Indian Economy · GS - III

The expansion of artificial intelligence infrastructure is reshaping investment patterns and productivity prospects in the global economy. Examine its potential economic benefits and the risks associated with an AI-driven investment boom.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 12/11/2026	GS - III	Indian Economy

MARKS	WORD LIMIT
10	~150 words

Answer Hint

AI capital expenditure, semiconductor ecosystem, data-centre infrastructure, productivity growth, enterprise adoption, employment transformation, speculative investment, energy demand, digital divide, regulatory safeguards.

Model Answer

Introduction

The rapid expansion of artificial intelligence (AI) has triggered substantial investments in semiconductors, data centres, cloud computing and digital infrastructure. This investment cycle is increasingly influencing global economic growth and technological competition.

Potential Economic Benefits

- **Productivity enhancement:** AI can automate repetitive tasks, improve decision-making and increase efficiency across manufacturing, healthcare, agriculture and services.

- **Investment multiplier:** Infrastructure spending generates demand for chips, electricity, construction, telecommunications and related industries.
- **Innovation:** AI can accelerate research, product development and the emergence of new business models.
- **Enterprise competitiveness:** Wider adoption can reduce operational costs and improve service delivery.

Major Risks and Challenges

- **Speculative valuations:** Excessive expectations may create asset-price distortions.
- **Overcapacity:** Heavy investment may exceed actual commercial demand.
- **Employment disruption:** Automation can displace certain jobs and widen skill gaps.
- **Energy pressures:** Data centres require substantial electricity and cooling resources.
- **Unequal benefits:** Concentration of computing infrastructure may deepen economic and technological inequalities.

Way Forward

Governments should promote responsible AI adoption, invest in digital skills, strengthen competition and data governance, and encourage energy-efficient infrastructure.

Conclusion

AI investment offers significant opportunities for structural transformation, but its long-term economic value will depend on productive adoption, sustainable financing and equitable distribution of benefits.