Science & Technology · GS - III

Distinguish between privatisation and private sector participation in India's space programme. Examine how space sector reforms can promote innovation while safeguarding strategic interests.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 26/10/2026	GS - III	Science & Technology

MARKS	WORD LIMIT
10	~ 150 words

Answer Hint

Indian Space Policy 2023; ISRO's role; IN-SPACe; NSIL; private investment; technology transfer; commercialisation; strategic autonomy; space security

Model Answer

Introduction

India's space sector reforms seek to expand commercial participation without necessarily transferring the Indian Space Research Organisation's institutional responsibilities to private companies. The objective is to strengthen national space capabilities through collaboration.

Privatisation and Private Participation

Privatisation generally involves transferring ownership or control of a public entity to private interests. Private participation, however, allows private firms to manufacture components, develop launch vehicles, provide satellite services and collaborate on research while public institutions retain their designated responsibilities.

Potential Benefits

1. Innovation and Investment

Private investment can accelerate technological development, attract funding and encourage competition.

2. Industrial Capacity

Private firms can expand manufacturing, launch services and satellite applications, creating skilled employment and export opportunities.

3. Cost and Efficiency

Specialisation and competition may improve production efficiency and shorten development cycles.

Key Challenges

Strategic technology protection, cybersecurity, orbital debris, regulatory clarity and equitable access to infrastructure require sustained attention.

Way Forward

India should strengthen IN-SPACe's regulatory capacity, support technology transfer through transparent mechanisms, protect sensitive technologies and maintain clear accountability. Public-private collaboration should complement ISRO's scientific and strategic work.

Conclusion

A collaborative space ecosystem can combine public research capabilities with private innovation. Clear institutional roles and robust safeguards are essential to achieving technological progress and strategic autonomy.

BECOME IAS
AI POWERED UPSC PREP