UK Tech Frontiers: AI Regulation, Quantum Leaps, and Space Sector Growth i

Technology · Answer Key · 15 Questions

1. In March 2024, the UK government released its response to the AI Regulation White Paper. What type of regulatory framework does the UK government aim to implement for AI?

A) A strict, compliance-based framework similar to the EU's AI Act.
B) A principles-based, context-specific framework for existing regulators.
C) A completely unregulated approach to foster rapid innovation.
D) A centrally mandated, prescriptive set of rules for all AI developers.

2. The UK National Quantum Strategy, unveiled in 2023, outlines a significant investment plan. Approximately how much public investment is planned for the quantum computing space over the next decade?

A) £500 million
B) £1 billion
C) £2.5 billion
D) £5 billion

3. As of mid-2024, the UK's space sector has seen robust growth in employment. Approximately how many Full Time Equivalents (FTEs) were estimated in the space industry, along with indirectly supported jobs?

A) Around 30,000 FTEs and 50,000 indirectly supported jobs.
B) Around 55,550 FTEs and 81,400 indirectly supported jobs.
C) Around 70,000 FTEs and 100,000 indirectly supported jobs.
D) Around 40,000 FTEs and 60,000 indirectly supported jobs.

4. The UK government has identified five cross-sectoral principles for its AI regulation. Which of the following is NOT one of these core principles?

A) Safety, security and robustness
B) Appropriate transparency and explainability
C) Innovation and market dominance
D) Fairness, accountability and governance

5. In early 2024, the UK announced a significant investment in quantum technologies, with a portion dedicated to public sector adoption. How much was allocated to support public sector adoption of quantum technologies?

A) £10 million
B) £15 million
C) £30 million
D) £45 million

6. Which of these UK-based AI companies is known for its work in AI-driven drug discovery and accelerating scientific research?

A) DeepMind
B) BenevolentAI
C) Onfido
D) Synthesia

7. The UK AI Safety Institute (AISI) has announced new research initiatives. What is a primary focus of these initiatives concerning future AI models?

A) Developing AI for personalized entertainment.
B) Creating AI for advanced robotics and automation.
C) Developing safety cases for risks related to loss of control and autonomy.
D) Exploring AI applications in financial trading.

8. Regarding the UK semiconductor industry in 2024, what was the approximate market size in USD billion for 2023, and its projected CAGR for 2024-2032?

A) USD 10.5 billion, 5.5% CAGR
B) USD 13.116 billion, 6.7% CAGR
C) USD 15.7 billion, 7.2% CAGR
D) USD 12.0 billion, 6.0% CAGR

9. In July 2024, the UK government announced plans to invest in multiple quantum research hubs across the UK. How many such hubs were announced, and what was the approximate total government funding for them?

A) Three hubs, £50 million
B) Five hubs, £106 million
C) Seven hubs, £150 million
D) Four hubs, £80 million

10. The UK government's National Semiconductor Strategy, published in May 2023, committed to strengthening protection for the UK semiconductor assets. What specific measure was planned to prevent 'hostile actors' from building harmful tech capability?

A) Increased government subsidies for domestic manufacturing.
B) Expansion of export controls to prevent misuse.
C) Mandatory cybersecurity training for all semiconductor employees.
D) Establishing a national semiconductor research institute.

11. What is the UK government's stated goal for the UK's position in the quantum technology sector by 2033?

A) To be a significant contributor to global quantum research.
B) To be a leading quantum-enabled economy.
C) To be a major exporter of quantum hardware.
D) To be a key participant in international quantum projects.

12. In 2024/25, the UK Space Agency (UKSA) reported significant activity in catalyzing investment. Approximately how much investment and revenue was generated by UKSA's activities?

A) £581 million
B) £1 billion
C) £2.2 billion
D) £5 billion

13. According to a study published in October 2024, UK semiconductor firms face geopolitical risks due to reliance on specific global powers. Which two superpowers were identified as creating vulnerability for UK firms?

A) United States and Russia
B) China and the European Union
C) United States and China
D) Japan and South Korea

14. In February 2024, the UK government invested in quantum technologies with specific funding for public sector adoption. This funding is part of the broader goal to transform the UK into a 'quantum-enabled economy' by which year?

A) 2026
B) 2030
C) 2033
D) 2035

15. The UK's cybersecurity sector demonstrated strong growth in the last year, with a notable increase in sector revenue. What was the approximate percentage increase in sector revenue?

A) 5%
B) 8%
C) 13%
D) 18%