

India's Space Future: Chandrayaan-4, Gaganyaan, and NISAR Milestones Unveiled

Space Exploration · Answer Key · 10 Questions

1. When is ISRO's Chandrayaan-4 lunar sample return mission primarily targeted for launch?

- A) 2026
- B) 2027
- C) 2028**
- D) 2029

2. What is the target year for India's first crewed Gaganyaan mission?

- A) 2025
- B) 2026
- C) 2027**
- D) 2028

3. Which two space agencies are jointly developing the NISAR Earth observation satellite?

- A) ISRO and ESA
- B) ISRO and JAXA
- C) ISRO and NASA**
- D) ISRO and Roscosmos

4. To what approximate value is India's space economy projected to grow by 2030?

- A) \$10-15 billion
- B) \$20-25 billion
- C) \$40-45 billion**
- D) \$60-65 billion

5. When is the first module of India's planned space station, Bharatiya Antariksh Station (BAS), expected to be launched?

- A) 2027
- B) 2028**
- C) 2030
- D) 2035

6. What critical system for the Gaganyaan crew module did ISRO successfully test in July 2026 to ensure safe descent?

- A) Navigation software
- B) Life support system
- C) Main parachutes**
- D) Docking mechanism

7. In July 2026, ISRO successfully hot-tested its indigenous semi-cryogenic engine at what significant thrust level?

- A) 50 tonnes
- B) 100 tonnes
- C) 175 tonnes**
- D) 250 tonnes

8. How many modules are planned for the Chandrayaan-4 mission, which will be carried by two separate launches?

- A) Three
- B) Four
- C) Five**
- D) Six

9. The NISAR satellite uses which two radar bands for its advanced Earth observation capabilities?

- A) C-band and X-band
- B) Ka-band and Ku-band
- C) L-band and S-band**
- D) UHF-band and VHF-band

10. What type of motor did ISRO successfully ground test in July 2026 for its new Sub-Orbital Launch Vehicle for Experiments (SOLVE) in support of the Gaganyaan program?

- A) Liquid fuel engine
- B) Ion thruster
- C) Solid motor**
- D) Hybrid rocket motor