

- (1) Software is defined as
- a) set of programs, documentation & configuration of data
 - b) set of programs
 - c) documentation and configuration of data
 - d) None of the mentioned.
- (2) What is Software Engineering?
- a) Designing a software
 - b) Testing a software
 - c) Application of engineering principles to the design a software
 - d) None of the above.
- (3) What is a Functional Requirement?
- a) specifies the tasks the program must complete
 - b) specifies the tasks the program should not complete
 - c) specifies the tasks the program must not work
 - d) All of the mentioned.
- (4) Why do bugs and failures occur in software?
- a) Because of Developers
 - b) Because of companies
 - c) Because of both companies and Developers
 - d) None of the mentioned.

- (5) Attributes of good software is _____
- a) Development
 - b) Maintainability & functionality
 - c) Functionality
 - d) Maintainability
- (6) What does SDLC stands for?
- a) System Design Life Cycle
 - b) Software Design Life Cycle
 - c) Software Development Life Cycle
 - d) System Development Life cycle
- (7) Which of the following is not a part of Software evolution?
- a) Re-engineering activities
 - b) Maintenance activities
 - c) Development activities
 - d) Negotiating with client
- (8) Software Debugging is known as _____
- a) identifying the task to be computerized
 - b) creating program code
 - c) creating the algorithm
 - d) finding and correcting errors in the program code

(9) What is the first step in the software development lifecycle?

- a) System Design
- b) Coding
- c) System Testing
- d) Preliminary Investigation and Analysis

(10) Which of the following factors are influenced on the architect?

- a) Background and experience of the architects
- b) Developing an organization
- c) Customers and end users
- d) All of the above

(11) A _____ view shows the system hardware and how software components are distributed across the processors in the system.

- a) physical
- b) logical
- c) process
- d) all of the mentioned.

(12) Which of the following view shows that the system is composed of interacting processes at run time?

- a) physical
- b) development
- c) logical
- d) process

- (13) Which view in architectural design shows the key abstractions in the system as objects or object classes?
- a) physical
 - b) development
 - c) logical
 - d) process
- (14) Architecture based process includes which of the following?
- a) Creating the business case for the system
 - b) Understanding the requirements
 - c) Analyzing or valuating the architecture
 - d) All of the mentioned
- (15) A good program _____.
- a) must have certain characteristic at delivery and must be maintainable during time
 - b) must conform to its design constraints
 - c) at delivery must satisfy its requirements
 - d) All of the Above
- (16) “**Designs that make easier to change are better**” which principle said that?
- a) Principle of Economy
 - b) Principle of Adequacy
 - c) Principle of Changeability
 - d) Principle of Feasibility

(17) Which of these software engineering activities are not a part of software processes ?

- a) Software dependence
- b) Software development
- c) Software validation
- d) Software specification

(18) Which of these is incorrect ?

- a) Software engineering belongs to Computer science
- b) Software engineering is a part of more general form of System Engineering
- c) Computer science belongs to Software engineering
- d) Software engineering is concerned with the practicalities of developing and delivering useful software

(19) Which one of the following models is not suitable for accommodating any change?

- a) build & fix model
- b) prototyping model
- c) rad model
- d) waterfall model

- (20) Model selection is based on _____.
a) Requirements
b) Development team & users
c) Project type & associated risk
d) All of the above.
- (21) Service Oriented Architecture (SOA) is
a) Strongly Coupled
b) Loosely Coupled
c) Strongly Cohesive
d) Loosely Cohesive
- (22) Which of the following is an essential principle of an architecture?
a) Consistency
b) Reliability
c) Scalability
d) All of the mentioned
- (23) Purpose of process is to deliver software
a) in time
b) with acceptable quality
c) that is cost efficient
d) both in time & with acceptable quality

(1) What is software architecture?

- a) The organization of a system
- b) The design of user interfaces
- c) The implementation of algorithms
- d) The testing phase of software development

(2) Which of the following is NOT an architecture style?

- a) data centered architectures
- b) data flow architectures
- c) object-oriented architecture
- d) data modification architecture

(3) Which architectural style prompts integrability of components?

- a) data centered architectures
- b) call and return architectures
- c) object-oriented architecture
- d) layered architecture

(4) In data-centered architecture, how do components communicate with each other?

- a) through shared data repositories
- b) through direct method calls
- c) through message passing
- d) through a central control unit

(5) Which architectural style is commonly used in database systems?

- a) data centered architectures
- b) object-oriented architecture
- c) layered architecture
- d) call and return architectures

(6) What is the main purpose of the repository architecture style?

- a) to provide data integrity and backup features
- b) to allow easy addition of new clients
- c) to reduce the overhead of transient data
- d) to control the logic flow through the data store

(7) Which architectural style is commonly found in AI applications and speech recognition systems?

- a) data centered architectures
- b) call and return architectures
- c) object-oriented architecture
- d) blackboard architecture style

(8) What are the major parts of the blackboard model?

- a) knowledge source, data structure, and control
- b) data access and repository
- c) input stream and output stream
- d) Pipes and Filters

(9) Which architecture style is known for its support of concurrency and scalability?

a) data centered architectures

b) data flow architectures

c) layered architecture

d) object-oriented architecture

(10) What kind of architecture is used when input data is transformed into output data through computational components?

a) data centered architectures

b) data flow architectures

c) layered architecture

d) object-oriented architecture

(11) Architecture style is composed of which of the following?

a) a set of component types that perform some function at run-time

b) a topological layout of these components indicating their run-time inter relationships

c) a set of semantic constraints

d) All of the mentioned

(12) Which architectural style goal is to achieve modifiability with reuse?

e) data flow architecture

f) call and return architecture

g) virtual machine architecture

h) none of the mentioned

(13) Data centered architecture is subdivided into which of the following subtypes?

a) repository and blackboard

b) batch sequential, pipes and filters

c) all of the mentioned

d) None of the mentioned

(14) Which of the architectural style is further subdivided into batch sequential and Pipes & Filters?

a) data flow architecture

b) call and return architecture

c) data centered architecture

d) None of the mentioned

(15) In which of the following style new clients can be added easily?

a) data flow architecture

b) call and return architecture

c) data centered architecture

d) None of the mentioned

(16) What is batch sequential style?

a) in batch sequential components are independent programs

b) assumptions is that each step runs to completion before the next step starts

c) All of the mentioned

d) None of the mentioned

(17) Which architecture style focuses on representing software components as objects that encapsulate data and behavior?

a) client-server

b) object-oriented

c) event-driven

d) layered

(18) What is the disadvantage of data flow architecture?

a) it frequency Degenerates to a batch sequential system

b) It does not allow application that require greater user engagement

c) It is not easy to coordinate two different but related streams

d) All of the above

(19) What are the qualities achieved by the data flow architecture?

a) reuse and modification

b) scalability and reusability

c) data integrity and backup feature

d) concurrency and scalability

(20) Which architecture style is characterized by the presence of multiple layers, with each layer providing specific functionality?

a) client-server

b) object-oriented

c) event-driven

d) layered

Midterm

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(16) In analysts and engineers communicate with the client and end-users to know their ideas.

- a) Requirement Gathering
- b) Software Requirement Validation
- c) Software Requirement Specification (SRS)
- d) Feasibility Study

(17) Decision points represented by.....

- a) square
- b) oval
- c) arcs
- d) nodes

(18) represent sources and destination and main system process

- a) Level-0
- b) Context DFD
- c) Level-n
- d) Level-1

(19) specify which actions are to be followed for a given set of conditions.

- a) Condition
- b) Indifferent condition
- c) Rules
- d) None of the above

(20) is an entity that receives data from the system

- a) Sink
- b) Source
- c) Data flow
- d) Data store