

2024-2025 Global Science Breakthroughs: AI, Quantum, Space & More!

Science · Practice Test · 12 Questions

1. Which field of AI is seeing significant advancements in healthcare for tasks like analyzing medical images and patient data to aid in diagnostics?

- A) Generative AI
- B) Reinforcement Learning
- C) Supervised Learning
- D) Unsupervised Learning

2. What is a key focus in quantum computing development for 2025, shifting from just increasing qubit count?

- A) Improving qubit precision and performance
- B) Developing analog quantum computers
- C) Increasing the physical size of qubits
- D) Focusing solely on quantum algorithms

3. In renewable energy, what type of solar panel technology is achieving higher efficiencies by capturing energy on both sides?

- A) Bifacial solar panels
- B) Thin-film solar panels
- C) Perovskite solar cells
- D) Concentrated solar power

4. What significant milestone has been reached in CRISPR medicine with approvals for treating which genetic blood disorders?

- A) Sickle cell disease and beta-thalassemia
- B) Cystic fibrosis and Huntington's disease
- C) Duchenne muscular dystrophy and hemophilia
- D) Alzheimer's disease and Parkinson's disease

5. What astronomical discovery in 2025 suggested that dark energy, driving the universe's expansion, might be changing over cosmic history?

- A) Data from the Dark Energy Spectroscopic Instrument (DESI)
- B) Observations of the James Webb Space Telescope
- C) New findings from the Kepler Space Telescope
- D) Analysis of data from the Chandra X-ray Observatory

6. Which area of archaeology saw discoveries in 2025, including a 7,000-year-old Copper Age settlement in southern Dagestan and other significant finds globally?

- A) Ancient settlements and early human activity
- B) Roman-era shipwrecks
- C) Viking burial sites
- D) Maya city explorations

7. The development of 'ambient AI scribes' in healthcare aims to address which common issue for clinicians?

- A) Reducing documentation time and clinician burnout
- B) Increasing the number of diagnostic tests
- C) Automating patient scheduling
- D) Improving hospital billing processes

8. What advancement in solar cell technology is achieving high efficiencies by stacking two different photovoltaic materials?

- A) Perovskite-silicon tandem solar cells
- B) Organic photovoltaic cells
- C) Gallium arsenide solar cells
- D) Cadmium telluride solar cells

9. In the field of physics, what elusive particle's direct detection was a significant milestone reported in 2024 from CERN's Large Hadron Collider?

- A) Electron neutrinos
- B) Muons
- C) Tachyons
- D) WIMPs (Weakly Interacting Massive Particles)

10. What new archaeological discovery in Indonesia in 2024 pushed back the date of the world's oldest known cave paintings?

- A) A painting depicting a wild pig and humanoid figures
- B) Cave paintings of bison and horses
- C) Geoglyphs of animal shapes
- D) Petroglyphs of abstract symbols

11. What is a major trend in renewable energy for 2025, involving the integration of solar, wind, and battery storage systems?

- A) Hybrid energy systems
- B) Geothermal power plants
- C) Biomass energy conversion
- D) Tidal energy harnessing

12. Which technology is being developed to overcome the challenges of quantum error correction and enable more robust quantum computers by 2025?

- A) Logical qubits
- B) Superconducting qubits
- C) Trapped ion qubits
- D) Photonic qubits