

China's Tech Frontier: Quantum Leaps, AI Governance, and Lunar Ambitions

China Tech · Practice Test · 20 Questions

1. In the realm of quantum computing, which of the following Chinese quantum computer prototypes has achieved a record number of readable qubits and demonstrated a significant leap in quantum computational advantage?

- A) Zuchongzhi 2.1 (66 qubits)
- B) Zuchongzhi 3.0 (105 qubits)
- C) Jiuzhang (photonic system)
- D) Origin Wukong (72 qubits)

2. As of late 2025, China has made significant strides in AI regulation. Which of the following was a key initiative announced in July 2025 to shape international AI governance and establish domestic safeguards?

- A) The AI Safety Governance Framework
- B) The Global AI Governance Action Plan
- C) The National Guidelines for the Development of a Comprehensive Standardization System for the AI Industry
- D) The Interim Measures for the Management of Generative Artificial Intelligence Services

3. China's Chang'e-6 mission achieved a historic milestone in lunar exploration in June 2024. What was this primary achievement?

- A) Successfully landing on the lunar south pole
- B) Collecting and returning the first-ever samples from the far side of the moon
- C) Deploying a rover to explore lunar lava tubes
- D) Establishing a permanent research base on the moon

4. Which agricultural biotechnology breakthrough did Chinese researchers achieve in August 2025, as published in the journal Cell?

- A) Development of a gene-edited rice variety resistant to all known pests
- B) Creation of the world's first AI-powered breeding robot named GEAIR
- C) Successful cultivation of the first genetically engineered wheat variety
- D) Breakthroughs in drought-resistant corn through synthetic biology

5. In late 2024, China's semiconductor industry saw a significant development concerning High Bandwidth Memory (HBM). Which company was reported to be aiming for mass production of HBM3 by 2026, alongside investments in dedicated HBM packaging capacity?

- A) YMTC (Yangtze Memory Technologies Corp)
- B) SMIC (Semiconductor Manufacturing International Corporation)
- C) CXMT (ChangXin Memory Technologies)
- D) HiSilicon

6. China has been rapidly advancing its drone technology. As of November 2025, what percentage of global drone-related patent applications does China account for, solidifying its position as the leading source of drone technology worldwide?

- A) Over 50%
- B) Over 60%
- C) Over 70%
- D) Over 80%

7. Regarding the development of humanoid robots, which Chinese company pivoted to bipedal humanoid robots in 2024-2025, leveraging mature motor and algorithm components for expanded production and R&D?

- A) UBTECH
- B) ENGINEAI Robotics
- C) Unitree
- D) Leju Robotics

8. In renewable energy, China achieved a significant milestone by late 2024, well ahead of its 2030 target. What was this milestone?

- A) Becoming the world's largest producer of solar panels
- B) Having the highest installed capacity for renewable energy globally
- C) Reaching 1,200 gigawatts (GW) of installed wind and solar power capacity
- D) Achieving 50% of its electricity from renewable sources

9. China's advancements in biotechnology include gene editing. In June 2025, researchers developed new tools known as mitochondrial DNA base editors. What is the primary potential application of these editors?

- A) Treating genetic disorders caused by mutations in the nuclear DNA
- B) Enabling faster and more efficient CRISPR-Cas9 gene editing
- C) Developing gene therapies for serious conditions caused by mitochondrial DNA errors
- D) Creating genetically modified crops with enhanced nutritional value

10. In the telecommunications sector, China is a leader in 5G-Advanced and looking towards 6G. By the end of 3Q25, what was the total number of 5G base stations in China?

- A) Approximately 3.5 million
- B) Approximately 4.7 million
- C) Approximately 5.2 million
- D) Approximately 6.0 million

11. China's electric vehicle (EV) market is the largest globally. In 2025, what significant achievement did China's EV market reach regarding new vehicle sales?

- A) Surpassing 50% electric vehicle share of new vehicle sales globally
- B) Becoming the first major market globally to surpass a 50% electric vehicle share of new vehicle sales
- C) Achieving 60% of new vehicle sales as electric vehicles
- D) Becoming the largest exporter of EVs globally

12. In the field of artificial intelligence governance, China released the 'Measures for Labelling of AI-Generated Synthetic Content' (Labelling Measures) and the 'Labelling Standard.' When did these measures and the standard become effective?

- A) September 1, 2024
- B) September 1, 2025
- C) October 1, 2025
- D) November 1, 2025

13. Which Chinese quantum computer, a 100-qubit neutral-atom system, entered commercial sales in 2025 with customers including Pakistan's government?

- A) Zuchongzhi 3.2
- B) Tianyan-504
- C) Hanyuan-1
- D) Origin Benyuan Wuyuan

14. China aims for significant progress in its semiconductor industry. The third phase of 'The Big Fund' (2025-2040) aims for what primary goal?

- A) To focus on developing advanced logic process nodes up to 7nm/5nm
- B) To establish a fully independent domestic supply chain, including all fab tools and core technology
- C) To significantly increase market share in the semiconductor device space to 10%
- D) To achieve 50% semiconductor self-sufficiency by 2027

15. In space exploration, China's Tianwen-2 mission is scheduled for launch around 2025. What is the primary objective of this mission?

- A) To explore the Jovian system
- B) To collect Martian samples
- C) To conduct asteroid flyby and sampling
- D) To survey the lunar south pole region

16. China leads in the production of civilian drones. In 2024, China accounted for approximately what percentage of approved drone patents globally?

- A) Around 50%
- B) Around 60%
- C) Around 79%
- D) Around 90%

17. Which renewable energy technology saw a Chinese firm, Jinko Solar, achieve a global record for conversion efficiency with its high-efficiency N-type TOPCon modules reaching 25.58 percent, as of late 2025?

- A) Offshore wind turbines
- B) Lithium-ion batteries for drones
- C) Photovoltaic cells (solar power)
- D) Energy storage systems

18. What is the projected market size for China's low-altitude economy, driven by drone logistics, by 2025, according to experts?

- A) Between 58.18 billion RMB and 120 billion RMB
- B) Between 120 billion RMB and 150 billion RMB
- C) Between 150 billion RMB and 180 billion RMB
- D) Between 180 billion RMB and 210 billion RMB

19. In the field of biotechnology, China has been making strides. In December 2024, the Ministry of Agriculture and Rural Affairs approved the first gene-edited rice event for local cultivation. What does this approval signify?

- A) Immediate commercialization of gene-edited rice across China
- B) A crucial step towards permitting the commercialization of gene-edited crops
- C) The establishment of national guidelines for gene-editing research
- D) A ban on all genetically modified (GM) crops in favor of gene-edited ones

20. Regarding China's 6G development, initial phases of research and trials were completed in 2025. What is the projected timeline for the potential commercialization of 6G in China?

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