

Emerging Technologies and Systems Analysis Reviewer

Information Technology · Answer Key · 15 Questions

1. What is the primary definition of an emerging technology according to Businessdictionary.com?

- A) A technology that is fully mature and widely used globally
- B) New technologies developing over 5-10 years that alter social/business environments**
- C) Any technology created in the last 12 months
- D) Hardware that is strictly limited to mechanical components

2. Which of the following is NOT one of the five main characteristics of emerging technologies?

- A) Radical Novelty
- B) Relatively Fast Growth
- C) Static and unchanging applications**
- D) Uncertainty and Ambiguity

3. What is the basic unit of information in a quantum computer?

- A) Byte
- B) Qubit**
- C) Transistor
- D) Pixel

4. Which stage of the Industrial Revolution introduced electrical systems?

- A) Industry 1.0
- B) Industry 2.0**
- C) Industry 3.0
- D) Industry 4.0

5. What is the primary role of a Systems Analyst?

- A) To build hardware servers
- B) To act as a bridge between technical developers and non-technical clients**
- C) To manage the company's financial budget
- D) To write marketing copy for the product

6. In the software development lifecycle, what is the main goal of the Analysis phase?

- A) Coding the software
- B) Testing for bugs
- C) Defining what the user needs from the system**
- D) Purchasing hardware components

7. Which type of requirement addresses the operational and behavioral quality of a system?

A) Functional

B) Non-functional

C) Hardware

D) Interface

8. What does a 'Performance Requirement' typically define?

A) The color scheme of the UI

B) Speed, capacity, and system availability

C) The legal jurisdiction of the data

D) The employee dress code

9. Which requirements-gathering technique involves an intensive, highly structured group workshop?

A) Interviews

B) Document Analysis

C) Joint Application Development (JAD)

D) Observation

10. In UML Use-Case diagrams, what does the <<include>> relationship signify?

A) Optional behavior

B) A mandatory subroutine that must run

C) Functionality inheritance

D) The system boundary

11. Which characteristic of a good requirement ensures it does not contradict other statements?

A) Consistent

B) Singular

C) Feasible

D) Traceable

12. What is the function of a 'Subject Boundary Box' in a UML diagram?

A) To represent human roles

B) To declare the system's boundary and scope

C) To list the project team members

D) To show the database structure

13. What is the primary benefit of the 'Observation' technique in requirements gathering?

- A) It explains why tasks are performed
- B) It is the fastest way to get statistical data
- C) It verifies whether statements reflect true daily workflows**
- D) It eliminates the need for interviews

14. What is the main purpose of the Requirements Definition Report?

- A) To serve as a legal/formal baseline for development**
- B) To market the software to potential customers
- C) To provide a training manual for end users
- D) To calculate the total project profit

15. In the context of the 4th Industrial Revolution, what does 'IoT' stand for?

- A) Input of Technology
- B) Internet of Things**
- C) Integrated Operational Tools
- D) Internal Organization Task