

GENERAL STUDIES II

India's Space Sector Reforms 2026: Gaganyaan, SpaDeX & UPSC PYQs

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Date: 14 October 2026

Platform: Civil Service Gurukul Research Wing

Reading Time: 5 Mins

India's space sector is undergoing a historic transformation driven by human spaceflight ambitions, indigenous orbital docking capabilities and the rapid expansion of private space enterprises (ISRO's Gaganyaan programme aims to establish human spaceflight capability, while the SpaDeX mission successfully demonstrated autonomous docking and undocking in 2025). Reforms introduced since 2020, including IN-SPACe, the Indian Space Policy 2023 and liberalised foreign investment rules, have accelerated commercial participation. As of August 2026, around 440 space-technology startups were registered in India. This comprehensive UPSC analysis explores technological milestones, the space economy, national security, regulatory challenges and important previous-year examination themes.

CIVIL SERVICE GURUKUL

UPSC | SCIENCE & TECHNOLOGY | GENERAL STUDIES

INDIA'S SPACE REFORMS 2026 | OCTOBER 2026

How India's human spaceflight mission, indigenous orbital docking technology and startup-led innovation are transforming the nation's scientific capabilities and commercial space economy.

14 October 2026 | GS Paper III | UPSC Prelims & Mains

1. Why Are India's Space Sector Reforms in the News?

India's space sector is transitioning from a predominantly government-led model to a broader ecosystem involving public research institutions, private manufacturers, technology startups and commercial operators.

Three developments highlight this transition:

- Preparations for ISRO's Gaganyaan human spaceflight programme.
- Successful demonstration of satellite rendezvous, docking and undocking through SpaDeX.
- Rapid growth in private space enterprises following reforms since 2020.

2020

Major reforms began

2025

SpaDeX docking

~440

Startups by August 2026

Latest Verified Development

In August 2026, parliamentary information indicated approximately 440 registered space-technology startups. IN-SPACE had granted 113 authorisations to 52 non-government entities, including 118 startups.

These are dated figures rather than a live count.

2. Evolution of India's Space Sector

1962: Indian National Committee for Space Research (INCOSPAR) established.

1969: Indian Space Research Organisation (ISRO) established.

1975: Aryabhata, India's first satellite, launched.

1980: Rohini satellite successfully placed in orbit by SLV-3.

2008: Chandrayaan-1 launched.

2013: Mars Orbiter Mission launched.

2019: NewSpace India Limited (NSIL) incorporated.

2020: Major reforms opened space activities to wider private participation.

2022: Skyroot's Vikram-S suborbital launch and formal inauguration of IN-SPACE.

2023: Indian Space Policy announced and Chandrayaan-3 achieved lunar soft landing.

2024: Space-sector FDI rules liberalised; Agnikul demonstrated a private suborbital launch.

2025: SpaDeX completed docking and undocking demonstrations.

2026: Continued expansion of India's private space ecosystem and human-spaceflight preparations.

3. Gaganyaan: India's Human Spaceflight Programme

Gaganyaan is India's programme to demonstrate indigenous capability for human spaceflight. The programme involves transporting astronauts into low Earth orbit and returning them safely to Earth.

Major Objectives

- Develop human-rated launch and spacecraft systems.
- Demonstrate safe crew transportation to space and return.
- Develop reliable environmental control and life-support systems.
- Establish emergency escape and crew recovery capabilities.
- Develop astronaut training and mission-operation capacity.

Major Components

Component	Purpose
Human-rated LVM3	Launch system adapted for crew safety requirements
Crew Module	Houses astronauts during the mission
Service Module	Provides supporting propulsion, power and other spacecraft functions
Crew Escape System	Separates the crew module from the launch vehicle during certain emergencies
Environmental Control and Life Support	Maintains suitable conditions for crew survival
Recovery Systems	Enable safe return and retrieval of the crew module

Why Is Human-Rating Important?

Human-rating means designing, testing and validating systems to meet stricter safety and reliability standards required for carrying people.

UPSC Concept

An unmanned satellite launch vehicle and a human-rated spacecraft system are not equivalent. Crew escape, redundancy, life support and safe recovery are essential additional requirements for human spaceflight.

Important Developments

ISRO has undertaken crew escape tests, parachute and recovery-system evaluations, astronaut training and integrated system testing.

The Axiom-4 mission in 2025 also enabled Indian astronaut Group Captain Shubhanshu Shukla to gain experience aboard the International Space Station, including participation in microgravity experiments.

The experience can support India's wider human-spaceflight capability, but the Axiom-4 mission is distinct from an indigenous Gaganyaan crewed launch.

Gaganyaan must not be described as having completed its planned indigenous crewed orbital flight without confirmation of that specific mission.

4. SpaDeX: India's Space Docking Technology

SpaDeX stands for Space Docking Experiment. Its purpose was to demonstrate technologies required for two spacecraft to approach one another, establish controlled contact and connect in orbit.

Important Mission Facts

Feature	Detail
Mission	SpaDeX
Launch vehicle	PSLV-C60
Spacecraft	SDX-01 and SDX-02
Successful docking	15 January 2025
Successful undocking	13 March 2025
Importance	Demonstrated rendezvous, docking and undocking capability

What Is Space Docking?

Space docking is the controlled mechanical connection of two spacecraft while they are in orbit.

The spacecraft must coordinate their relative positions, velocities and orientations before establishing contact.

Docking Sequence

Orbit determination ? Rendezvous ? Relative navigation ? Close approach ? Alignment ? Capture and docking ? Joint operations ? Undocking.

Why Does Docking Matter?

- Assembly of modular space stations.
- Transfer of crew and supplies between spacecraft.
- Orbital servicing and future refuelling systems.
- Complex lunar missions involving multiple spacecraft.
- Long-duration human spaceflight operations.

India's Achievement

With the successful SpaDeX docking demonstration, India became the fourth country to demonstrate indigenous satellite docking technology, after the United States, Russia and China.

ISRO subsequently demonstrated undocking, a second docking operation and power transfer between the spacecraft.

Future Relevance

Docking capability is an important technological foundation for the proposed Bharatiya Antariksh Station and more complex orbital operations.

5. Docking, Undocking and Berthing: Key Differences

Concept	Meaning
Rendezvous	Two spacecraft approach and coordinate relative motion in orbit
Docking	Two spacecraft connect through controlled relative motion and capture
Undocking	Previously connected spacecraft safely separate
Berthing	Spacecraft or cargo is positioned and attached using an external handling system, often a robotic arm

For Prelims, the distinction between docking and berthing is especially useful.

6. Bharatiya Antariksh Station: India's Space Station Vision

India plans to develop the Bharatiya Antariksh Station as part of its longer-term human-spaceflight and orbital research strategy.

The national vision includes establishing an initial space station module around 2028 and progressing towards an operational Indian space station by 2035. A crewed lunar mission is a longer-term objective for 2040.

These are programme targets rather than completed milestones.

Potential Benefits

- Long-duration human spaceflight research.
- Experiments in microgravity.
- Study of life sciences and materials.
- Spacecraft servicing and docking operations.
- Development of advanced space robotics.
- International research cooperation.

Direct UPSC Connection

UPSC Mains 2019 asked about India's plan to have its own space station and its benefits. The SpaDeX achievement adds an important technological dimension to this previously examined theme.

7. Why Were Space Sector Reforms Necessary?

India developed strong publicly funded space research capabilities under ISRO, but the global space economy increasingly includes private manufacturers, satellite operators, launch companies and data-service providers.

The reforms aim to create a competitive ecosystem without weakening national scientific priorities.

Commercial Expansion

Encourage private investment and commercial space services.

Technology Innovation

Support advanced propulsion, satellites, sensors and launch vehicles.

Employment Generation

Create specialised engineering, research and manufacturing opportunities.

Global Competitiveness

Enable Indian businesses to participate in international space markets.

8. India's New Space Governance Architecture

A. ISRO

ISRO focuses on research, advanced technologies, national space missions and scientific development.

B. IN-SPACe

The Indian National Space Promotion and Authorization Centre promotes, enables, supervises and authorises space activities undertaken by non-government entities.

C. NewSpace India Limited

NSIL is a commercial public-sector enterprise under the Department of Space. It supports commercialisation, technology transfer and industry-led space production and services.

Institution	Primary Role
ISRO	Research, innovation and national missions
IN-SPACe	Promotion, enabling and authorisation of private space activities
NSIL	Commercialisation and industry-oriented space activities
Department of Space	Government policy and administrative oversight

D. Indian Space Policy 2023

The policy defines responsibilities and enables private participation in space manufacturing, launch services, satellite systems, ground infrastructure and space-based applications.

E. FDI Reforms 2024

India liberalised foreign investment rules for different space-sector activities, with conditions varying by business category.

- Satellite manufacturing and operation: up to 74% automatic route.
- Launch vehicles, associated systems and spaceports: up to 49% automatic route.
- Satellite components, systems, ground and user segments: up to 100% automatic route.

Investments beyond the specified automatic-route thresholds requires government approval where applicable.

9. The Rise of Private Space Startups

Private space enterprises are becoming active in launch services, satellite manufacturing, remote sensing, propulsion, orbital safety, communication systems and downstream analytics.

Startup	Broad Specialisation
Skyroot Aerospace	Private launch vehicles and launch services
Agnikul Cosmos	Launch vehicle development and propulsion
Pixxel	Hyperspectral Earth observation satellites
Dhruva Space	Satellite platforms and space systems
Bellatrix Aerospace	Propulsion technologies
Digantara	Space situational awareness and orbital monitoring
GalaxEye	Earth observation and imaging technology
TakeMe2Space	In-orbit computing and space technology services

Two Notable Early Milestones

In November 2022, Skyroot Aerospace's Vikram-S became a major milestone for privately developed suborbital launch systems in India.

In May 2024, Agnikul Cosmos demonstrated a privately developed suborbital launch vehicle.

Important Distinction

A successful suborbital test is not the same as placing a payload into a stable Earth orbit. Always verify the exact mission outcome before describing a vehicle as operational for commercial orbital launches.

10. Economic Significance of India's Space Revolution

A. Growth of Space Economy

Government and industry projections envisage significant expansion of India's commercial space economy over the coming decade.

A frequently cited IN-SPACe vision targets a space economy of approximately US\$44 billion by 2033. This is a projection, not current realised revenue.

B. New Industries

- Satellite communications.
- Earth observation data and analytics.
- Precision agriculture.
- Maritime tracking and logistics.
- Disaster forecasting and insurance.
- Space propulsion and materials.
- Launch services and orbital infrastructure.

C. Strategic Benefits

- Reduced dependence on foreign technologies.
- Domestic manufacturing capabilities.
- Greater resilience of critical space infrastructure.
- Export opportunities and skilled employment.

11. Social and Developmental Applications

Agriculture

Satellite imaging supports crop assessment, water monitoring and agricultural planning.

Disaster Management

Remote sensing supports flood mapping, cyclone monitoring and emergency response.

Navigation

NavIC supports regional navigation, positioning and timing services.

Communication

Satellites support broadcasting, connectivity and communication services.

12. Challenges Before India's Space Sector

1. **High development costs:** Space technologies require substantial initial investment.
2. **Reliability:** Launch and spacecraft failures can cause significant financial losses.
3. **Technology gaps:** Advanced components and materials may require further indigenous development.
4. **Space debris:** Growing satellite activity increases collision risks.
5. **Regulatory complexity:** Space activity requires clear authorisation and accountability rules.
6. **Financing:** Deep-tech startups may face long periods before generating revenue.
7. **Insurance and liability:** Launch and on-orbit activities present complex risks.
8. **Dual-use technology:** Space systems have civilian and security implications.

Important International Agreements

- Outer Space Treaty, 1967.
- Rescue Agreement, 1968.
- Liability Convention, 1972.
- Registration Convention, 1975.

These agreements form important parts of the international legal framework for space activities.

13. The Way Forward

- Expand affordable research and testing infrastructure.
- Improve public-private technology collaboration.
- Strengthen access to venture capital and patient funding.
- Develop skilled aerospace professionals.
- Promote indigenous component manufacturing.
- Build transparent licensing and liability systems.
- Strengthen space debris monitoring and sustainability standards.
- Encourage international scientific and commercial partnerships.

Policy Direction

India needs a balanced framework combining government-led research, private innovation, commercial opportunities, national security and responsible space governance.

14. Actual UPSC Previous Year Questions

PYQ Authenticity Note

The following questions are historical UPSC Civil Services Mains GS III questions, drawn from 2015–2023. They are related to navigation, space missions, human spaceflight, space stations and scientific applications.

Mains questions are descriptive; there are no correct option letters. The answer frameworks below are original exam-preparation explanations.

UPSC MAINS 2015 | GS III

PYQ 1. Indian Regional Navigation Satellite System

What do you understand by "Standard Positioning System" and "Precision Positioning System" in the GPS era? Discuss the advantages India perceives from its ambitious IRNSS programme employing just seven satellites.

Model Answer Framework

- Explain satellite navigation and positioning services.
- Distinguish standard civilian services from higher-precision services.
- Explain the regional coverage and architecture of IRNSS/NavIC.

- Discuss technological autonomy and navigation resilience.
- Explain applications in disaster management, transport and national security.

Contemporary Link: Space reforms can strengthen India's domestic navigation hardware, receiver and application ecosystem.

UPSC MAINS 2016 | GS III

PYQ 2. Space Technology and Socioeconomic Development

Discuss India's achievements in the field of Space Science and Technology. How has the application of this technology helped India in its socio-economic development?

Model Answer Framework

- ISRO's satellite and launch-vehicle capabilities.
- Communication and broadcasting services
- Meteorology and disaster management.
- Agricultural and natural-resource applications.
- Navigation, scientific exploration and national security.
- Emerging private-sector applications and commercial services.

Contemporary Link: Private space startups are extending space-based applications into commercial markets.

UPSC MAINS 2017 | GS III

PYQ 3. Challenges of Human Spaceflight

India has achieved remarkable successes in unmanned space missions including Chandrayaan and Mars Orbiter Mission, but has not ventured into a manned space mission. What are the main obstacles to launching a manned space mission, both in terms of technology and logistics? Examine critically.

Model Answer Framework

- Human-rating of launch systems.
- Crew module safety and life support.
- Crew escape and emergency response.
- Atmospheric re-entry and recovery.
- Astronaut training.
- Cost, infrastructure and mission reliability.

Contemporary Link: Gaganyaan directly addresses many of the technology and logistical obstacles identified in this question.

UPSC MAINS 2019 | GS III

PYQ 4. India's Own Space Station

What is India's plan to have its own space station and how will it benefit our space programme?

Model Answer Framework

- Explain India's Bharatiya Antariksh Station vision.
- Long-duration crew operations and microgravity research.
- Materials science, medicine and biological experiments.
- Docking and orbital servicing capabilities.
- Advanced spacecraft systems and international cooperation.

Contemporary Link: SpaDeX docking technology supports the future assembly and servicing of orbital infrastructure.

UPSC MAINS 2022 | GS III | 15 MARKS

PYQ 5. James Webb Space Telescope

Launched on 25th December, 2021, James Webb Space Telescope has been much in the news since then. What are its unique features which make it superior to its predecessor Space Telescopes? What are the key goals of this mission? What potential benefits does it hold for the human race?

Model Answer Framework

- Infrared observation capability.
- Large segmented primary mirror.
- Location near the Sun-Earth L2 region.
- Study of early galaxies and star formation.
- Exoplanet atmospheres and planetary systems.
- Technological and scientific benefits.

Contemporary Link: Distinguish scientific space missions from human-spaceflight, navigation and commercial satellite programmes.

UPSC MAINS 2023 | GS III | 15 MARKS

PYQ 6. Chandrayaan-3 and Spacecraft Subsystems

What is the main task of India's third Moon mission which could not be achieved in its earlier mission? List the countries that have achieved this task. Introduce the subsystems in the spacecraft launched and explain the role of the "Virtual Launch Control Centre" at the Vikram Sarabhai Space Centre which contributed to the successful launch from Sriharikota.

Model Answer Framework

- Explain the objective of successful lunar soft landing.
- Compare Chandrayaan-2 and Chandrayaan-3 outcomes.
- Identify the propulsion, lander and rover modules.
- Explain navigation, guidance and landing systems.
- Discuss the role of launch preparation and monitoring.
- Explain indigenous technology development.

Contemporary Link: Orbital docking adds another major technological capability to India's complex mission architecture.

15. PYQ Trend Analysis: What Does UPSC Actually Test?

The six selected Mains questions span 2015–2023. They show the examination's interest in both the underlying technologies and their applications.

Year	PYQ Theme	Demand	Current Relevance
2015	IRNSS/NavIC	Navigation systems and national benefits	High
2016	Indian space achievements	Socioeconomic applications	Very High
2017	Human spaceflight	Technological and logistical challenges	Very High
2019	Indian space station	Future plans and benefits	Very High
2022	James Webb Telescope	Technology, mission objectives, benefits	Medium
2023	Chandrayaan-3	Mission systems and technological achievement	Very High

A. Trend 1: Technology-Based Questions

UPSC expects candidates to understand the functioning of space systems, not merely memorise mission names.

B. Trend 2: Benefits and Applications

Questions regularly connect space technology with economic development, navigation, scientific research and public welfare.

C. Trend 3: National Capability and Self-Reliance

Human spaceflight, satellite navigation and launch technologies illustrate India's growing indigenous capabilities.

D. Trend 4: Future Missions

The 2019 question on India's space station demonstrates interest in future plans, their benefits and associated technological requirements.

E. Prelims: Likely Question Structures

- Statements about spacecraft and mission objectives.
- Matching institutions with their responsibilities.
- Distinguishing docking, undocking and berthing.
- Understanding launch vehicles and orbital terms.
- Identifying important scientific instruments.
- Matching startups with their technological domains.

Methodological Note

These are qualitative observations from selected historical questions. They are not numerical estimates of UPSC question probabilities.

16. Most Important Topics for UPSC 2027 Revision

Priority I: Very High

VERY HIGH

1. Gaganyaan

- Mission objectives
- Human-rated LVM3
- Crew Module and Service Module
- Crew Escape System
- Life-support technology
- Re-entry and recovery systems
- Challenges of human spaceflight

VERY HIGH

2. SpaDeX and Orbital Docking

- Docking and undocking dates
- SDX-01 and SDX-02

- PSLV-C60
- Rendezvous and relative navigation
- Docking versus berthing
- Power transfer
- Applications in space stations and lunar missions

VERY HIGH

3. Space Sector Reform Institutions

- 2020 space reforms
- IN-SPACe
- NSIL
- ISRO
- Indian Space Policy 2023
- FDI policy 2024
- Authorisation of private space activities

VERY HIGH

4. Bharatiya Antariksh Station

- India space station vision
- Modular construction
- Docking and servicing
- Microgravity research
- Human spaceflight capability
- 2035 operational goal

Priority II: High

HIGH

5. Private Space Startups

- Skyroot and Agnikul
- Pixxel and Dhruva Space
- Bellatrix and Digantara
- Launch services
- Satellite manufacturing

- Earth observation and data analytics
- Venture capital and commercialisation

HIGH

6. Important Orbital Concepts

- Low Earth Orbit
- Geostationary and geosynchronous orbits
- Polar and Sun-synchronous orbits
- Orbital rendezvous
- Microgravity
- Space debris
- Space situational awareness

HIGH

7. Socioeconomic Applications

- Remote sensing
- Precision agriculture
- Disaster management
- Telecommunications
- Navigation
- Weather forecasting
- National security

Priority III: Selective

MEDIUM

8. Space Law and Sustainability

- Outer Space Treaty 1967
- Liability Convention 1972
- Registration Convention 1975
- Space debris mitigation
- Orbital traffic management
- Private-sector liability

17. Original UPSC Prelims Practice MCQs

Question Status: These are original exam-oriented practice questions, not actual historical UPSC PYQs.

Practice MCQ 1: SpaDeX

Consider the following statements:

1. SpaDeX was launched using PSLV-C60.
2. It demonstrated successful orbital docking in 2025.
3. Its primary objective was to land astronauts on the Moon.

Which statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) All three

Answer: (a)

SpaDeX demonstrated autonomous rendezvous, docking and undocking. It was not a crewed lunar landing mission.

Practice MCQ 2: IN-SPACE

What is the principal role of IN-SPACE?

- (a) To replace ISRO as India's space research organisation.
- (b) To promote, enable and authorise non-government space activities.
- (c) To regulate international aviation.
- (d) To operate the International Space Station.

Answer: (b)

IN-SPACE promotes and authorises private participation in India's space sector.

Practice MCQ 3: Gaganyaan

Consider the following statements:

1. Gaganyaan involves human-rated launch systems.
2. A Crew Escape System improves astronaut safety.
3. A successful uncrewed satellite launch alone proves complete human-spaceflight capability.

- (a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) All three

Answer: (b)

Human spaceflight requires additional capabilities, including life support, crew escape and safe recovery.

Practice MCQ 4: Space Governance

Which of the following pairs are correctly matched?

1. ISRO – Space research and national missions.
2. NSIL – Commercial space activities.
3. IN-SPACe – Private-sector authorisation.

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) All three

Answer: (d)

All three institutions have complementary roles in India's space ecosystem.

Practice MCQ 5: Orbital Operations

Which statement is most accurate?

- (a) Docking and atmospheric re-entry are identical.
(b) Berthing always requires a crewed spacecraft.
(c) Docking involves controlled connection between spacecraft in orbit.
(d) Satellites cannot separate after docking.

Answer: (c)

Docking joins spacecraft through controlled relative motion. Undocking enables subsequent separation.

18. Most Important UPSC Mains Practice Questions for 2027

The following are original predictive practice questions, not actual previous year questions or guaranteed predictions.

GS III | 15 Marks | Highest Priority

"India's space sector reforms represent a shift from government-led research to a competitive innovation-driven ecosystem." Critically examine with reference to IN-SPACe, NSIL and private space startups.

GS III | 15 Marks | Highest Priority

Explain the principle of orbital docking. Discuss the significance of the SpaDeX mission for India's planned space station and future human-spaceflight programmes.

GS III | 15 Marks | Highest Priority

Discuss the technological and logistical challenges of Gaganyaan. How can the programme strengthen India's long-term scientific capabilities?

GS III | 10 Marks | High Priority

Examine the opportunities and constraints facing private space startups in India.

GS III | 15 Marks | High Priority

Evaluate the significance of Bharatiya Antariksh Station for scientific research, space diplomacy and strategic autonomy.

GS III | 10 Marks | High Priority

Discuss the challenges posed by space debris and the need for sustainable orbital operations.

19. Three-Day Revision Strategy

Day	Topics	Practice Task
Day 1	Gaganyaan, human-rating, crew safety, LVM3	Revise 2017 PYQ and write one Mains answer
Day 2	SpaDeX, orbits, docking, space station	Revise 2019 PYQ and attempt 20 MCQs

Day 3 IN-SPACE, NSIL, startups, policy and FDI

Prepare institutional comparison and two Mains answers

20. Fifteen Last-Minute Revision Facts

1. ISRO was established in 1969.
2. India's major space-sector reforms began in 2020.
3. IN-SPACE supports and authorises private space activities.
4. NSIL was incorporated in 2019.
5. Indian Space Policy was introduced in 2023.
6. India liberalised space-sector FDI rules in 2024.
7. Gaganyaan is India's human spaceflight programme.
8. Human-rated LVM3 is associated with Gaganyaan.
9. SpaDeX was launched using PSLV-C60.
10. SpaDeX demonstrated docking on 16 January 2025.
11. Successful SpaDeX undocking occurred on 13 March 2025.
12. India became the fourth country to demonstrate space docking capability.
13. Bharatiya Antariksh Station is India's planned space station.
14. Around 400 space startups were registered as of August 2026.
15. Space docking supports modular orbital construction and future complex missions.

21. Conclusion

India's space programme is entering a new phase that combines advanced science, human spaceflight, autonomous docking and commercial innovation.

Gaganyaan seeks to develop the country's human-spaceflight capability, while SpaDeX has demonstrated an important technology required for future orbital infrastructure.

At the same time, IN-SPACE, NSIL and private enterprises are expanding India's commercial and technological ecosystem.

The long-term success of these reforms will depend on technological reliability, effective regulation, affordable financing, skilled talent and responsible space operations.

Final UPSC Takeaway

Prepare this topic through five dimensions: human spaceflight, orbital docking, space governance reforms, private startups and national development applications.

22. Frequently Asked Questions

What is Gaganyaan?

Gaganyaan is India's programme to develop indigenous human-spaceflight capability.

What is SpaDeX?

SpaDeX is ISRO's Space Docking Experiment, which demonstrated orbital rendezvous, docking and undocking.

When did India achieve space docking?

ISRO successfully docked the SpaDeX satellites on 16 January 2025.

What is IN-SPACe?

IN-SPACe promotes, enables and authorises non-government space activities in India.

What is Bharatiya Antariksh Station?

It is India's planned space station for long duration research and human spaceflight.

Why are private startups important?

They can expand innovation, manufacturing, commercial launch services, Earth observation and space-based applications.

UPSC Syllabus Relevance

GS III – Science & Technology

GS III – Indigenisation

GS III – Space Technology

GS III – Economic Development

GS II – Government Policies

Gaganyaan

SpaDeX

IN-SPACe

Space Startups

UPSC PYQ Analysis

UPSC Current Affairs 2026

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