court of Arbitration** to address water-related differences.

PRESENT STATUS

- 🇮🇳 **India’s Stance:** Following the April 2025 Pahalgam terror attack, India placed the **1960 Indus Waters Treaty in “abeyance”**, citing Pakistan’s continued support for cross-border terrorism and seeking formal

modification of the Treaty.

PCA Ruling:

- o On **31 August 2026**, the Permanent Court of Arbitration (PCA) at The Hague ruled that the Treaty **remains in force** and cannot be unilaterally suspended by India.
- o India rejected the ruling, calling the PCA **“illegally constituted”** and maintaining that it had never accepted the Court’s jurisdiction over the dispute.

 **Institutional Breakdown:** The **Permanent Indus Commission has not met since 2022**, while routine **data-sharing and on-site inspections** under the Treaty have also been disrupted.

CHALLENGES

- ▼ **Climate Change:** Changing **precipitation patterns, glacier melt and extreme floods** can alter the hydrology of the Indus Basin.
- ▼ **Growing Demand:** Rising populations, urbanisation and agricultural requirements are increasing pressure on shared water resources.
- ▼ **Hydropower Disputes:** Differences over the design and operation of Indian hydropower projects remain a major source of friction.
 - o **Example:** Pakistan continues to challenge India’s **run-of-the-river projects**, particularly **Ratle and Kishanganga**, on the western rivers.
- ▼ **Geopolitical Tensions:** India-Pakistan political and security tensions increasingly affect cooperation under the Treaty.
- ▼ **Infrastructure Constraints:** India’s utilisation of its permitted share, particularly on the Western Rivers, has historically been constrained by geographical, financial and infrastructural factors.

WAY FORWARD

- * **Modernise the Framework:** Explore mutually agreed adjustments to address **climate change, changing water demand and technological developments**.
- * **Strengthen Bilateral Dialogue:** Maintain technical-level communication through appropriate institutional mechanisms even during wider political tensions.
- * **Improve Data Sharing:** Strengthen real-time exchange of **hydrological, meteorological and flood-related information**.
- * **Climate-Resilient Management:** Incorporate climate projections, glacier dynamics and extreme-weather risks into basin-level planning.
- * **Efficient Water Use:** Promote water-use efficiency, modern irrigation and reduced wastage in both countries.
- * **Cooperative Basin Management:** Move towards a broader **Indus Basin approach** that combines water security, ecological sustainability, disaster management and hydropower development.

CONCLUSION

The Indus Waters Treaty remains important for **water security, agricultural stability and regional cooperation**, but changing hydrology, climate change and geopolitical tensions have created new challenges. A **modern, cooperative and climate-resilient approach**, while respecting legitimate water rights and established mechanisms, is essential for its future.

SAMPLE QUESTION

Q) “India’s decision to place the Indus Waters Treaty in abeyance marks a shift from water cooperation towards water as a strategic instrument.” Examine critically. **(10 marks, 150 words)**

HEALTH GOVERNANCE

Syllabus: GS II - Health

PYQ MAPPING

Q) In a crucial domain like the public healthcare system the Indian State should play a vital role to contain the adverse impact of marketisation of the system. Suggest some measures through which the State can enhance the reach of public healthcare at the grassroots level. **(2024)**

Q) "Besides being a moral imperative of a Welfare State, primary health structure is a necessary precondition for sustainable development." Analyze. **(2021)**

SHORT TAKES

- **Out-of-Pocket Expenditure (OOPE):** Refers to the money individuals and households pay directly for healthcare services from their own pockets, rather than through insurance or government funding.

WHY IN NEWS

A **Parliamentary Standing Committee on Health and Family Welfare** has flagged that **more than 40 crore Indians**, over one-fourth of the population, face a healthcare affordability gap.

INTRODUCTION

Health governance refers to the processes through which governments and institutions make **decisions, allocate resources and ensure the delivery, regulation and accountability of healthcare services**. India has expanded its health system significantly, with **1.87 lakh Ayushman Arogya Mandirs functional by September 2026** focusing on a broader shift towards accessible and financially protected healthcare.

STATUS OF HEALTH GOVERNANCE IN INDIA

- 🌱 **Improving Health Outcomes:** India has made progress in maternal and child health, disease control and life expectancy, supported by expansion of public health programmes.
- 🌱 **Health Financing:** Government Health Expenditure (GHE) increased from **29% of total health expenditure in 2014-15 to 48% in 2021-22**, while Out-of-Pocket Expenditure (OOPE) declined from **62.6% to 39.4%**.
- 🌱 **Health Infrastructure:** India has a large network of Sub Health Centres, Primary Health Centres (PHCs), Community Health Centres (CHCs) and hospitals, but their capacity and quality remain uneven across regions.

IMPORTANCE

- ☀️ **Human Capital:** Good health improves productivity, learning outcomes and labour-force participation.
- ☀️ **Universal Health Coverage:** Effective governance is essential for ensuring **accessible, affordable and quality healthcare** without financial hardship.
- ☀️ **Health Equity:** Strong public health systems can reduce disparities based on **income, gender, geography and social status**.
- ☀️ **Economic Growth:** Preventive healthcare and disease control reduce productivity losses and the economic burden of illness.
- ☀️ **Crisis Preparedness:** Effective governance strengthens India's ability to respond to **pandemics, epidemics and other health emergencies**.

CHALLENGES

- ▼ **Unequal Access:** Rural, remote and poorer populations continue to face greater barriers to quality healthcare.
 - **Example:** Nearly **65% of India's population lives in rural areas**, while about **75% of healthcare infrastructure** is concentrated in urban areas.
- ▼ **Human Resource Gaps:** Shortages and uneven distribution of doctors, specialists, nurses and other health professionals affect service delivery.
 - **Example:** Nearly **80 percent shortage of specialist doctors** at **community health centres (CHCs)** across rural India.
- ▼ **Infrastructure Gaps:** Availability and quality of health infrastructure vary significantly across States and regions.
 - **Example:** A **NITI Aayog assessment** found Bihar has only **6 district hospital beds per 100,000 people**.
- ▼ **Digital Divide:** Unequal access to smartphones, internet connectivity and digital literacy can exclude vulnerable groups from digital health services.
- ▼ **Data Privacy:** Expansion of digital health creates concerns regarding **health-data protection, consent and cybersecurity**.
 - **Example:** **2022 AIIMS Delhi ransomware attack** highlighted vulnerabilities in digital health infrastructure

▼ **Disease Burden:** India faces a **dual burden of communicable diseases and rising non-communicable diseases (NCDs)**, requiring stronger preventive healthcare.

- **Example:** India known as "**diabetes capital of the world**" with over 100 million diabetic adults.

GOVERNMENT INITIATIVES

- ✱ **National Health Mission (NHM):** Strengthens rural and urban healthcare, maternal and child health, and disease control.
- ✱ **Ayushman Bharat:** Provides primary healthcare through **Ayushman Arogya Mandirs** and ₹5 lakh health cover under **Pradhan Mantri Jan Arogya Yojana (PM-JAY)**.
- ✱ **Ayushman Bharat Digital Mission (ABDM):** Creates a digital health ecosystem through **Ayushman Bharat Health Account (ABHA)** IDs and interoperable health records.
- ✱ **National Health Policy, 2017:** Targets public health spending of **2.5% of Gross Domestic Product (GDP)** and promotes preventive healthcare.
- ✱ **Pradhan Mantri Swasthya Suraksha Yojana (PSSY):** Establishes **All India Institutes of Medical Sciences (AIIMS)** and upgrades State medical colleges.
- ✱ **eSanjeevani:** Provides **telemedicine services** to bridge rural-urban gaps in access to doctors.
- ✱ **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):** Provides affordable generic medicines to reduce **Out-of-Pocket Expenditure (OOPE)**.

WAY FORWARD

- ✱ **Strengthen Primary Healthcare:** Prioritise preventive, promotive and community-based healthcare through stronger Ayushman Arogya Mandirs.
- ✱ **Increase Public Investment:** Raise public health spending and improve the efficiency and targeting of health expenditure.
- ✱ **Address Human Resource Gaps:** Improve recruitment, training, retention and equitable deployment of healthcare professionals.
 - **Example:** Establish an All India Medical and Health Service (AIMHS).
- ✱ **Strengthen Centre-State Coordination:** Develop better coordination, technical support and outcome-based financing between different levels of government.
- ✱ **Promote Digital Inclusion:** Combine digital health expansion with affordable connectivity, digital literacy

and offline alternatives.

- ✱ **Protect Health Data:** Strengthen **privacy, cybersecurity, consent mechanisms and accountability** in digital health systems.
- ✱ **Focus on Prevention:** Give greater emphasis to **NCD prevention, mental health, nutrition, sanitation and healthy lifestyles**.
 - **Example:** Scale up the FSSAI's 'Eat Right India' campaign.

CONCLUSION

India's health governance has progressed from a focus on disease-specific programmes towards **universal, preventive and technology-enabled healthcare**. The next phase must strengthen **primary healthcare, human resources, public health financing, Centre-State coordination and digital governance** so that improved coverage translates into better health outcomes and greater equity.

SAMPLE QUESTION

Q) "India's health governance has expanded access to healthcare, but significant gaps in quality, equity and affordability remain." Critically examine. **(10 marks, 150 words)**

WEEKLY DOSSIERS

ENERGY SECURITY AND DISASTER RESILIENCE IN THE HIMALAYAS

Why in the News?

- Recent flash floods in Nepal's Bhotekoshi river basin destroyed hydropower projects and transmission infrastructure, wiping out about **431.1 MW of generation capacity** and exposing the vulnerability of Himalayan energy infrastructure.

Introduction

- Energy security is traditionally understood in terms of adequate, affordable and reliable power supply. However, in ecologically fragile regions such as the **Hindu Kush Himalaya (HKH)**, energy security must also include the ability of infrastructure to withstand climate-induced and geological disasters.

Why Must Energy Security Incorporate Disaster Resilience?

- Hydropower infrastructure is hazard-exposed:** Himalayan hydropower projects are often located along steep river valleys vulnerable to **GLOFs, landslides, flash floods and debris flows**.
- Nepal provides a recent warning:** Around **12 operational hydropower projects were reportedly wiped out**, while 15 under-construction projects and transmission infrastructure were also affected.
- Past disasters show a recurring pattern:** The **2023 Sikkim GLOF destroyed the 1,200 MW Teesta-III project**, while the **2021 Chamoli disaster damaged the Rishiganga hydropower project**.
- Climate change amplifies the risk:** Retreating glaciers and formation or expansion of unstable glacial lakes increase the probability of sudden downstream floods.

- Cascading infrastructure failure:** Damage to a single dam or transmission hub can disrupt electricity supply, roads, communication networks and local livelihoods simultaneously.
- Carrying capacity cannot be ignored:** Excessive concentration of hydropower projects in fragile river basins can increase ecological stress, slope instability and disaster exposure.
- Energy security is not merely installed capacity:** A high generation capacity has limited value if infrastructure repeatedly fails under predictable climate and geological hazards.

Way Forward

- Make **disaster-risk assessment mandatory in environmental clearance** for large energy projects.
- Use basin-level cumulative impact assessments rather than project-by-project appraisal.
- Design dams, tunnels and transmission lines for **GLOF, flood and seismic resilience**.
- Strengthen real-time glacier and river monitoring and downstream early-warning systems.
- Diversify the energy mix so that excessive dependence on vulnerable hydropower corridors is reduced.

Conclusion

The Himalayas demonstrate that **energy security without resilience can itself become a source of insecurity**. Sustainable energy planning must therefore integrate ecology, disaster risk reduction and infrastructure resilience from the design stage itself.

CLIMATE CHANGE, GLACIAL RETREAT AND HIMALAYAN INFRASTRUCTURE

Why in the News?

- The recent Nepal floods have renewed concerns over the interaction between **glacial retreat, extreme weather events and large infrastructure development** across the Hindu Kush Himalayan region.

Introduction

- The Hindu Kush Himalaya is often described as the **"Third Pole"** because of its vast reserves of snow and ice and its role in sustaining major Asian river systems. Climate-induced glacier retreat is now altering the region's hydrology while simultaneously increasing risks to settlements, hydropower projects and transport infrastructure.

How Climate Change Is Increasing Himalayan Vulnerability

- ♦ **Rapid glacier loss:** An ICIMOD study cited in the report found that between **1990 and 2020**, the HKH region witnessed around a **12% decline in glacier area and 9% reduction in estimated ice reserves**.
- ♦ **Smaller glaciers are especially vulnerable:** Glaciers below **0.5 sq km** have experienced particularly high losses and fragmentation.
- ♦ **Major river basins are affected:** Glacier losses were reported at around **21% in the Ganga basin and 16% in the Brahmaputra basin**, increasing long-term water and disaster risks.
- ♦ **Growth of unstable glacial lakes:** Melting glaciers can expand moraine-dammed lakes which may burst suddenly, producing destructive **Glacial Lake Outburst Floods (GLOFs)**.
- ♦ **Infrastructure lies directly in hazard pathways:** Hydropower projects, roads and settlements are concentrated along river valleys where flash floods and debris flows naturally travel.
- ♦ **Climate risk combines with anthropogenic stress:** Blasting, tunnelling, road widening, deforestation and poorly regulated construction can intensify slope

instability and ecological degradation.

- ♦ **Losses can be irreversible:** The **2013 Kedarnath disaster, 2021 Chamoli disaster and 2023 Sikkim GLOF** demonstrate how extreme events can destroy infrastructure worth decades of investment within hours.

Way Forward

- ♦ Undertake **Himalayan carrying-capacity studies** before sanctioning large infrastructure clusters.
- ♦ Map glacial lakes, landslide zones and flood pathways using remote sensing and field monitoring.
- ♦ Avoid projects in critical wildlife habitats, highly unstable slopes and major flood corridors.
- ♦ Promote climate-resilient infrastructure standards suited to mountain geography.
- ♦ Integrate scientific institutions, local communities and disaster-management agencies in planning.

Conclusion

The Himalayan crisis is not merely an environmental problem but a **development-planning challenge**. Infrastructure in mountain regions must be designed within ecological limits rather than assuming that engineering alone can overcome natural fragility.

TRANSBOUNDARY DISASTER DIPLOMACY IN SOUTH ASIA

Why in the News?

- ♦ The Nepal floods demonstrated how Himalayan disasters can generate **cross-border impacts**, highlighting the need for stronger regional cooperation in early warning, information sharing and disaster response.

Introduction

- ♦ Natural disasters do not recognise political boundaries, particularly in interconnected Himalayan river systems shared by Nepal, India, Bhutan, China and Bangladesh. Therefore, effective disaster management requires **transboundary cooperation rather than purely national responses**.

Why Is Transboundary Disaster Cooperation Necessary?

- ♦ **Shared river systems create shared risks:** Floods originating in Nepal or Tibet can rapidly affect

downstream regions of **Bihar, Uttar Pradesh, Assam and Bangladesh**.

- ♦ **Hazards can cascade across borders:** Floodwater, debris, damaged infrastructure and disrupted river flows can create humanitarian, ecological and economic consequences far beyond the country of origin.
- ♦ **Early warning saves lives:** Timely sharing of rainfall, glacier, river discharge and dam-release information can provide crucial evacuation time to downstream populations.
- ♦ **Climate change makes old risk maps inadequate:** Glacier retreat, erratic monsoons and extreme precipitation are creating new and rapidly evolving hazard patterns.
- ♦ **Regional mechanisms remain weak:** The **SAARC Agreement on Rapid Response to Natural Disasters** and the SAARC Disaster Management Centre have remained underutilised due to geopolitical tensions

and weak institutionalisation.

- ◆ **Disaster cooperation can build trust:** Joint monitoring, rescue exercises and scientific data sharing can serve as a form of “**disaster diplomacy**”, creating functional cooperation even amid political differences.
- ◆ **India has a strategic role:** As the largest country in South Asia with major technical and disaster-response capabilities, India can support regional satellite monitoring, early-warning systems, rescue teams and capacity building.

Way Forward

- ◆ Establish a **South Asian Himalayan Disaster Information Grid** for real-time rainfall, river and glacial data.
- ◆ Develop interoperable early-warning systems across international river basins.

- ◆ Conduct joint disaster-response exercises among neighbouring countries.
- ◆ Strengthen bilateral mechanisms where wider SAARC cooperation is politically difficult.
- ◆ Institutionalise climate-risk and dam-safety data sharing.
- ◆ Empower regional scientific bodies such as **ICIMOD** to support evidence-based cooperation.

Conclusion

- ◆ The Nepal disaster shows that **disaster resilience in South Asia is inherently transboundary**. Regional security increasingly depends not only on borders and military capability, but also on shared climate intelligence, early warning and cooperative disaster governance.

BEYOND VERDICTS: KEY JUDICIAL INTERVENTIONS

Front-of-Pack Nutrition Labelling

- ◆ The Supreme Court has asked **FSSAI** to clearly define thresholds for foods “high” in sugar, salt or fat, calling food safety a matter of **national interest**. FSSAI has proposed **red front-of-pack warning labels** based on **ICMR-NIN Dietary Guidelines, 2024**, aimed at improving informed consumer choice and reducing lifestyle diseases such as obesity, diabetes and hypertension.

Student Accommodation Safety and Urban Governance

- ◆ After the **Satya Niketan building collapse in Delhi**, which killed seven people, the Supreme Court indicated that it may frame **pan-India safety norms for PGs, private hostels and student accommodation**.
- ◆ The case highlights weak enforcement of **building bye-laws, land-use rules, structural-safety and fire-safety norms**, especially where residential buildings are illegally converted into student housing.
- ◆ The Court has stressed the need for **time-bound safety audits and stronger municipal accountability**, making the issue relevant to urban governance, disaster prevention and the **Right to Life under Article 21**.

Marital Rape and Judicial Limits

- ◆ The Supreme Court has questioned whether courts can permit prosecution for **marital rape when the existing penal law expressly exempts it**, while acknowledging that non-consensual sex within marriage makes the wife a victim.
- ◆ The case raises a constitutional conflict between **women’s bodily autonomy, dignity and equality under Articles 14 and 21** and the principle that creation of criminal offences primarily lies within the **legislature’s domain**. The debate also centres on the validity of the marital rape exception retained under **Section 63 of the Bharatiya Nyaya Sanhita, 2023**.

Aravalli Protection and Sustainable Mining

- ◆ The Supreme Court has directed its high-powered committee to submit by **November 30, 2026** a uniform definition of the **Aravalli hills and range** and measures to regulate mining. The case highlights the ecological importance of the Aravallis as a **barrier against desertification** and the need to balance mining with **biodiversity, hydrology and tribal livelihoods**.
- ◆ The Court has also stressed a **scientific, multi-criteria approach** rather than relying only on elevation, while continuing restrictions on new mining leases pending final recommendations.

Protection of Student Protesters and Vulnerable Victims

- ◆ The Supreme Court directed **immediate police action and protection** for a 14-year-old student who alleged threats and harassment after participating in protests over the **NEET-UG paper leak**.
- ◆ The Court stressed that vulnerable victims and witnesses must have safe access to justice, while also flagging broader constitutional concerns over **police excesses, surveillance, privacy, facial recognition and accountability during peaceful protests**. The issue is relevant to **Article 19, Article 21, child protection and police accountability**.

ETHICS - CASE STUDY

Q) You are the Compliance and Ethics Manager of a large private hospital chain. The hospital has recently invested heavily in a new cardiac care unit and management has set aggressive revenue targets for senior doctors. During an internal audit, you discover that some doctors are advising expensive diagnostic tests and procedures even when cheaper alternatives may be sufficient. You also find that doctors who generate higher revenue receive larger incentives and faster promotions. The management argues that such targets are necessary to recover investment costs and remain competitive. At the same time, several patients come from low-income families and depend entirely on doctors' advice. A senior executive privately tells you not to escalate the matter because exposing the practice could damage the hospital's reputation, reduce investor confidence and affect hundreds of employees. However, continuing the practice may violate patient autonomy, informed consent and professional ethics.

You are also aware that directly accusing senior doctors without conclusive evidence could damage their careers and create conflict within the organisation.

Questions:

- Identify the **ethical issues and stakeholders** involved in the case.
- What are the major **ethical dilemmas** faced by you as the Compliance and Ethics Manager?
- What course of action would you adopt? Justify your answer using relevant **ethical principles and values**.
- Suggest measures that private institutions can adopt to balance **profitability with social responsibility and professional ethics**.

ETHICS - EXAMPLES

- Altruism:** After losing his 13-year-old son Shreyas Hareesh, a national-level motorcycle racing prodigy who won the MiniGP India 2022, Hareesh Parandhaman created Trust SH39 to support young racers. The trust plans to fund one racer annually from 2027, turning his son's unfinished MotoGP dream into support for the next generation.
- Lack of Equality:** A Bihar government school headmaster, Gyan Prakash, was suspended in September 2026 after a video showed him performing a *shuddhikaran* ritual with Ganga water in his office following the transfer of a teacher, sparking allegations of caste-based discrimination.
- Compassion:** Eight-year-old Alfaz Sheikh from Bahraich, Uttar Pradesh, a Class III student, donated his year-long savings of around ₹2,000 in a *gulak* to help victims of Nepal's flash floods after seeing their suffering.
- Lack of accountability:** An Air India pilot-in-command was sacked on September 4, 2026 after testing positive for a psychoactive substance, following a Delhi–Phuket flight incident on August 4 in which the aircraft briefly lost altitude and 24 passengers were injured.
- Innovation:** Gaurav Sen, a Bengaluru engineer, developed the AI-powered "Pothole Reporter" after his family experienced the dangers of potholes. The app uses AI, GPS and public tender records to detect potholes, identify the responsible contractor or authority, and prepare a complaint with evidence.
- Workplace Ethics:** A BAPS (Bochasanwasi Akshar Purushottam Swaminarayan Sanstha) group's visit to the Eiffel Tower sparked controversy after female staff were reportedly asked to step aside to accommodate the group's preference for limited contact with women. The move led to a staff strike and temporary closure.
- Integrity:** IAS officer Divya Mittal, a 2013-batch officer, resigned after 13 years of service, citing her belief in standing up for what is right and serving people with dignity. As DM of Mirzapur, she helped bring piped water to 125 households in Lahuria Dah in August 2023, ending decades of dependence on water tankers.
- Lack of Honesty:** Tripti Singh Rajput allegedly posed as an IAS officer and Additional Director of Madhya Pradesh Tourism, using fake identity cards and government documents to collect money by promising government jobs and tourism-property leases. She was arrested with her brother and booked for cheating, personation and criminal conspiracy.

MODEL ESSAY

"The foundation of every state is the education of its youth."

Introduction

- Quote attributed to Diogenes
- During the **late-1990s Y2K crisis**, India's engineering graduates helped Western firms rewrite vulnerable software code, accelerating the rise of **IT exports, Bengaluru's tech industry and India's middle class**.
- Educated human capital is a key source of national power – achieve global influence through knowledge and innovation.

Importance of Educating Youth for the State

- **Economic Growth:** Education builds human capital and enables a shift towards high-value services and innovation. **Eg: South Korea's investment in education and STEM.**
- **Accountability :** Educated citizens can critically evaluate policies and hold governments accountable. **Eg: Kerala's high literacy and strong democratic participation.**
- **Technological Autonomy:** Technical education supports indigenous capabilities in defence, space and technology. **Eg: ISRO's Chandrayaan-3 mission.**
- **Reducing Social Inequality:** Education provides opportunities for marginalised groups and challenges entrenched social hierarchies. **Eg: Dr B.R. Ambedkar's use of education to challenge caste discrimination.**
- **Geopolitical Soft Power:** A strong education system produces globally influential professionals who enhance national influence. **Eg: Sundar Pichai and Satya Nadella.**
- **Scientific Temper:** Education promotes evidence-based thinking and counters superstition and misinformation. **Eg: India's polio eradication campaign.**

Risks of Educating Youth Without Supporting Systems

- **Educated Unemployment:** Education without

adequate job creation can create frustrated and economically insecure youth

- **State Indoctrination and Propaganda:** When governments control education to suppress critical thinking, schools can become tools of political indoctrination. **Eg: Hitler Youth in Nazi Germany.**
- **Brain Drain :** Public investment in education may benefit foreign economies when highly skilled graduates migrate abroad.
- **Technological Misuse:** Education increases technical capabilities but does not automatically ensure ethical behaviour. **Eg: Cyber-fraud networks in Jamtara, India.**

Synthesis

- Educated youth need sufficient employment and entrepreneurship opportunities to convert knowledge into productive economic activity.
- Technical knowledge must be combined with **constitutional values, ethics and social responsibility** to produce responsible citizens.

Conclusion

- The Y2K crisis became an opportunity because India's mathematically and technically trained youth matched **global demand for software skills**.
- A state can recover from economic crises, disasters or military defeat, but failure to educate its youth weakens its **future productive and institutional capacity**.

Sample Quotes

- *He who cannot draw on three thousand years is living from hand to mouth.* — Johann Wolfgang von Goethe
- *Art is the lie that enables us to realize the truth.* — Pablo Picasso
- *The struggle of man against power is the struggle of memory against forgetting.* — Milan Kundera

MAINS JOT DOWN



GS I: GEOGRAPHY

- Western Disturbances and Winter Air Pollution in North India
 - » A recent study found that nearly **70% of year-to-year variation in winter PM2.5 pollution in northern India** can be explained by the frequency of **Western Disturbances (WDs)**.
 - » Western Disturbances are **eastward-moving extratropical storms originating around the Mediterranean region** that affect north and northwest India.



GS III: BIOTECHNOLOGY

- India's biotechnology sector is growing at around **12–13% CAGR**, reflecting the rapid expansion of the country's bioeconomy.
- More than **1,100 biotech startups** were launched in the last year, showing a strong innovation and entrepreneurship ecosystem.
- **Fundamental research remains crucial**, as advanced technologies cannot be sustainably imported without strong domestic scientific capability.
- India needs **context-specific regulation**, because excessive regulatory requirements can disproportionately burden startups and smaller firms.



GS II: SOCIAL JUSTICE

- A 2025 U.S. survey found **19.2% of people aged 12–21 had used AI chatbots for mental-health advice**, and nearly two-thirds had not disclosed this to others.
- AI offers **24x7, low-stigma and apparently non-judgmental support**, which may encourage early disclosure of distress.
- However, chatbots may struggle to identify **intermediate or subtle suicide risk**, especially when distress is expressed indirectly.
- Repeated reassurance can create an **"internal loop"**, prolong rumination and delay professional help-seeking.
- AI lacks access to a person's full **clinical history**,

protective factors, mental state and social context, and therefore cannot replace psychiatric assessment.

- Experts recommend **mandatory safety audits, independent clinical evaluation, incident reporting and clear liability frameworks** for



GS II: EDUCATION

- mental-health chatbots.
- India's **Gross Expenditure on R&D (GERD)** has remained around **0.64–0.65% of GDP**, compared with about **2.4–2.6% in China, 3.5% in the U.S. and over 5% in South Korea**.
- India spends only about **\$13 per person annually on research**, compared with nearly **\$250 in China and over \$2,100 in the U.S.**
- India has only **262 researchers per million population**, against **1,585 in China and 4,821 in the U.S.**
- Government accounts for roughly **64% of India's R&D funding**, while private industry contributes only about **36%**; in major innovation economies,



GS II: HEALTH

- industry contributes around **65–77%**.
- According to the **World Obesity Atlas 2026**, about **41 million Indian children and adolescents aged 5–19 are overweight or obese**, highlighting India's growing nutrition and NCD burden.
- FSSAI has proposed **front-of-pack red warning labels** for foods high in sugar, salt and fat to improve informed consumer choice.
- A major concern is aggressive marketing of sugary cereals, drinks and "health foods" to children despite high added-sugar content.
- Warning labels alone are insufficient because much of India's unhealthy food consumption comes from the **unorganised sector**, including street food, sweet shops and dhabas.



GS III: ENVIRONMENT

- ➔ Bamboo Mass Flowering and Ecological Risks
 - » **Bamboo is monocarpic**- many woody bamboo species flower only once after long intervals of about **40–120 years**, after which entire stands die synchronously.
 - » A **KFRI study** warns that mass flowering and die-off can trigger cascading ecological effects such as **invasive species spread, wildfires, rodent outbreaks and human–elephant conflict**.
 - » After bamboo canopy collapse, increased sunlight and soil disturbance allow invasives such as **Senna spectabilis, Mikania micrantha and Lantana camara** to dominate forest gaps.
 - » Loss of bamboo, an important elephant food source, can push herds towards **farmlands and settlements**, intensifying crop damage and human–wildlife conflict.
 - » Abundant bamboo seeds can cause **rodent population explosions**; once seeds are exhausted, rodents may invade farms and grain stores, as seen historically during **Mautam events in northeast India**.
 - » Dead bamboo creates a large **dry fuel load**, increasing the intensity and spread of forest fires and further suppressing native regeneration.
 - » The study recommends **anticipatory landscape management**, including removal of dead culms, invasive-species control, protection of wildlife corridors and maintaining bamboo stands of different age cohorts.



GS III: SCIENCE & TECHNOLOGY

- ➔ The **International Space Summit 2026** was held in **Paris** with participation from about **90 countries**.
- ➔ More than **50 space-related projects** were expected to be signed, involving investments worth billions.
- ➔ Europe reaffirmed the **IRIS² programme Infrastructure for Resilience, Interconnectivity and Security by Satellite** — aimed at strengthening secure satellite connectivity and strategic autonomy.
- ➔ The summit highlighted the growing role of **private space companies**, including commercial astronaut missions to the International Space Station.
- ➔ **ISRO Chairman V. Narayanan** led the Indian delegation, underlining India's growing engagement in global space partnerships.



GS III: ENVIRONMENT

- ➔ A study by **IISER Pune, Wadia Institute of Himalayan Geology and IIT-Roorkee** found that rapid Himalayan erosion can make glacier-fed mountain catchments a **net geological source of CO₂**.
- ➔ Normally, **silicate weathering removes atmospheric CO₂** and contributes to long-term climatic cooling.
- ➔ However, erosion exposes **pyrite (iron sulphide)**; its oxidation produces sulphuric acid, which reacts with carbonate rocks and **releases CO₂**.
- ➔ In the **Upper Indus basin**, estimated CO₂ release through this pathway was about **three times greater than CO₂ uptake through silicate weathering**.



GS III: ECONOMY

- ➔ India's steel sector contributes nearly **12% of the country's GHG emissions**, with emissions intensity about **32% above the global average**.
- ➔ India produced around **160 million tonnes of steel in FY 2025-26** and plans to raise crude steel capacity to **300 MT by 2030-31** and **400 MT by 2035-36**.
- ➔ The **National Mission on Green Steel** aims to reduce emissions intensity from about **2.55–2.65 tCO₂e per tonne of crude steel** to **2.2 tCO₂e by 2029-30**.



GS III: AGRICULTURE

- ➔ A **Global Centre of Excellence for Accelerated Sugarcane Genetic Improvement** will be set up at the **ICAR-Sugarcane Breeding Institute, Coimbatore**, with an investment of about **₹90 crore**.
- ➔ The Centre aims to reduce the time required to develop new sugarcane varieties from around **14 years to about 8 years**.
- ➔ Research will focus on **higher yield and sugar recovery**, better ratooning ability, and resistance to major pests and diseases.
- ➔ It will develop **climate-resilient varieties** tolerant to drought, floods, salinity and heat stress.

CHERRY PICKS OF THE WEEK

NICOTINE POUCHES

- They are **small, tobacco-free sachets** containing synthetic or pharmaceutical nicotine, plant fibres, water and flavouring agents. They are placed between the **gum and upper lip**, allowing nicotine to be absorbed through the oral mucosa without smoking, vapour or spitting.

SUPERALIGNMENT

- It is a field of AI safety focused on ensuring that **superhuman AI systems remain aligned with human values, intentions and safety constraints** even when their capabilities exceed human understanding. Unlike ordinary AI alignment, it addresses situations where humans may no longer be able to fully **monitor, interpret or verify** how advanced AI systems arrive at decisions.

DOCTRINE OF INCIDENTAL OR ANCILLARY POWERS

- This doctrine holds that the **power to legislate on a subject includes the power to make laws on matters reasonably incidental or necessary to make that legislation effective.**
- It complements the **Doctrine of Pith and Substance** and flows from the broad interpretation of legislative entries under **Article 246 and the Seventh Schedule**. In **State of Rajasthan v. G. Chawla (1958)**, the Supreme Court affirmed that legislative entries should be interpreted widely to include such ancillary powers.

DOCTRINE OF TERRITORIAL NEXUS

- The doctrine permits a **State Legislature to make laws affecting matters outside its territory only when there is a real and sufficient connection between the State and the subject matter regulated.** It is rooted in **Article 245**, which defines the territorial extent of legislative powers.
- In the **State of Bombay v. R.M.D. Chamarbaugwala (1957)**, the Supreme Court upheld State taxation because the prize competition had a sufficient business nexus with Bombay despite being organised from outside the State.

DARK PATTERNS

- They are deceptive or manipulative design techniques used by websites and apps to push consumers into choices they may not otherwise make, such as unwanted purchases, subscriptions or sharing personal data.