Asian Space Frontiers: China's Lunar Ambitions, India's Human Spaceflight, a

Space Exploration Asia · Answer Key · 10 Questions

1. What is the primary scientific objective of China's upcoming Chang'e-7 mission, scheduled for launch in the second half of 2026?

A) To establish a permanent lunar research base.

B) To search for water ice and volatile elements in the lunar south pole's permanently shadowed regions.

C) To conduct a sample return mission from the far side of the Moon.

D) To deploy a large-scale astronomical observatory on the lunar surface.

2. Which Asian nation successfully launched its fourth homegrown Nuri rocket in November 2025, carrying an Earth-observation satellite and multiple cubesats into orbit?

A) Japan

B) South Korea

C) Vietnam

D) Singapore

3. India's Gaganyaan program aims to achieve a significant milestone. What is the current planned year for the first crewed flight of the Gaganyaan mission?

A) 2026

B) 2027

C) 2028

D) 2025

4. Japan's SLIM (Smart Lander for Investigating Moon) mission achieved a historic first for the country. What was this achievement?

A) First Asian nation to land a rover on the Moon.

B) First successful sample return mission from the Moon.

C) First precision lunar landing, making Japan the fifth country to soft-land on the Moon.

D) First mission to detect subsurface water ice on the lunar south pole.

5. China's Tiangong space station is undergoing expansion. What is the planned configuration for the expanded station, and what is a notable future addition?

A) A four-module station with the addition of a new laboratory module.

B) A six-module station with the addition of a multifunctional extension module and the Xuntian orbital telescope.

C) A ten-module station designed for long-term deep space missions.

D) A dual-module station mirroring the ISS configuration.

6. The United Arab Emirates (UAE) is preparing for its second lunar mission. What is the name of the rover and its target destination?

A) Rashid Rover 1, targeting the lunar north pole.
B) MBRSC Explorer, targeting a lunar crater.
C) Rashid Rover 2, targeting the far side of the Moon.
D) Lunar Falcon, targeting the lunar equator.

7. Vietnam has made advancements in space technology, particularly in materials science. What type of composite materials have they developed for satellite applications?

A) Aluminum-lithium alloys for enhanced structural integrity.
B) Carbon fiber-reinforced polymer (CFRP) composites enhanced with carbon nanomaterials.
C) Titanium-based alloys for high-temperature resistance.
D) Ceramic matrix composites for improved thermal shielding.

8. South Korea's Next-Generation Mid-Sized Satellite 2 (CAS500-2) was recently launched. What is a key characteristic of this satellite's development and its intended use?

A) It was entirely developed by a government research institute and will be used for deep space observation.
B) It is the first independently developed satellite platform by a private company (KAI) and will be used for Earth observation.
C) It is a joint venture with a European space agency for telecommunications.
D) It is a small satellite designed for scientific experiments in low Earth orbit.

9. Recent findings from India's Chandrayaan-3 mission have provided new insights into the Moon's subsurface. What unexpected electrical phenomenon was detected near the Moon's surface at the South Polar Region?

A) Significant subsurface ice deposits.
B) A highly active plasma environment with dynamic spikes of electrical potential.
C) Geothermal vents emitting heat.
D) A strong magnetic field comparable to Earth's.

10. Singapore is establishing a National Space Agency (NSAS) in 2026. What are some of the key focus areas for Singapore's space initiatives?

A) Developing independent launch capabilities and deep space exploration.
B) Climate and sustainability technologies (e.g., carbon monitoring), space sustainability, and microgravity research.
C) Establishing a lunar mining operation and asteroid defense systems.
D) Focusing solely on satellite manufacturing for commercial purposes.