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DAILY PRACTICE QUESTIONS

BEST FOR UPSC | UP PCS EXAM

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DAILY PRACTICE QUESTIONS FROM STATIC PART

1. With reference to Buddhist and Jain architectural developments in India, consider the following statements:

1. Ellora is significant because its surviving monuments demonstrate the coexistence of Buddhist, Hindu and Jain architectural traditions at the same site.
2. Nagapattinam emerged as an important Buddhist centre partly because of its maritime links with Sri Lanka, and Chola-period Buddhist bronzes have also been associated with the site.

Which of the above statements are correct?

- (a) Only 1
- (b) Only 2
- (c) Neither one nor two
- (d) Both one and two

Answer: (d) Both one and two

Explanation:

Both statements are correct. Ellora is particularly significant because Buddhist, Hindu and Jain monuments occur within the same monumental landscape, illustrating the coexistence and interaction of different religious traditions. Nagapattinam was an important Buddhist centre, with its location and maritime connections contributing to its significance. The site has also yielded Buddhist bronze images in the Chola artistic tradition. The important trap is to assume that the presence of Chola bronzes necessarily makes Nagapattinam exclusively a Hindu/Chola religious centre; its Buddhist connections were substantial as well.

2. A country experiences a rapid expansion of knowledge-intensive activities, including research and development, specialised data interpretation and intellectual-property research, while a substantial proportion of routine customer-support work is transferred to external agencies abroad. Which one of the following best captures the geographical-economic process illustrated by this combination?

- (a) Vertical integration of primary activities
- (b) Spatial division of labour through outsourcing and knowledge-based specialisation
- (c) Deindustrialisation caused primarily by declining international trade
- (d) Replacement of tertiary activities by quaternary activities

Answer: (b)

Explanation:

The situation combines **outsourcing/off-shoring** with the growth of **quaternary activities**. NCERT distinguishes quaternary activities by their knowledge orientation, including research, development and information-intensive work. Outsourcing involves contracting work to an outside agency, while off-shoring refers specifically to transferring such work overseas. The two processes can therefore operate simultaneously rather than representing mutually exclusive alternatives.

3. With reference to an open economy, consider the following statements:

1. An increase in imports, other things remaining unchanged, constitutes a leakage from the domestic circular flow of income.

2. An increase in exports, other things remaining unchanged, constitutes an injection into domestic aggregate demand.
3. A rise in the marginal propensity to import necessarily increases the open-economy expenditure multiplier because a larger share of additional income is converted into foreign demand.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b) Only two

Explanation:

Statements 1 and 2 are correct. Imports represent a **leakage** because expenditure is directed towards goods and services produced outside the domestic economy. Exports constitute an **injection** because foreign expenditure creates demand for domestically produced output.

Statement 3 is incorrect. A higher marginal propensity to import represents an additional leakage from the domestic circular flow and therefore **reduces**, rather than **increases**, the open-economy multiplier. This is a classic UPSC trap: the candidate must distinguish between the effect on foreign demand and the effect on **domestic income propagation**. NCERT's Chapter 6 explicitly treats imports as leakage and exports as injection in an open economy.

4. With reference to the political developments surrounding the Emergency in India, consider the following statements:

1. The Emergency proclaimed in June 1975 was based on the constitutional ground of “internal disturbance” as it existed then.
2. The conflict between the executive and the judiciary was one of the institutional tensions preceding the Emergency.
3. The Emergency ended with the restoration of the Congress government following the 1977 Lok Sabha elections.
4. The political developments of 1974–75 involved both organised protest movements and wider debates concerning the balance between governmental authority and democratic institutions.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Answer: (c) Only three

Explanation:

Statements 1, 2 and 4 are correct.

- **Statement 1:** Correct. The Emergency of June 1975 was proclaimed under the constitutional provision then referring to a threat from “**internal disturbance**.”

- **Statement 2:** Correct. Tensions between the government and judiciary formed an important part of the political background.
- **Statement 3:** Incorrect. The 1977 Lok Sabha elections resulted in the defeat of the Congress at the Union level and the formation of the **Janata government**.
- **Statement 4:** Correct. The period witnessed movements in Gujarat and Bihar alongside broader institutional and constitutional controversies.

The key trap is the chronological reversal in Statement 3: the Emergency ended in 1977, but the political consequence was not restoration of the Congress government; rather, the Congress lost the election.

5. Consider the following Assertion and Reasons:

Assertion (A): A population can undergo evolutionary change even when no new mutation occurs in the population during a particular generation.

Reason (R1): Gene flow can alter the frequencies of alleles already present in a population through movement of individuals or gametes.

Reason (R2): Genetic drift can change allele frequencies through random sampling effects, particularly when population size is small.

Which one of the following is correct?

- (a) Both R1 and R2 are correct, and both explain Assertion (A)
- (b) Both R1 and R2 are correct, but only R1 explains Assertion (A)
- (c) Both R1 and R2 are correct, but only R2 explains Assertion (A)
- (d) R1 is correct, but R2 is incorrect

Answer: (a)

Explanation:

Both reasons correctly explain the Assertion.

Evolution at the population level is reflected in changes in **allele frequencies** across generations; it does not require a new mutation to arise during every generation. Existing genetic variation can be redistributed or altered by evolutionary forces.

R1 is correct: Gene flow introduces or removes alleles through migration of individuals or gametes and can consequently alter allele frequencies.

R2 is correct: Genetic drift produces random changes in allele frequencies because of sampling effects. Its influence can be especially pronounced in small populations.

The deeper conceptual trap is equating **mutation** with the only possible source of evolutionary change. Mutation generates new variation, but once variation exists, processes such as gene flow, genetic drift and natural selection can change its frequency. Hardy–Weinberg equilibrium, conversely, represents the absence of evolutionary change when its restrictive conditions are satisfied. The Class 12 Biology Chapter 6 places Hardy–Weinberg equilibrium within the broader mechanism of evolution.

DAILY PRACTICE QUESTIONS FROM CURRENT AFFAIRS

Q1. Consider the following statements regarding the Asian-Pacific Postal Union (APPU):

1. The APPU is a regional postal union functioning as a restricted union within the framework of the Universal Postal Union (UPU).
2. Although the APPU originated through the Asian-Oceanic Postal Union initiative, its present headquarters is in Bangkok, and its membership includes India as well as countries from both Asia and the Pacific.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Neither one nor two
- (d) Both one and two

Answer: (d) Both one and two

Explanation:

Both statements are correct.

- **Statement 1 is correct.** The APPU is one of the UPU's **restricted unions**. Such unions promote regional cooperation in postal services while operating within the broader international postal framework of the UPU. Importantly, restricted unions may formulate regional arrangements, but those arrangements cannot provide conditions less favourable to postal users than the applicable UPU framework.
- **Statement 2 is correct.** The APPU originated as the **Asian-Oceanic Postal Union (AOPU)** following the 1961 Manila process, while the present APPU is headquartered in **Bangkok, Thailand**. India is among its members, alongside countries extending across the Asian and Pacific regions.

Prelims Trap:

The APPU should not be confused with an independent UN specialised agency. The **UPU** is the UN specialised agency concerned with postal matters; the APPU is a **regional/restricted union associated with the UPU framework**.

Q2. A consumer product consists of a small permeable pouch containing nicotine, which is placed between the gum and upper lip, allowing nicotine to be absorbed through the oral mucosa without combustion, smoke or aerosol generation. Which one of the following is the most appropriate identification of the product?

- (a) Nicotine pouch
- (b) Electronic nicotine-delivery system
- (c) Heated tobacco product
- (d) Conventional smokeless tobacco product

Answer: (a) Nicotine pouch

Explanation:

A **nicotine pouch** is a tobacco-free oral product in which nicotine is delivered through the oral mucosa. It does **not require combustion or electronic heating** and therefore does not generate smoke or an aerosol in the manner characteristic of cigarettes or electronic nicotine-delivery systems.

The important conceptual distinction is between **nicotine delivery** and the **form in which nicotine is delivered**. A product can contain nicotine without being an electronic nicotine-delivery system.

The September 2026 current-affairs discussion highlighted the increasing availability of nicotine pouches in India and the regulatory questions arising from their tobacco-free composition.

Q3. With reference to the UNESCO International Literacy Prizes 2026, consider the following statements:

1. The 2026 edition was associated with the theme “Literacy for people, the planet and prosperity”.
2. The UNESCO King Sejong Literacy Prize primarily recognises programmes promoting mother-tongue and multilingual literacy.
3. The UNESCO Confucius Prize for Literacy is restricted to programmes implemented within countries belonging to East and Southeast Asia.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b) Only two

Explanation:

Statements **1 and 2** are correct, while Statement 3 is incorrect.

- **Statement 1 is correct.** The theme of the 2026 UNESCO International Literacy Prizes was “**Literacy for people, the planet and prosperity.**” The 2026 celebrations also marked the **60th anniversary of International Literacy Day.**
- **Statement 2 is correct.** The **UNESCO King Sejong Literacy Prize**, supported by the Republic of Korea, recognises efforts particularly involving **mother-tongue and multilingual literacy.**
- **Statement 3 is incorrect.** The **UNESCO Confucius Prize for Literacy** is not geographically restricted to East and Southeast Asia. It recognises programmes supporting functional literacy, particularly among rural populations and out-of-school youth, including through technology.

The 2026 prizes consisted of **six awards in total**—three King Sejong prizes and three Confucius prizes. Each laureate receives a medal, diploma and **US\$30,000.**

Q4. With reference to the Boma–Badingilo Migratory Landscape, consider the following statements:

1. It is located in South Sudan and incorporates Boma National Park and Badingilo National Park.

2. Its ecological significance is associated with large-scale seasonal movements of ungulates across floodplains, wetlands and savanna habitats.
3. Its inscription on the UNESCO World Heritage List was based exclusively on its biodiversity value under Criterion (x).

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b) Only two

Explanation:

Statements **1 and 2** are correct, while Statement 3 is incorrect.

- **Statement 1 is correct.** The **Boma–Badingilo Migratory Landscape** is in **South Sudan** and encompasses Boma National Park, Badingilo National Park and the wider landscape connecting them.
- **Statement 2 is correct.** The landscape supports one of the world's largest remaining terrestrial mammal migrations. Seasonal rainfall, flooding, vegetation productivity and availability of resources drive large-scale movements of migratory ungulates.
- **Statement 3 is incorrect.** The property was inscribed under **three criteria: (vii), (ix) and (x)**. Thus, its significance extends beyond biodiversity/species conservation under Criterion (x) to include an exceptional natural phenomenon and ongoing ecological and biological processes.

A particularly important current-affairs fact is that the landscape became **South Sudan's first UNESCO World Heritage Site in 2026**.

Conceptual Trap:

The question deliberately distinguishes **Criterion (vii)**—exceptional natural phenomena, **Criterion (ix)**—ongoing ecological/biological processes, and **Criterion (x)**—biodiversity and threatened species. Treating all natural World Heritage inscriptions as merely “biodiversity sites” is therefore incorrect.

Q5. With reference to the Asian-Pacific Postal Union (APPU), UNESCO International Literacy Prizes and the Boma–Badingilo Migratory Landscape, consider the following statements:

1. The APPU is a restricted union associated with the UPU, whereas UNESCO International Literacy Prizes are awarded under the institutional framework of UNESCO.
2. The Boma–Badingilo Migratory Landscape is a cultural World Heritage property because its principal significance derives from traditional land-use practices of local communities.
3. The UNESCO International Literacy Prizes comprise the UNESCO King Sejong Literacy Prize and the UNESCO Confucius Prize for Literacy.
4. The APPU headquarters is located in Bangkok, while the 2026 global celebration associated with the International Literacy Prizes was held in Chiapas, Mexico.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Answer: (c) Only three

Explanation:

Statements **1, 3 and 4** are correct, while Statement 2 is incorrect.

- **Statement 1 is correct.** APPU is a **restricted/regional postal union within the UPU framework**, whereas the International Literacy Prizes are UNESCO prizes.
- **Statement 2 is incorrect.** Boma–Badingilo is a **natural World Heritage property**, not a cultural property. It was inscribed under natural criteria **(vii), (ix) and (x)**. Its significance includes large-scale wildlife migration, ecological processes and biodiversity.
- **Statement 3 is correct.** The UNESCO International Literacy Prizes comprise the **King Sejong Literacy Prize** and the **Confucius Prize for Literacy**, with three awards associated with each prize.
- **Statement 4 is correct.** The APPU Bureau is headquartered in **Bangkok, Thailand**, while the 2026 International Literacy Day global celebration and prize ceremony took place in **Chiapas, Mexico**, on 8–9 September 2026.

UPSC Trap:

The question mixes **international organisations, UNESCO heritage classification and geographical locations**. The key is not to associate every UNESCO-related current affair with the World Heritage Convention; the Literacy Prizes are an entirely different UNESCO programme.

Q6. With reference to the map shown by the location of Mount Anak Krakatau, which one of the following statements is correct?

- (a) It lies in the Sunda Strait between Java and Sumatra.
- (b) It lies in the Strait of Malacca between Sumatra and the Malay Peninsula.
- (c) It lies in the Lombok Strait between Bali and Lombok.
- (d) It lies in the Makassar Strait between Borneo and Sulawesi.

Answer: (a)

Explanation:

Mount Anak Krakatau is located in the **Sunda Strait**, the strategically important waterway separating **Java and Sumatra** in Indonesia.

It is the volcanic remnant that emerged in the area associated with the former **Krakatoa/Krakatau** volcanic system. The region lies within the tectonically active **Indonesian volcanic belt**, where the Indo-Australian Plate interacts with the Sunda Plate.

The location is particularly important for mapping because the **Sunda Strait is not the same as the Strait of Malacca or Lombok Strait**. The 2018 eruption/collapse of Anak Krakatau was associated with a destructive tsunami affecting coastal areas around the Sunda Strait.

Map Elimination:

- **Sunda Strait → Java–Sumatra → Anak Krakatau**

- **Lombok Strait** → **Bali–Lombok**
- **Malacca Strait** → **Sumatra–Malay Peninsula**
- **Makassar Strait** → **Borneo–Sulawesi**

DAILY PRACTICE QUESTIONS FOR MAINS ANSWER WRITING PRACTICE

GS Paper I — Society

Q1. “Globalisation has not simply weakened traditional social institutions; rather, it has altered the manner in which these institutions reproduce, negotiate and exercise authority.” Discuss with reference to the Indian family, caste and kinship systems.

Sample Answer

Globalisation refers to the intensification of cross-border flows of **capital, technology, information, goods, services, ideas and people**. In India, its social consequences have been uneven. Rather than simply destroying traditional institutions, globalisation has generated a process of **institutional adaptation**, whereby family, caste and kinship structures have acquired new forms and functions.

1. Transformation of the family

Globalisation has contributed to:

- **Nuclearisation**, particularly in urban and mobile professional households.
- Increased participation of women in formal employment and global labour markets.
- Greater geographical separation between parents and children because of migration.
- Expansion of **dual-earner households**.
- Increasing acceptance of individual choice in marriage and lifestyle.

However, this has not necessarily resulted in the disappearance of the extended family.

Digital communication, remittances and periodic migration have enabled “**transnational or dispersed families**” to maintain emotional and economic connections despite geographical separation.

Thus, the family has shifted from a predominantly **co-residential institution** towards a more networked institution.

2. Transformation of caste

Globalisation has produced contradictory effects on caste.

On one hand:

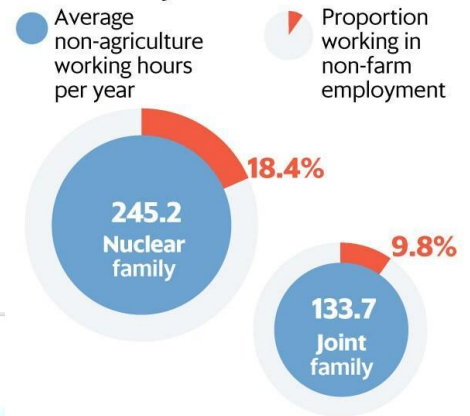
- Urban labour markets can weaken the importance of caste-based occupational divisions.
- Professional education and migration provide opportunities for social mobility.
- Digital platforms can create interactions beyond traditional caste boundaries.

On the other hand:

- Caste networks continue to influence employment, marriage and political mobilisation.
- Diaspora communities may reproduce caste identities outside India.
- Digital platforms can facilitate both caste-based solidarity and exclusion.

Chart 3

Women in nuclear families are nearly twice as likely to be in non-farm work as those in joint families



Source: Dhanaraj and Mahambare (2018), based on IHDS (2011-12)

Thus, caste has increasingly moved from being merely a **local social hierarchy** to becoming a networked identity.

3. Transformation of kinship

Migration has weakened everyday interaction among kin but has simultaneously expanded the geographical reach of kinship networks.

For example, overseas migration can generate:

- Remittance-based economic relationships;
- Transnational marriages;
- Diaspora networks;
- Digital maintenance of kinship ties.

Critical dimension

Globalisation also produces **commodification of relationships**, consumerist aspirations, inter-generational tensions and new inequalities based on access to education, technology and mobility.

Therefore, the appropriate conclusion is not that globalisation simply replaces traditional institutions with modern ones. Instead, it creates **hybrid institutional forms** in which traditional identities coexist with modern economic, technological and cultural practices.

Way Forward

India needs to combine:

- social security for mobile families,
- gender-sensitive labour policies,
- protection against caste discrimination,

- affordable urban housing,
- digital inclusion,
- support systems for elderly persons living away from their children.

Conclusion:

Globalisation has therefore produced **reconfiguration rather than straightforward erosion** of Indian social institutions. Their survival increasingly depends on their capacity to adapt to mobility, individualisation and technological connectivity while retaining their integrative functions.

GS Paper II — Governance

Q2. “Good governance is not merely a question of efficient administration; it requires the institutionalisation of transparency, accountability, participation and responsiveness.” Discuss. What prevents these principles from translating automatically into better governance outcomes in India?

Sample Answer

Governance refers to the processes through which public decisions are formulated, implemented and evaluated. **Government** primarily denotes formal institutions of the State, whereas governance encompasses interactions among the State, citizens, civil society, markets and other stakeholders.

NCERT's treatment of democratic institutions emphasises that political authority is exercised through institutions and that public power must remain accountable to citizens. This provides the foundation for understanding governance beyond mere administrative efficiency.

Pillars of good governance

1. Transparency

Citizens must have access to information concerning government decisions, expenditure and implementation. Instruments such as the **Right to Information framework, social audits and proactive disclosure** strengthen this dimension.

2. Accountability

Officials and institutions must be answerable for decisions and outcomes. Legislative scrutiny, judicial review, audit institutions, vigilance mechanisms and citizen grievance systems contribute to accountability.

3. Participation

Democratic governance cannot be reduced to periodic elections. Gram Sabhas, urban local bodies, consultations and participatory planning provide avenues for citizens to influence public decisions.

4. Responsiveness

A governance system should respond to changing social needs. Digital grievance platforms and direct-benefit mechanisms can reduce transaction costs and improve service delivery.

5. Inclusiveness

Governance must ensure that disadvantaged groups are not excluded from public services merely because of geographical, economic, social or technological barriers.

Why do these principles not automatically produce good outcomes?

Institutional fragmentation

Multiple departments may pursue overlapping objectives, producing coordination failures.

Capacity constraints

Policies may be well-designed but poorly implemented because of shortages of personnel, skills, data or local administrative capacity.

Digital divide

E-governance can improve accessibility for digitally connected citizens while excluding those lacking smartphones, connectivity or digital literacy.

Information asymmetry

Citizens may technically possess rights but lack awareness or resources to exercise them effectively.

Accountability gaps

Multiple layers of implementation can make it difficult to identify responsibility when outcomes are poor.

Proceduralism

Excessive emphasis on compliance may result in **“process-oriented administration”** rather than outcome-oriented governance.

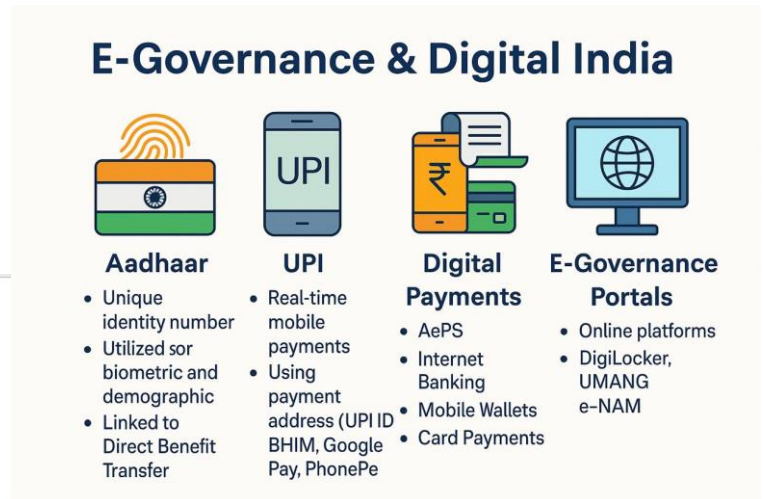
Way Forward

India needs:

- outcome-based monitoring;
- stronger local governments;
- interoperable digital systems;
- social audits;
- citizen-centric grievance redress;
- capacity-building of frontline officials;
- independent evaluation;
- protection for whistle-blowers;
- greater use of behavioural insights and data while protecting privacy.

Conclusion

Good governance is ultimately a relationship of **trust between citizens and institutions**. Efficiency without accountability can become arbitrary administration, while participation without administrative capacity can



produce ineffective decision-making. Sustainable governance therefore requires the simultaneous strengthening of **capacity, accountability, participation and inclusion**.

GS Paper III — Artificial Intelligence

Q3. Artificial Intelligence is simultaneously a productivity-enhancing technology and a source of new economic, social and governance risks. Critically examine the opportunities and challenges associated with the widespread adoption of AI in India.

Sample Answer

Artificial Intelligence refers broadly to computational systems capable of performing tasks associated with human cognitive abilities such as pattern recognition, prediction, language processing, classification and decision-making. Its significance lies not merely in automation but in the possibility of **augmenting human capabilities across sectors**.

Opportunities for India

1. Productivity enhancement

AI can automate repetitive cognitive tasks, optimise supply chains and improve forecasting, potentially increasing productivity.

2. Agriculture

AI-enabled satellite imagery, sensors and weather data can support:

- crop-health monitoring,
- irrigation scheduling,
- pest detection,
- yield forecasting,
- precision agriculture.

Government initiatives are already promoting AI-, sensor- and weather-based irrigation and advisory systems as part of climate-resilient agriculture.

3. Healthcare

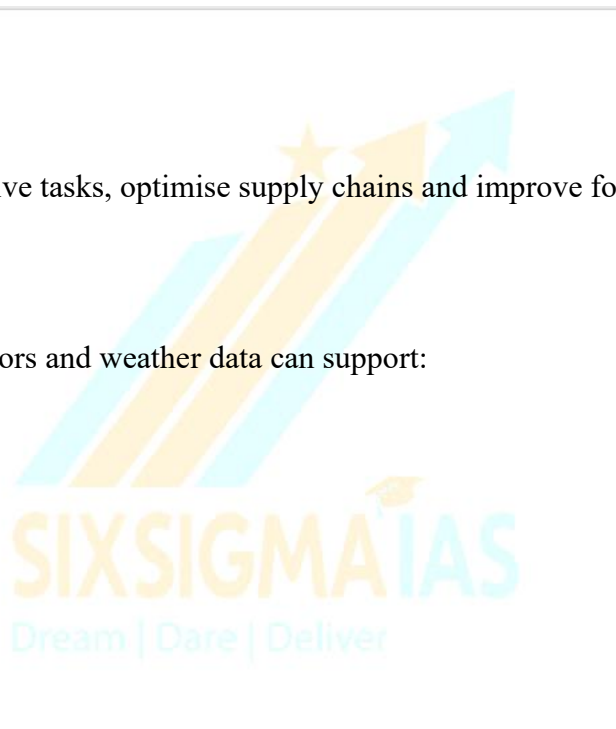
AI can assist in medical imaging, disease screening, clinical decision support and drug discovery, particularly where specialist manpower is limited.

4. Education

Adaptive learning systems can personalise educational content and identify learning gaps.

5. Governance

AI can assist in:



- fraud detection,
- disaster forecasting,
- tax compliance,
- public-service targeting,
- document processing,
- multilingual citizen services.

Major concerns

Employment displacement

Automation may disproportionately affect routine cognitive and repetitive occupations. The challenge is therefore not simply unemployment but **occupational transition**.

Algorithmic bias

AI systems learn from data. If historical data contain social biases, automated systems can reproduce or amplify them.

Privacy

Large-scale AI requires enormous quantities of data. Weak safeguards may create risks of surveillance and unauthorised profiling.

Explainability

A citizen affected by an algorithmic decision may have difficulty understanding why that decision was made.

Concentration of technological power

Advanced computing infrastructure, datasets and foundation models require substantial capital. This can concentrate AI capabilities among a small number of firms and countries.

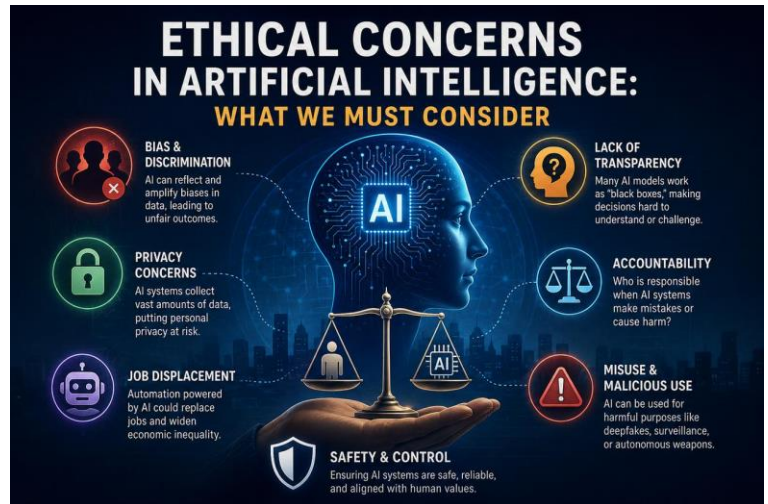
Deepfakes and information integrity

Generative AI can reduce the cost of producing synthetic audio, images and video, creating challenges for public trust.

Way Forward

India requires a **risk-based governance framework** combining:

- data protection;
- algorithmic accountability;
- human oversight;
- independent audits;
- AI literacy;
- reskilling;



- public-interest AI;
- interoperable public digital infrastructure;
- support for Indian-language AI;
- safeguards against discriminatory automated decisions.

The objective should not be to choose between **innovation and regulation**. Regulation itself should be designed to enable trustworthy innovation.

Conclusion

AI can become a major productivity multiplier only when technological progress is accompanied by **human capital, institutional capacity and ethical safeguards**. India's comparative advantage may lie in combining AI with its digital public infrastructure and large human resource base, rather than treating AI merely as a substitute for labour.

GS Paper IV — Ethics, Integrity and Public Administration

Q4. “The increasing use of technology in public administration creates a paradox: it can make decisions more consistent and efficient, yet simultaneously distance decision-making from human responsibility.” Discuss the ethical issues involved and suggest safeguards for an ethical public servant.

Sample Answer

Public administration ultimately exercises **public power over individuals**. Therefore, efficiency alone cannot determine whether an administrative decision is ethically legitimate. With increasing digitisation and algorithmic decision-making, the ethical challenge is to combine technological efficiency with **human dignity, accountability, fairness and justice**.

Ethical issues

1. Accountability

When an algorithm produces an erroneous decision, responsibility can become diffused among the programmer, vendor, department and officer.

The ethical principle of **accountability** requires that responsibility ultimately remain identifiable.

2. Transparency

Citizens have a legitimate interest in understanding decisions affecting their entitlements. A completely opaque automated system can weaken procedural fairness.

3. Bias and discrimination

An algorithm may appear objective because it uses mathematical calculations, but biased training data can generate discriminatory outcomes.

Thus, **technical neutrality does not necessarily guarantee ethical neutrality.**

4. Privacy

Public administration increasingly processes sensitive personal information. Excessive data collection can violate the principle of informational autonomy.

5. Human dignity

A citizen approaching the State is not merely a data point. Automated systems that reject applications without meaningful avenues for human review can undermine dignity.

6. Conflict between efficiency and compassion

Consider an automated welfare system that rejects an application because a particular database field does not match existing records. Technically, the system may be functioning correctly, while ethically the outcome may be unjust if the mismatch results from an administrative error.

Ethical qualities required in a civil servant

Integrity

The officer must ensure that technological systems are not manipulated for personal or institutional interests.

Impartiality

Algorithms and administrative decisions must be applied without discrimination.

Empathy

The officer should recognise exceptional circumstances that automated systems cannot adequately capture.

Objectivity

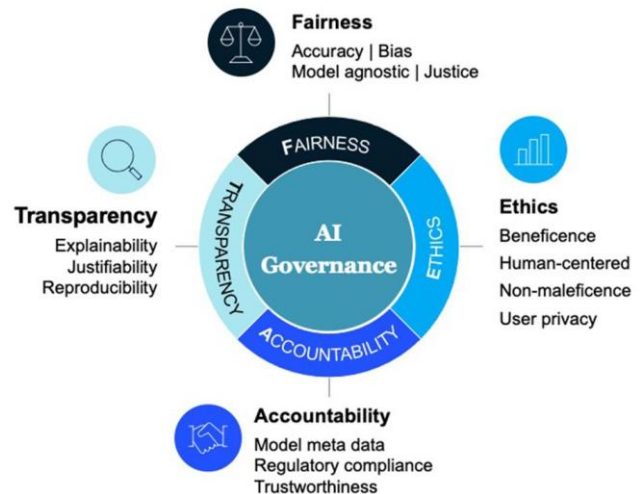
Personal preferences should not determine intervention or review.

Accountability

An officer must not use “the algorithm decided” as a substitute for responsibility.

Safeguards

1. **Human-in-the-loop** for high-impact decisions.



2. Periodic **algorithmic audits**.
3. Explainability requirements.
4. Grievance and appeal mechanisms.
5. Data minimisation.
6. Privacy-by-design.
7. Bias testing across social groups.
8. Clear allocation of institutional responsibility.
9. Independent oversight for high-risk applications.
10. Continuous training of civil servants in digital ethics.

Conclusion

Technology should be understood as an **instrument of public administration, not a replacement for public responsibility**. The ethical civil servant must therefore combine technological competence with constitutional morality, compassion, integrity and accountability. The ultimate test of digital governance is not whether the system makes decisions faster, but whether it enables the State to make decisions that are **fair, explainable and humane**.

Current Affairs — GS Paper III

Q5. India's agricultural transformation increasingly requires a shift from cereal-centric production towards high-productivity and high-value crop diversification, including horticulture. Examine the economic, ecological and nutritional rationale for this transition. What policy architecture is necessary to ensure that diversification does not merely shift farmers from one form of production risk to another?

Sample Answer

India's agricultural challenge is gradually moving beyond simply increasing aggregate production. It increasingly involves achieving **higher productivity, better farm incomes, efficient resource utilisation, nutritional security and climate resilience simultaneously**.

Recent government assessments indicate a growing role for horticulture and other high-value agricultural activities. Horticultural production increased substantially over the past decade, while the Government has promoted region-specific diversification according to agro-climatic conditions, water availability and market opportunities.

Why diversification is necessary

1. Higher value generation

Fruits, vegetables, spices, flowers and plantation crops can generate greater value per unit of land than some traditional cereal systems, particularly where suitable agro-climatic and market conditions exist.

2. Water security

Several cereal-growing regions face groundwater stress. An ICAR assessment has identified a mismatch between existing cropping patterns and water availability in several groundwater-depleted states. It therefore supports **location-specific diversification rather than uniform crop substitution**.

3. Nutritional security

Diversification towards fruits, vegetables, pulses and other nutrient-rich crops can complement calorie-oriented food security with **nutrition-sensitive agriculture**.

4. Climate resilience

A diversified agricultural system can reduce dependence on a single crop and potentially distribute production risks across crops with different climatic sensitivities.

5. Employment and value addition

Horticulture has strong linkages with:

- food processing,
- cold chains,
- packaging,
- logistics,
- retail,
- exports.

This creates opportunities beyond farm-gate production.

But diversification itself creates new risks

Market risk

Unlike cereals supported by relatively predictable procurement mechanisms in certain regions, horticultural commodities can experience substantial price volatility.

Perishability

Fruits and vegetables require cold storage, processing and efficient logistics.

Quality and export standards

Global markets impose stringent standards concerning residues, traceability, packaging and phytosanitary requirements.

Water-intensive horticulture

Diversification is not automatically synonymous with water conservation. Some horticultural crops can themselves be water-intensive depending on crop and production method.

Smallholder constraints

With fragmented landholdings, farmers may lack bargaining power, storage facilities and access to organised markets.

Required policy architecture



1. Agro-climatic planning

Crop choice should be based on:

soil + water + climate + market + farmer capability

rather than merely on short-term prices.

2. Market infrastructure

Expansion of:

- cold chains,
- grading,
- warehouses,
- processing units,
- farmer-producer organisations,
- digital market linkages.

3. Risk management

Crop insurance and weather-based insurance need better coverage for diversified crops.

4. Water-use efficiency

Drip irrigation, fertigation, rainwater harvesting and scientific irrigation scheduling should accompany diversification. Government programmes already promote micro-irrigation and location-specific resource management.

5. Value-chain approach

The farmer should not be encouraged merely to change the crop; the entire **production-to-processing-to-market chain** must be developed simultaneously.

6. Research and extension

Improved varieties, climate-resilient cultivars, post-harvest technology and digital advisories are essential.

Conclusion

The objective should not be “**diversification for its own sake**”, but **productive, profitable and resource-efficient diversification**. India's agricultural transition should therefore move from a narrow production-centric approach towards a **value-chain, water-sensitive and climate-resilient agricultural strategy** in which farmers have both the opportunity and the institutional capacity to diversify.

The current policy direction already reflects this shift: ICAR has identified location-specific alternatives and is promoting pulses, oilseeds, millets, horticultural crops, micro-irrigation and technology-enabled resource management.

