Science & Technology · GS - III

As artificial intelligence becomes increasingly commercialised, examine the challenges of balancing innovation, business interests and AI safety. How can India promote responsible AI development while ensuring human control and accountability?

EXAM YEAR	PAPER	SUBJECT
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MARKS	WORD LIMIT
15	~250 words

Answer Hint

AI safety, commercialisation, human oversight, algorithmic accountability, transparency, bias, data privacy, regulatory framework, innovation ecosystem, IndiaAI Mission.

Model Answer

Introduction

The rapid commercialisation of artificial intelligence has intensified the debate over balancing technological innovation with safety and accountability. The commitment expressed by Anthropic's CEO to resist commercial and political pressure highlights the importance of responsible AI development.

Challenges in Balancing Innovation and Safety

1. **Commercial pressure:** Competition for market share and investment may encourage premature deployment of inadequately tested AI systems.
2. **Unintended consequences:** Advanced AI can generate misinformation, discriminatory outputs and potentially harmful autonomous behaviour.
3. **Opacity and accountability:** Complex algorithms make it difficult to explain decisions and identify responsibility for harm.

4. **Concentration of power:** Dominance by a few technology companies can create risks relating to market competition, data control and public accountability.
5. **Regulatory uncertainty:** Excessively restrictive or fragmented regulations may discourage innovation, while inadequate safeguards can expose society to harm.

Measures for Responsible AI Governance in India

- **Risk-based regulation:** Establish proportionate safeguards according to the potential harm posed by different AI applications.
- **Human oversight:** Ensure meaningful human intervention in high-impact decisions, particularly healthcare, finance and public administration.
- **Transparency and accountability:** Promote independent audits, explainability and clear responsibility for AI-related harms.
- **Data protection:** Ensure compliance with applicable data protection safeguards and prevent discriminatory data practices.
- **Institutional capacity:** Strengthen AI research, testing infrastructure and regulatory expertise.
- **Innovation ecosystem:** Advance the IndiaAI Mission while supporting startups, academic research and indigenous AI capabilities.

Conclusion

AI safety should be integrated into innovation rather than treated as an obstacle to it. A framework combining technological progress, human oversight, accountability and proportionate regulation can help India develop trustworthy and socially beneficial AI.

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