Science & Technology · GS - III

Artificial Intelligence can transform public service delivery by improving efficiency, accessibility and evidence-based governance. Examine its potential applications in healthcare and agriculture, while highlighting the institutional and ethical safeguards required for its responsible adoption.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 23/11/2026	GS - III	Science & Technology

MARKS	WORD LIMIT
15	~250 words

Answer Hint

AI-driven governance, predictive healthcare, precision agriculture, Real Time Governance, digital divide, data privacy, algorithmic bias, accountability, capacity building

Model Answer

Introduction

Artificial Intelligence (AI) can strengthen governance by analysing large datasets, identifying emerging needs and supporting faster administrative decisions. Its integration into Andhra Pradesh's Real Time Governance framework reflects the potential of technology-enabled public service delivery.

Applications of AI

1. **Healthcare delivery:** AI-assisted diagnostics, disease surveillance and predictive analytics can support early detection, improve resource allocation and strengthen telemedicine, particularly in underserved areas.

2. **Agricultural productivity:** AI-based crop monitoring, weather analysis, pest detection and precision irrigation can help farmers reduce input costs and manage climate-related risks.

3. **Administrative efficiency:** AI can identify recurring public grievances, track service-delivery delays and help departments prioritise pending cases.

4. **Evidence-based planning:** Real-time data analytics can assist governments in identifying regional disparities and directing resources towards vulnerable populations.

Challenges and Risks

1. **Digital divide:** Limited internet connectivity, digital literacy and access to devices may exclude rural and marginalised communities.

2. **Data privacy:** Sensitive health, agricultural and personal information requires robust protection against misuse and unauthorised access.

3. **Algorithmic bias:** Incomplete or unrepresentative datasets can produce discriminatory outcomes and weaken equitable service delivery.

4. **Institutional capacity:** Shortages of trained personnel, interoperable databases and reliable digital infrastructure can constrain implementation.

5. **Accountability:** Automated decisions must remain explainable, reviewable and subject to human oversight.

Way Forward

1. Establish clear data-governance and cybersecurity standards.
2. Invest in employee training and digital infrastructure.
3. Pilot AI applications before large-scale deployment and independently evaluate their outcomes.
4. Provide accessible grievance mechanisms and human review of consequential automated decisions.
5. Encourage collaboration among governments, research institutions and responsible technology providers.

Conclusion

AI should function as an instrument of inclusive and accountable governance rather than a substitute for public institutions. Its success will depend on combining technological innovation with transparency, human oversight and equitable access.