Unit-IV

1. What is Information Engineering (IE)?
    a. A branch of civil engineering
    b. A methodology for designing and developing information systems
    c. A technique for data mining
    d. A software testing approach

2. Which of the following is a key aspect of Information Engineering?
    a. Focus on technology only
    b. Emphasis on data modeling and architecture
    c. Exclusively concerned with end-user training
    d. Ignoring the need for documentation

3. In Information Engineering, what does the term "re-engineering" refer to?
   a. Building systems from scratch
   b. Upgrading software tools
   c. Improving and redesigning existing systems
   d. Hardware maintenance

4. What is the role of a Data Flow Diagram (DFD) in Information Engineering?
   a. Representing the physical implementation of a system
   b. Focusing on the end-user interface design
   c. Describing the flow of data within a system
   d. Documenting the software testing procedures

5. Which modeling technique is commonly used in Information Engineering for representing data relationships?
   a. Entity-Relationship Diagram (ERD)
   b. Data Flow Diagram (DFD)
   c. UML Diagrams
   d. State Diagrams

6. What is the purpose of normalisation in the context of Information Engineering?
   a. Increasing redundancy in the database
   b. Simplifying data storage
   c. Enhancing system security
   d. Reducing data redundancy and dependency

7. Which phase of Information Engineering involves defining and documenting the system requirements?
   a. Analysis   b. Design
   c. Implementation   d. Maintenance

8. What does the acronym CASE stand for in the context of Information Engineering?
   a. Computer-Aided Software Engineering
   b. Centralised Architecture for System Enhancement
   c. Code Analysis and Software Evaluation
   d. Comprehensive Application for System Evolution

9. Which of the following is a benefit of using Information Engineering methodologies?
   a. Slower development cycles
   b. Lack of focus on data modeling
   c. Improved system documentation
   d. Ignoring end-user needs

10. In Information Engineering, what is the significance of "process modeling"?
    a. Representing the flow of data within a system
    b. Designing user interfaces

c. Defining system requirements
d. Describing the sequence of tasks and activities in a system

11. What is the primary goal of Structured System Analysis and Design (SSAD)?
    a. To emphasize rapid development
    b. To create complex algorithms
    c. To provide a framework for understanding and solving complex problems
    d. To focus solely on end-user needs

12. Which of the following is a key principle of structured analysis?
    a. Focus on technology over business processes
    b. Emphasis on user interfaces
    c. Divide and conquer approach
    d. Ignoring system documentation

13. In SSAD, what is the purpose of a Data Flow Diagram (DFD)?
    a. Describing the system's architecture
    b. Representing the physical implementation of the system
    c. Illustrating the flow of data within the system
    d. Focusing on end-user interfaces

14. What does the term "modularisation" mean in the context of SSAD?
    a. Breaking down a complex system into smaller, manageable modules
    b. Ignoring the need for modular design
    c. Combining all system components into a single module
    d. Emphasizing hardware components over software modules

15. Which SSAD phase involves defining the requirements of the system by studying and understanding the problem domain?
    a. Design phase
    b. Implementation phase
    c. Analysis phase
    d. Maintenance phase

16. What is the primary focus of the SSADM (Structured Systems Analysis and Design Method) methodology?
    a. Emphasizing rapid prototyping
    b. Providing a framework for object-oriented analysis
    c. Supporting iterative development
    d. Structured and sequential development approach

17. Which SSAD technique involves creating a visual representation of the system's data and the processes that transform the data?
    a. Entity-Relationship Diagram (ERD)
    b. Data Flow Diagram (DFD)
    c. Unified Modeling Language (UML)
    d. State Diagram

18. What is the purpose of a Structure Chart in SSAD?
    a. Representing data relationships
    b. Describing the flow of data within a system
    c. Illustrating the system's architecture
    d. Providing a visual representation of module hierarchy and relationships

19. Which SSAD phase involves creating detailed specifications for the system components, including algorithms and data structures?
    a. Analysis phase
    b. Design phase
    c. Implementation phase
    d. Maintenance phase

20. In SSAD, what is the significance of the term "feasibility study"?
    a. Evaluating the technical feasibility of the system
    b. Assessing the economic, technical and operational aspects of the proposed system
    c. Ignoring the need for a project timeline
    d. Focusing solely on user requirements