Science & Technology · GS - III

Analyse how the growing intersection of technology, national security and trade is transforming economic relations among major powers.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 25/11/2026	GS - III	Science & Technology

MARKS	WORD LIMIT
15	~250 words

Answer Hint

Geoeconomics, technology restrictions, export controls, intellectual property, strategic autonomy, global supply chains

Model Answer

Technology has emerged as a strategic determinant of economic and geopolitical power. Competition over semiconductors, artificial intelligence, telecommunications and digital infrastructure increasingly influences international trade relations.

Changing dimensions of economic relations

1. **Strategic technology controls:** Governments use export restrictions and investment screening to limit access to technologies considered sensitive for national security.
2. **Technology fragmentation:** Competing technological ecosystems can create separate standards, supply chains and markets.
3. **Intellectual property disputes:** Allegations of trade-secret theft and violations of sanctions can generate criminal proceedings and diplomatic tensions.
4. **Economic coercion concerns:** Tariffs, sanctions and restrictions on technology access may become instruments of geopolitical competition.

Implications for India

India faces both opportunities and challenges. Global supply-chain diversification may attract semiconductor and electronics investments, while technological fragmentation can increase import costs and strategic dependencies.

Policy priorities

1. Strengthen domestic research, semiconductor manufacturing and innovation.
2. Protect intellectual property through credible legal institutions.
3. Diversify critical technology supply chains.
4. Maintain transparent, rules-based trade and investment policies.
5. Build international partnerships without compromising strategic autonomy.

The emerging technology order requires balancing legitimate national-security concerns with predictable trade rules. For India, technological self-reliance combined with global cooperation is essential to economic resilience and strategic autonomy.

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