

Name _____

Quantum Computing: Unlocking the Potential to Solve Unsolvable Problems

Multiple Choice Questions

1. What property of qubits enables quantum computers to explore many possibilities at once?
 - a) Superposition
 - b) Classical bits
 - c) Entanglement
 - d) Factorization

2. Which problem is famous for its relevance to modern encryption and the potential threat posed by quantum computing?
 - a) Route planning
 - b) Protein folding
 - c) Factorization
 - d) Quantum simulation

3. What is a significant challenge in quantum computing due to the sensitivity of qubits to environmental factors?
 - a) Error rates
 - b) Algorithm development
 - c) Quantum advantage
 - d) Scalability

4. What is a limitation of quantum computing when it comes to solving problems?
 - a) Quantum computers are highly affordable.
 - b) Quantum computers can solve all types of problems.
 - c) Quantum hardware is well-developed.
 - d) Quantum computing is not yet widely accessible.

5. What quantum property connects the state of one qubit to the state of another instantaneously?
 - a) Superposition
 - b) Error correction
 - c) Entanglement
 - d) Quantum advantage

