

# Information Systems and Emerging Technologies

Information Technology · Answer Key · 15 Questions

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**1. Which of the following is NOT one of the six components of an information system?**

- A) People
- B) Hardware
- C) Procedures
- D) Finance**

**2. What is the primary difference between IT and IS?**

- A) IT includes people, IS does not
- B) IS includes people and procedures, IT focuses on technology**
- C) IT is broader than IS
- D) There is no difference

**3. Which phase of the Design Council's double diamond involves testing solutions at a small scale?**

- A) Discover
- B) Define
- C) Develop
- D) Deliver**

**4. Which ethical framework focuses on embodying positive character traits like courage and wisdom?**

- A) Virtue ethics**
- B) Utilitarianism
- C) Rights-based ethics
- D) Justice ethics

**5. What is the relationship between AI, ML, and DL?**

- A) DL is a subset of ML, and ML is a subset of AI**
- B) AI is a subset of ML, and ML is a subset of DL
- C) They are three independent technologies
- D) AI and ML are the same

**6. What does the 'superposition' property allow quantum computers to do?**

- A) Use bits instead of qubits
- B) Exist in multiple states simultaneously**
- C) Connect only to the internet
- D) Delete data permanently

**7. Which service model provides a development environment without managing infrastructure?**

- A) IaaS
- B) PaaS**
- C) SaaS
- D) VM

**8. What is the purpose of a hypervisor in virtual machines?**

- A) To connect to the internet
- B) To create and manage VMs**
- C) To encrypt data
- D) To replace hardware

**9. Which technology uses a decentralized and distributed digital ledger?**

- A) Blockchain**
- B) Cloud computing
- C) AI
- D) IoT

**10. What do IoT devices primarily do?**

- A) Replace human workers entirely
- B) Collect and exchange data over the internet**
- C) Run quantum algorithms
- D) Manage corporate finances

**11. Which of the following is a key aspect of ergonomics?**

- A) Workstation design**
- B) Software coding
- C) Network security
- D) Financial forecasting

**12. Which project management variant is part of the Agile methodology?**

- A) Scrum**
- B) COBIT
- C) ITIL
- D) SFIA

**13. What is the main goal of HCI?**

- A) To make computers faster
- B) To design systems that are usable and receptive to human needs**
- C) To secure networks from hackers
- D) To automate all human decision-making

**14. Which of these is a tangible benefit of an information system?**

A) Improved brand reputation

**B) Increased revenue**

C) Higher employee morale

D) Better customer trust

**15. What does the acronym 'TCO' stand for in a business case?**

**A) Total Cost of Ownership**

B) Technical Computing Objective

C) Time-based Cost Optimization

D) Total Corporate Output