

Question Bank

T.Y.Bsc (Computer Science) Sem-V

Subject: - SOFTWARE ENGINEERING

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MULTIPLE CHOICE QUESTIONS

1. What are the characteristics of software?
  - a. Software is developed or engineered; it is not manufactured in the classical sense.
  - b. Software doesn't "wear out".
  - c. Software can be custom built or custom build.
  - d. All mentioned above**
  
2. Compilers, Editors software come under which type of software?
  - a. System software**
  - b. Application software
  - c. Scientific software
  - d. None of the above.
  
3. Software Engineering is defined as systematic, disciplined and quantifiable approach for the development, operation and maintenance of software.
  - a. True**
  - b. False
  
4. RAD Software process model stands for \_\_\_\_\_.
  - a. Rapid Application Development.
  - b. Relative Application Development.**
  - c. Rapid Application Design.
  - d. Recent Application Development.
  
5. Software project management comprises of a number of activities, which contains \_\_\_\_\_.
  - a. Project planning
  - b. Scope management
  - c. Project estimation
  - d. All mentioned above**
  
6. Which of the following is not defined in a good Software Requirement Specification (SRS) document?
  - a. Functional Requirement.
  - b. Nonfunctional Requirement.
  - c. Goals of implementation.
  - d. Algorithm for software implementation.**

7. Software consists of \_\_\_\_\_ .
- a. Set of instructions + operating procedures
  - b. Programs + documentation + operating procedures**
  - c. Programs + hardware manuals
  - d. Set of programs
8. What is the simplest model of software development paradigm?
- a. Spiral model
  - b. Big Bang model
  - c. V-model
  - d. Waterfall model
9. Which of the following is the understanding of software product limitations, learning system related problems or changes to be done in existing systems beforehand, identifying and addressing the impact of project on organization and personnel etc?
- a. Software Design
  - b. Feasibility Study
  - c. Requirement Gathering
  - d. System Analysis**
- 10 Find out which phase is not available in SDLC?
- a. Coding
  - b. Testing
  - c. Maintenance
  - d. Abstraction**
- 11.RAD stands for
- a) Relative Application Development
  - b) Rapid Application Development**
  - c) Rapid Application Document
  - d) None of the mentioned
- 12.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**
- 13.Which is not one of the types of prototype of Prototyping Model?
- a) Horizontal Prototype
  - b) Vertical Prototype
  - c) Diagonal Prototype**
  - d) Domain Prototype

14. Which one of the following is not a phase of Prototyping Model?

- a) Quick Design
- b) Coding**
- c) Prototype Refinement
- d) Engineer Product

15. Which of the following statements regarding Build & Fix Model is wrong?

- a) No room for structured design
- b) Code soon becomes unfixable & unchangeable
- c) Maintenance is practically not possible
- d) It scales up well to large projects**

16. RAD Model has

- a) 2 phases
- b) 3 phase
- c) 5 phases**
- d) 6 phases

17. What is the major drawback of using RAD Model?

- a) Highly specialized & skilled developers/designers are required
- b) Increases reusability of components**
- c) Encourages customer/client feedback
- d) Increases reusability of components, Highly specialized & skilled developers/designers are required

18. SDLC stands for

- a) Software Development Life Cycle**
- b) System Development Life cycle
- c) Software Design Life Cycle
- d) System Design Life Cycle

19. Which model can be selected if user is involved in all the phases of SDLC?

- a) Waterfall Model
- b) Prototyping Model
- c) RAD Model**
- d) both Prototyping Model & RAD Model

20. Which one of the following is not an Evolutionary Process Model?

- a) WINWIN Spiral Model
- b) Incremental Model
- c) Concurrent Development Model
- d) All of the mentioned**

21. The Incremental Model is a result of combination of elements of which two models?

- a) Build & FIX Model & Waterfall Model
- b) Linear Model & RAD Model

**c) Linear Model & Prototyping Model**

d) Waterfall Model & RAD Model

22. What is the major advantage of using Incremental Model?

a) Customer can respond to each increment

b) Easier to test and debug

c) It is used when there is a need to get a product to the market early

**d) Easier to test and debug & It is used when there is a need to get a product to the market early**

23. The spiral model was originally proposed by

a) IBM

**b) Barry Boehm**

c) Pressman

d) Royce

24. The spiral model has two dimensions namely \_\_\_\_\_ and \_\_\_\_\_

a) diagonal, angular

b) radial, perpendicular

**c) radial, angular**

d) diagonal, perpendicular

25. Identify the disadvantage of Spiral Model.

**a) Doesn't work well for smaller projects**

b) High amount of risk analysis

c) Strong approval and documentation control

d) Additional Functionality can be added at a later date

26. Spiral Model has user involvement in all its phases.

a) True

**b) False**

27. Selection of a model is based on

a) Requirements

b) Development team & Users

c) Project type and associated risk

**d) All of the mentioned**

28. Which two models doesn't allow defining requirements early in the cycle?

a) Waterfall & RAD

**b) Prototyping & Spiral**

c) Prototyping & RAD

d) Waterfall & Spiral

29. Which of the following life cycle model can be chosen if the development team has less experience on similar projects?

**a) Spiral**

b) Waterfall

c) RAD

d) Iterative Enhancement Model

30. If you were a lead developer of a software company and you are asked to submit a project/product within a stipulated time-frame with no cost barriers, which model would you select?

- a) Waterfall
- b) Spiral
- c) **RAD**
- d) Incremental

31. Which two of the following models will not be able to give the desired outcome if user's participation is not involved?

- a) Waterfall & Spiral
- b) RAD & Spiral
- c) RAD & Waterfall
- d) **RAD & Prototyping**

32. One can choose Waterfall Model if the project development schedule is tight.

- a) True
- b) **False**

33. Choose the correct option from given below:

- a) Prototyping Model facilitates reusability of components
- b) RAD Model Model facilitates reusability of components
- c) **Both RAD & Prototyping Model facilitates reusability of components**
- d) None

34. Spiral Model has high reliability requirements.

- a) **True**
- b) False

35. RAD Model has high reliability requirements.

- a) True
- b) **False**

36 . What is Software ?

- a). **Set of computer programs, procedures and possibly is a collection of instructions that enable the user to interact with a computer**
- b). A set of compiler instructions
- c). A mathematical formula
- d). Things which we can touch

37. A Software consists of \_\_\_\_\_ .

- a). Programs + hardware manuals
- b). Set of instructions + operating procedures
- c). Set of programs

**d). Programs + documentation + operating procedures**

38. Which of the following is not the characteristic of a software?

- a). Software does not wear out
- b). Software is not manufactured
- c). Software is always correct**
- d). Software is flexible

39. \_\_\_\_\_ is a piece of programming code which performs a well defined task.

- a). Computer Program**
- b). Computer Software
- c). Both A & B
- d). None of the above

40. A person who writes a program for running the hardware of a computer is called?

- a). System designer
- b). Data processor
- c). Programmer**
- d). System analyst

41. The main activity of the design phase of the system life cycle is to?

- a). Replace the old system with the new one
- b). Develop and test the new system
- c). Understand the current system
- d). Propose alternatives to the current system**

42. A feasibility study is?

- a). Considers a single solution
- b). Includes a statement of the problem**
- c). Both (a) and (b)
- d). None of these

43. A system analyst does not need to consider:

- a). Technical feasibility
- b). Economics feasibility
- c). Operational feasibility
- d). None of these**

44. Which of the following tools is (are) used in modelling the new system?

- a). Decision Table
- b). Data Flow Diagrams
- c). Data dictionary
- d). All of these**

45. Compilers, **Editors** software come under which type of software?

- a). Application software

- b). Scientific software
- c). System software**
- d). None of the above

46. Software consists of \_\_\_\_\_

- a). Set of instructions + operating procedures
- b). Programs + documentation + operating procedures**
- c). Programs + hardware manuals
- d). Set of programs

47. Which one of the following is not a step of requirement engineering?

- a) elicitation
- b) design**
- c) analysis
- d) documentation

48. A Use-case actor is always a person having a role that different people may play.

- a) True
- b) False**

49. A stakeholder is anyone who will purchase the completed software system under development.

- a) True
- b) False**

50. How many feasibility studies is conducted in Requirement Analysis ?

- a) Two
- b) Three**
- c) Four
- d) None of the mentioned

51. \_\_\_\_\_ and \_\_\_\_\_ are the two issues of Requirement Analysis.

- a) Performance, Design
- b) Stakeholder, Developer
- c) Functional, Non-Functional**
- d) None of the mentioned

52. Coad and Yourdon suggested \_\_\_\_\_ selection characteristics that should be used as an analyst considers each potential object for inclusion in the requirement analysis model.

- a) Three
- b) Four
- c) Five
- d) Six**

53. Which of the property of software modularity is incorrect with respect to benefits software modularity?

- a) Modules are robust

- b) Module can use other modules
- c) Modules Can be separately compiled and stored in a library
- d) Modules are mostly dependent**

54. \_\_\_\_\_ is a measure of the degree of interdependence between modules.

- a) Cohesion
- b) Coupling**
- c) None of the mentioned
- d) All of the mentioned

55. Which of the following is the best type of module coupling?

- a) Control Coupling
- b) Stamp Coupling
- c) Data Coupling**
- d) Content Coupling

56. Which of the following is the worst type of module coupling?

- a) Control Coupling
- b) Stamp Coupling
- c) External Coupling**
- d) Content Coupling

57. Which of the following is the worst type of module cohesion?

- a) Logical Cohesion
- b) Temporal Cohesion
- c) Functional Cohesion
- d) Coincidental Cohesion**

58. Which of the following is the best type of module cohesion?

- a) Functional Cohesion**
- b) Temporal Cohesion
- c) Functional Cohesion
- d) Sequential Cohesion

59. A software engineer must design the modules with the goal of high cohesion and low coupling.

- a) True**
- b) False

60. In what type of coupling, the complete data structure is passed from one module to another?

- a) Control Coupling
- b) Stamp Coupling**
- c) External Coupling
- d) Content Coupling

61. If all tasks must be executed in the same time-span, what type of cohesion is being exhibited?

- a) Functional Cohesion
- b) Temporal Cohesion**



- c) Functional Cohesion
- d) Sequential Cohesion

62. A \_\_\_\_\_ is a decision support tool that uses a tree-like graph or model of decisions and their possible consequences, including chance event outcomes, resource costs, and utility.

- a) Decision tree**
- b) Graphs
- c) Trees
- d) Neural Networks

63. A data model contains

- a) data object
- b) attributes
- c) relationships
- d) all of the mentioned**

64. A data model contains

- a) data object
- b) attributes**
- c) relationships
- d) all of the mentioned

65. A data condition occurs whenever a data is passed to an input element followed by a processing element and the result in control output.

- a) True**
- b) False

66. The \_\_\_\_\_ enables the software engineer to develop models of the information domain and functional domain at the same time

- a) data flow diagram**
- b) state transition diagram
- c) control specification
- d) activity diagram

67. A rectangle in a DFD represents

- a) a process
- b) data store
- c) an external entity**
- d) an input unit

68. External entity may be

- a) source input data only
- b) source input data only or destination result**
- c) destination result
- d) repository data

69. A data store in a DFD represents

- a) sequential file
- b) a disk store
- c) a repository of data**
- d) a random access memory

70. Decision table is

- a) a way to get an accurate picture of the system
- b) a way of representing information flow
- c) a way of representing multiple conditions
- d) all of the above**

71. What is the Software

- a) Software is set of program
- b) Software is documentation and configuration of data
- c) Both a and b**
- d) None of the mentioned

72. what are the good software

- a) Software maintainability
- b) Software functionality
- c) software development
- d) a and b**

73. What is the system software

- a) word processor
- b) database
- c) Game
- d) Compilers**

74. Which of the following is/are White box technique?

- a) Statement Testing
- b) Decision Testing
- c) Condition Coverage
- d) All of the mentioned**

75. Boundary value analysis belong to?

- a) White Box Testing
- b) Black Box Testing**
- c) White Box & Black Box Testing
- d) None of the mentioned

76. Unit testing is done by

- a) Users
- b) Developers**
- c) Customers
- d) None of the mentioned

77. Which of the following is black box testing
- a) Basic path testing
  - b) Boundary value analysis**
  - c) Code path analysis
  - d) None of the mentioned
78. Behavioral testing is
- a) White box testing
  - b) Black box testing**
  - c) Grey box testing
  - d) None of the mentioned
79. Quality Management in software engineering is also known as
- a) SQA**
  - b) SQM
  - c) SQI
  - d) SQA and SQM
80. The degree to which the design specifications are followed during manufacturing is known as
- a) Quality of design
  - b) Quality of conformance**
  - c) Quality of testing
  - d) None of the mentioned
81. The testing in which code is checked
- a) Black box testing
  - b) White box testing**
  - c) Red box testing
  - d) Green box testing
82. Which one is not a software quality model?
- a) ISO 9000**
  - b) McCall model
  - c) Boehm model
  - d) ISO 9126
83. Software reliability is defined with respect to
- a) time**
  - b) bugs
  - c) failures
  - d) quality
84. Which of the following is software engineer's primary characteristics?
- a) A collection of useful tools that will help in every step of building a product
  - b) An organized layout that enables tools to be found quickly and used efficiently
  - c) A skilled artisan who understands how to use the tools in an effective manner
  - d) All of the mentioned**

85. System testing is a

- a) **Black box testing**
- b) Grey box testing
- c) White box testing
- d) Both a and b

86. White-box testing can be started:

- a) After installation
- b) After SRS creation
- c) **After programming**
- d) After designing

87. Give the disadvantages of modularization.

- a. Smaller components are easier to maintain
- b. Program can be divided based on functional aspects
- c. Desired level of abstraction can be brought in the program
- d. None of the above**

88. What is the main aim of Software engineering?

- a. Reliable software
- b. Cost effective software
- c. Reliable and cost effective software**
- d. None of the above

89. SDLC is not a well-defined, structured sequence of stages in software engineering to develop the intended software product.

- a. True
- b. False**

90. A generic process framework for software engineering encompasses five activities.

What are those activities?

- a. Communication, risk management, measurement, production, deployment.
- b. Communication, Planning, Modeling, construction, deployment.**
- c. Analysis, designing, programming, debugging, maintenance
- d. None of the above.

91. Which phase is refers to the support phase of software development ?

- a. Acceptance Phase.
- b. Testing.
- c. Maintenance.**
- d. None of the above.

92. Which is focused towards the goal of the organization?

- a. Feasibility study**
- b. Requirement gathering

- c. Software requirement specification
- d. Software requirement validation

93. The maximum number of objects that can participate in a relationship is called\_\_\_\_\_ .

- a. Cardinality**
- b. Attributes
- c. Operations
- d. Transformers

94. Match the List 1 to List 2 and choose the correct option.

List 1

List 2

- 1. Requirement Elicitation ——— a. Module Development and integration.
  - 2. Design—————b. Analysis
  - 3. Implementation—————c. Structure and behavioral
  - 4. Maintenance ————— d. Performance tuning.
- a. 1-c , 2-a , 3-d , 4-b
  - b. 1-c , 2-a , 3-b , 4-d
  - c. 1-a , 2-c , 3-d , 4-b
  - d. 1-b , 2-c , 3-a , 4-d**

95. In which elicitation process the developers discuss with the client and end users and know their expectations from the software?

- a. Requirement gathering**
- b. Organizing requirements
- c. Negotiation & discussion
- d. Documentation

96. If requirements are easily understandable and defined then which model is best suited?

- a. Spiral model
- b. Waterfall model**
- c. Prototyping model
- d. None of the above

97. Software is defined as \_\_\_\_ .

- a. Instructions
- b. Data Structures
- c. Documents
- d. All of the above**

98. Which box specifies the behavior of a system or a part of a system?

- a. State box
- b. Clear box
- c. Black box**
- d. None of the above

99. What is described by means of DFDs as studied earlier and represented in algebraic form?

- a. **Data flow**
- b. Data storage
- c. Data Structures
- d. Data elements

100. IEEE provides a standard as IEEE 830-1993. For which activity this standard is recommended standard?

- a. **Software requirement specification.**
- b. Software design.
- c. Testing.
- d. Both a and b

-----Best --of--Luck-----