



Dr.G.R.Damodaran College of Science

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CRISL rated 'A' (TN) for MBA and MIB Programmes

III B.Sc CS [2015-2018]

Semester V

Core: Software Engineering-507D

Multiple Choice Questions.

1. The Software is _____ product.

- A. tangible
- B. vehicle
- C. intangible
- D. component.

ANSWER: C

2. Software can be defined as _____.

- A. instructions.
- B. collection of programmes
- C. documents.
- D. all of the above.

ANSWER: D

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

- A. Software is developed.
- B. Software is engineered.
- C. Software is manufactured.
- D. Software does not wear out.

ANSWER: C

4. _____ is a collection of programs to service other programs.

- A. Application software.
- B. System software.
- C. Embedded software.
- D. Product-line software.

ANSWER: B

5. Which of the following is not system software?

- A. Compilers
- B. Editors
- C. Point-of-sale transaction
- D. Driver

ANSWER: C

6. Every software engineering organization should describe a unique set of _____ activities.

- A. design.

- B. framework.
- C. methodology.
- D. development.

ANSWER: B

7. In Trivial project, how many programmer will work for a few days or few weeks?

- A. 5
- B. 1
- C. 10
- D. 20

ANSWER: B

8. A _____ model is also called as classic life cycle model.

- A. waterfall.
- B. RAD.
- C. prototyping.
- D. incremental model.

ANSWER: A

9. Software engineering is a _____.

- A. information technology.
- B. computer technology.
- C. layered technology .
- D. software technology.

ANSWER: C

10. The Foundation for software engineering is _____.

- A. process layer.
- B. methods layer.
- C. tools layer.
- D. task layer.

ANSWER: A

11. The duration of large project is expected to be _____.

- A. 1-2 weeks.
- B. 4-5 months.
- C. 1-2 years.
- D. 4-5 years.

ANSWER: C

12. Requirements engineering provides the mechanism for _____.

- A. understanding customer needs.
- B. assessing facility.
- C. analyzing need.
- D. all of the above .

ANSWER: D

13. Software engineers ask a set of context-free questions during _____.

- A. inspection.
- B. elicitation.
- C. elaboration.

D. negotiation.

ANSWER: A

14. The _____ model combines of the waterfall model applied in an iterative fashion.

- A. prototyping.
- B. RAD.
- C. incremental.
- D. spiral.

ANSWER: C

15. When a customer does not identify a detailed input, processing or output requirements, _____ model is used.

- A. RAD.
- B. incremental.
- C. spiral.
- D. prototyping.

ANSWER: D

16. The ease with which software can be transferred from one computer system to another is _____ .

- A. reliability
- B. efficiency
- C. portability
- D. error

ANSWER: C

17. Requirement analysis results in the specification of software _____ characteristics.

- A. operational.
- B. basic.
- C. essential.
- D. useful.

ANSWER: A

18. The level of abstraction for analysis must be _____.

- A. low.
- B. relatively low.
- C. high.
- D. relatively high.

ANSWER: D

19. When the model is analyzed, try to minimize _____.

- A. cohesion.
- B. coupling.
- C. functions.
- D. complexity.

ANSWER: B

20. A _____ is a representation of almost any composite information that must be understood by software.

- A. entity.
- B. data.
- C. data object.

D. attribute.

ANSWER: C

21. Data objects are represented by _____.

- A. circle.
- B. rectangle.
- C. triangle.
- D. labeled arrows.

ANSWER: D

22. Lack of planning is a primary cause of _____.

- A. schedule slippage.
- B. cost overruns.
- C. poor quality.
- D. all the above.

ANSWER: D

23. Circle is also called as _____.

- A. round.
- B. shape.
- C. bubble.
- D. flow.

ANSWER: C

24. All arrows and bubbles should be named with _____ names.

- A. useful.
- B. meaningful.
- C. some
- D. hierarchical.

ANSWER: B

25. The level _____ data flow diagram should depict the software as a single bubble.

- A. 0
- B. 2
- C. 1
- D. 3

ANSWER: A

26. A data flow diagram is _____.

- A. the primary output of the systems design phase.
- B. mainly used at the systems specification stage.
- C. the modern version of flowchart.
- D. all of the above

ANSWER: A

27. The data flow diagram shows _____.

- A. the flow of data.
- B. the processes.
- C. the areas where they are stored.
- D. the flow of data, processes and the areas where they are stored.

ANSWER: D

28. The _____ model indicates how software will respond to external events.

- A. functional.
- B. scenario-based.
- C. data flow.
- D. behavioral.

ANSWER: D

29. Understanding the requirements are involved in the _____.

- A. system engineering process.
- B. systems.
- C. engineering process.
- D. software process.

ANSWER: A

30. The _____ diagram involves transitions from one object to object.

- A. action.
- B. sequence.
- C. state.
- D. DFD.

ANSWER: B

31. Events in sequence diagram are identified by examining _____.

- A. use-case.
- B. example.
- C. diagram.
- D. DFD.

ANSWER: A

32. The second step in planning a software project is to determine _____.

- A. computing resources.
- B. the problem.
- C. testing.
- D. cost estimation.

ANSWER: C

33. Functionality is assessed by _____ the feature set and capabilities of the program.

- A. adding.
- B. deleting.
- C. updating.
- D. evaluating.

ANSWER: D

34. PFR is _____

- A. Product Feasibility Review
- B. Product Fashion Review
- C. Product Feasibility Report
- D. Program Feasibility Review

ANSWER: A

35. A _____ is evaluated by measuring the frequency and severity of failure.

- A. usability.
- B. reliability.
- C. performance.
- D. supportability.

ANSWER: B

36. A _____ is measured by processing speed, response time, resource consumption, throughput and efficiency.

- A. usability.
- B. reliability.
- C. performance.
- D. supportability

ANSWER: C

37. A _____ abstraction refers to a sequence of instructions that have a specific and limited function.

- A. data.
- B. procedural.
- C. design.
- D. architecture.

ANSWER: B

38. High level goals and requirements can often be expressed in terms of _____ that the system should possess.

- A. quantity attributes.
- B. quality attributes.
- C. modules.
- D. subroutines.

ANSWER: B

39. Goal of software _____ is to derive an architectural rendering of a system.

- A. analysis.
- B. design.
- C. testing.
- D. coding.

ANSWER: D

40. _____ models represent architecture as an organized collection of program components.

- A. Structural.
- B. Framework.
- C. Dynamic.
- D. Functional.

ANSWER: A

41. _____ models focuses on the design of the business or technical process.

- A. Process.
- B. Framework.
- C. Dynamic.
- D. Functional.

ANSWER: A

42. COCOMO is nothing but_____.

- A. Constructive Cost Model.
- B. Calculative Cost Model.
- C. Constant Cost Model.
- D. Cost Construction Model.

ANSWER: A

43. The design of software architecture considers _____.

- A. data design.
- B. architectural design.
- C. both a and b.
- D. behavioral design.

ANSWER: C

44. The _____ is not the operational software.

- A. requirement.
- B. data.
- C. architecture.
- D. implementation.

ANSWER: C

45. Representations of software architecture enable communication between _____.

- A. modules.
- B. stakeholders.
- C. partners.
- D. components.

ANSWER: B

46. The _____ translates data objects into data structures at component level.

- A. analysis.
- B. design.
- C. architecture.
- D. code.

ANSWER: B

47. A set of _____ is developed to represent the system from the users point of view.

- A. design activities.
- B. use-cases.
- C. analysis.
- D. patterns.

ANSWER: B

48. Waterfall model has _____ steps or phases.

- A. 5
- B. 4
- C. 8
- D. 6

ANSWER: A

49. Design phase is followed by _____.

- A. coding.
- B. debugging.

- C. testing.
- D. maintenance.

ANSWER: A

50. Waterfall model is also called _____.

- A. classic life cycle model.
- B. customer model.
- C. RAD.
- D. spiral model.

ANSWER: A

51. Prototyping model begins with_____.

- A. test prototype.
- B. coding.
- C. requirements gathering.
- D. none of the above.

ANSWER: A

52. _____ is not a phase of prototyping model.

- A. Maintenance.
- B. Listen customer.
- C. Build mock-up.
- D. Customer test mock-up.

ANSWER: B

53. Expert judgment is _____ technique.

- A. top-down analysis.
- B. bottom-up analysis.
- C. top-down cost estimation.
- D. bottom-up cost estimation.

ANSWER: C

54. Spiral model is a _____.

- A. incremental model.
- B. linear model.
- C. evolutionary model.
- D. none of the above.

ANSWER: C

55. The system which is developed within a short time period of 60 to 90 days is _____model.

- A. RAD.
- B. spiral.
- C. prototyping.
- D. incremental.

ANSWER: A

56. In _____ model, plan and modeling is quick.

- A. RAD.
- B. prototyping.
- C. spiral.
- D. incremental.

ANSWER: B

57. The better it works the more efficiently it can be tested the property denotes_____.

- A. operability.
- B. observability.
- C. controllability.
- D. simplicity.

ANSWER: A

58. The property What U see is what U test is specified by _____.

- A. operability.
- B. observability.
- C. controllability.
- D. simplicity.

ANSWER: B

59. The property isolating the problems is denoted by _____.

- A. operability.
- B. observability.
- C. controllability.
- D. decomposability.

ANSWER: D

60. DSI stands for _____.

- A. Delivered Source Instruction.
- B. Delivered Source Index.
- C. Developed Source Instruction.
- D. Developed Source Index.

ANSWER: A

61. _____ state the properties of a solution without stating a solution method.

- A. Recurrence relations.
- B. Algebraic axioms.
- C. Implicit equations.
- D. Regular expressions.

ANSWER: C

62. White box testing is also called _____ testing.

- A. class-box.
- B. black-box.
- C. glass-box.
- D. basis-path.

ANSWER: C

63. Tests that demonstrates each function is fully operational is_____ testing.

- A. white-box.
- B. black-box.
- C. integration.
- D. stress.

ANSWER: B

64. Testing that checks whether the internal operations are performed according to _____ specification.

- A. stress.
- B. validation.
- C. white-box.
- D. black-box.

ANSWER: C

65. White box testing guarantee that all independent paths within a module have been executed at least _____.

- A. once.
- B. twice.
- C. thrice.
- D. none.

ANSWER: A

66. Black box testing responds to tests conducted at software _____.

- A. interface.
- B. component.
- C. module.
- D. independent paths.

ANSWER: A

67. In Cyclomatic complexity $V(G)$ is defined as_____.

- A. $V(G)=E$.
- B. $V(G)=E-N$.
- C. $V(G)=E+N$.
- D. $V(G)=E-N+2$.

ANSWER: D

68. _____ can be used to specify the syntactic structure of symbol strings.

- A. Regular expressions.
- B. Implicit equations.
- C. Algebraic axioms.
- D. Recurrence relations.

ANSWER: A

69. Information that enters the system along paths that transform external data into an internal form are identified as _____.

- A. incoming flow.
- B. outgoing flow.
- C. transform flow.
- D. transaction flow.

ANSWER: A

70. _____ are concerned with examining the internal processing logic of a software system.

- A. Structure tests.
- B. Acceptance tests.
- C. Stress tests.
- D. Performance tests.

ANSWER: A

71. The software that is embedded in a controller system is called _____.

- A. critical system.
- B. safety critical system.
- C. safety system.
- D. safety only.

ANSWER: B

72. The software that can be directly result injury is_____.

- A. Safety critical system.
- B. Secondary safety system
- C. Secondary safety critical system.
- D. Secondary system.

ANSWER: C

73. Each node in the flow graph is identified by _____.

- A. letter.
- B. number.
- C. roman letter.
- D. lateral entry.

ANSWER: B

74. Graph matrix is _____ representation of a flow graph.

- A. circular.
- B. tabular.
- C. rectangular.
- D. triangular.

ANSWER: B

75. _____ testing is a test case design that exercises the logical conditions contained in a program module.

- A. Stress.
- B. Validation.
- C. Condition.
- D. Loop.

ANSWER: C

76. The _____ testing method selects test paths of a program according to location of definitions and uses of variables in the program.

- A. validation.
- B. stress.
- C. loop.
- D. data flow.

ANSWER: D

77. Expand SADT.

- A. Structured Analysis and Decision Technique.
- B. Structured Analysis and Design Technique
- C. Structured Analysis and Decision Tree.
- D. Structured Analysis and Design Tree.

ANSWER: B

78. _____ testing is one of the white box testing.

- A. Basis path.
- B. Data flow.
- C. Loop.
- D. Stress.

ANSWER: C

79. In simple loop of loop testing, n represents the _____ number of allowable passes through the loop.

- A. minimum.
- B. maximum.
- C. zero.
- D. none.

ANSWER: B

80. In nested loops of loop testing, start at the _____ loop.

- A. outermost.
- B. middle.
- C. inner.
- D. side.

ANSWER: A

81. Black box testing is also called as _____ testing.

- A. white-box.
- B. behavioral.
- C. integration.
- D. validation.

ANSWER: B

82. _____ testing uses the control structure which is described as part of component-level design to derive test cases.

- A. Black-box testing.
- B. White-box Testing.
- C. Alpha testing.
- D. Beta testing.

ANSWER: A

83. _____ testing method enables the test case designer to derive a logical complexity measure of a procedural design.

- A. Exhaustive testing.
- B. Basis Path testing.
- C. Data Flow testing.
- D. Loop testing.

ANSWER: A

84. The SADT is called _____.

- A. the language of Structured Analysis.
- B. the language of System Analysis.
- C. Basis path testing.
- D. Scenario-based testing.

ANSWER: A

85. Which of the following testing method selects test paths of a program according to the locations of definitions and uses of variables in the program?

- A. Data Flow testing.
- B. Condition testing.
- C. Loop testing.
- D. Smoke testing.

ANSWER: B

86. Which of the following questions should be answered during documentation testing?

- A. Does the performance procedure conform to requirements?
- B. Does the documentation accurately describe how to accomplish each mode of use?
- C. Does the design conform to high quality design?
- D. Are interrupt priorities properly assigned and properly handled?

ANSWER: C

87. Which of the following testing method is designed to test the run-time performance of software within the context of an integrated system?

- A. Validation testing.
- B. Verification testing.
- C. Performance testing.
- D. Stress testing.

ANSWER: C

88. Black-box testing attempts to find errors _____ category.

- A. incorrect functions.
- B. interface errors.
- C. errors in data structures.
- D. all the above.

ANSWER: D

89. The first step in black-box testing is to find the_____.

- A. data.
- B. facts.
- C. objects.
- D. all the above.

ANSWER: C

90. Node weights represent the _____ of a node in graph based testing.

- A. properties.
- B. data.
- C. objects.
- D. links.

ANSWER: A

91. Nodes in graph based testing are represented as _____.

- A. rectangle.
- B. triangle.
- C. square.
- D. circle.

ANSWER: D

92. _____ is made to check whether the user need is satisfied.
- A. Feasibility study.
 - B. Customer study.
 - C. Field study.
 - D. Case study.

ANSWER: A

93. _____ are used when a number of different relationships are established between graph nodes.
- A. Directed.
 - B. Bi.
 - C. Parallel.
 - D. Bidirectional.

ANSWER: C

94. Equivalence partitioning defines a _____ that uncovers classes of errors.
- A. value.
 - B. test cases.
 - C. analysis.
 - D. range.

ANSWER: B

95. If an input condition is _____, one valid and one invalid class are defined.
- A. member of a set.
 - B. value.
 - C. range.
 - D. boolean.

ANSWER: D

96. Boundary value analysis leads to a selection of test cases that exercises _____ values.
- A. top.
 - B. bottom.
 - C. analysis.
 - D. bounding.

ANSWER: D

97. Boundary value analysis is a complement of _____.
- A. graph-based testing.
 - B. array testing.
 - C. input values.
 - D. equivalence partitioning.

ANSWER: D

98. Boundary value analysis leads to the _____ of the class.
- A. edges.
 - B. center.
 - C. whole.
 - D. output.

ANSWER: A

99. _____ testing can be applied to problems in which the input domain is relatively small.

- A. Graph based testing.
- B. Boundary value analysis.
- C. Orthogonal array testing.
- D. Condition testing.

ANSWER: C

100. Given the relatively _____ number of input values and discrete values, exhaustive testing is possible.

- A. small
- B. large.
- C. very large.
- D. very small.

ANSWER: A

101. Orthogonal array testing provides _____ test cases than exhaustive testing.

- A. larger.
- B. very larger.
- C. fewer.
- D. less fewer.

ANSWER: C

102. When a single parameter value makes the software malfunction, it is _____ fault.

- A. single mode.
- B. double mode.
- C. triple mode.
- D. none.

ANSWER: A

103. Multimode faults are detected by _____ testing.

- A. Graph based testing.
- B. boundary value analysis.
- C. orthogonal array testing.
- D. condition testing

ANSWER: C

104. _____ is a set of activities that can be planned in advance and conducted systematically.

- A. Analysis.
- B. Coding.
- C. Testing.
- D. Implementation.

ANSWER: C

105. What should be conducted for performing effective testing?

- A. Analysis.
- B. Questionnaire.
- C. Interview.
- D. Technical review.

ANSWER: D

106. Testing and debugging are _____ activities.

- A. same.
 - B. parallel.
 - C. different.
 - D. opposite.
- ANSWER: C

107. Which activity refers to the action Are we building the product right??

- A. Verification.
 - B. Validation.
 - C. Testing.
 - D. Debugging.
- ANSWER: A

108. Which activity refers to the action Are we building the right product??

- A. Verification.
 - B. Validation.
 - C. Testing.
 - D. Debugging.
- ANSWER: B

109. Verification and validation consists of a variety of _____ activities.

- A. SQM
 - B. SPM
 - C. CM
 - D. SQA
- ANSWER: D

110. Expansion of ITG is _____.

- A. inherent test group.
 - B. independent test group.
 - C. inherent test guide.
 - D. inherent to group.
- ANSWER: B

111. Unit testing begins at the _____ of the spiral.

- A. vortex.
 - B. bottom.
 - C. left.
 - D. right.
- ANSWER: A

112. _____ is a validation technique in which input variables of a program unit are assigned symbolic values rather than literal values.

- A. Program execution.
 - B. Data flow diagram.
 - C. Flow chart.
 - D. Symbolic execution.
- ANSWER: D

113. A _____ is prepared to describe the results of all reviews, audits and tests conducted by quality assurance personnel throughout the development cycle.

- A. acceptance test plan.
- B. software verification summary.
- C. quality assurance plan.
- D. standard policy.

ANSWER: B

114. The processes at the most detailed level of the data flow diagrams are called _____.

- A. transform descriptions.
- B. functional primitives
- C. data flows.
- D. interfaces.

ANSWER: A

115. Process models focus on _____.

- A. increase level of design abstraction.
- B. behavioral aspects of program architecture.
- C. design of business or technical process.
- D. functional hierarchy of a system.

ANSWER: A

116. _____ provide a mechanism for recording complex decision logic.

- A. Decision tables.
- B. Regular expressions.
- C. Implicit equations.
- D. All the above.

ANSWER: A

117. Roughly 60% are development costs and 40% are _____.

- A. testing cost.
- B. validation testing.
- C. test verification testing cost.
- D. cost effective.

ANSWER: A

118. The acronym CASE stands for_____.

- A. computer aided engineering.
- B. computer aided software engineer.
- C. computer software engineering.
- D. computer aided software engineering

ANSWER: D

119. What is the disadvantage of top-down approach?

- A. Clusters.
- B. Stubs.
- C. Power card.
- D. Customer.

ANSWER: B

120. The program as an entity does not exist until the last module is added is the drawback of _____ integration.

- A. bottom-up.

- B. top-down.
- C. spiral.
- D. unit.

ANSWER: A

121. _____ specify actions to be taken when events occur under different set of conditions.

- A. Event table.
- B. Transition table.
- C. Decision table.
- D. all the above.

ANSWER: A

122. Unlike flowcharts, data flow diagrams are not concerned with _____.

- A. decision structure.
- B. algorithmic details.
- C. both (a) and (b).
- D. none of the above.

ANSWER: C

123. What type of testing focuses verification effort on the smallest unit of software design?

- A. Unit Testing.
- B. Integration Testing.
- C. Verification Testing.
- D. Validation Testing.

ANSWER: B

124. Which test is conducted at the developers site by end-users?

- A. Alpha Test.
- B. Beta Test.
- C. Smoke Test.
- D. Regression Test.

ANSWER: B

125. _____ method enables the test case designer to derive a logical complexity measure of a procedural design.

- A. Exhaustive testing.
- B. Basis Path testing.
- C. Data Flow testing.
- D. Loop testing.

ANSWER: A

126. _____ is used to investigate the structural properties of source code.

- A. Static analysis.
- B. Control flow testing.
- C. Basis path testing.
- D. Scenario-based testing.

ANSWER: A

127. in which year, Petri net concept was invented?

- A. 1965.
- B. 1960.

C. 1906.

D. 1956.

ANSWER: B

128. Display processing in CAD has such type of activity as _____.

A. error processing.

B. rotation.

C. graphs.

D. access.

ANSWER: C

129. Update activity is an example for _____ in CAD.

A. user interaction.

B. data manipulation.

C. display processing.

D. database management.

ANSWER: D

130. _____ validity refers to tests to uncover functional errors.

A. Interface integrity.

B. Functional.

C. Information content.

D. Performance.

ANSWER: B

131. Internal and external interfaces are tested as each module at _____.

A. interface integrity.

B. functional validity.

C. information content.

D. performance.

ANSWER: A

132. Tests conducted to uncover errors at local and global data structures is _____.

A. interface integrity.

B. functional validity.

C. information content.

D. performance.

ANSWER: C

133. Validation testing begins at the culmination of _____ testing.

A. Data Flow testing.

B. Condition testing.

C. Loop testing.

D. None of the above.

ANSWER: B

134. Validation is achieved through a series of _____.

A. white box tests

B. black box tests

C. integration tests.

D. verification tests.

ANSWER: B

135. _____ is an important element of validation process.

- A. Configuration review.
- B. Testing.
- C. Specification.
- D. Deficiency list.

ANSWER: A

136. A walkthrough session should not be used to _____.

- A. identify errors
- B. correct errors.
- C. detect and correct the errors.
- D. review the errors.

ANSWER: B

137. A classic system testing problem is _____.

- A. configuration review.
- B. finger pointing.
- C. specification
- D. deviation

ANSWER: B

138. _____ occurs when an error is uncovered.

- A. Configuration review.
- B. Deviation.
- C. Specification.
- D. Finger pointing.

ANSWER: D

139. _____ includes the actions to be taken and the messages to be displayed in response to undesired situations or events.

- A. Exception handling.
- B. Data dictionary.
- C. Flowchart.
- D. Data flow diagram.

ANSWER: A

140. _____ testing is used to protect the system from improper penetration.

- A. Integration.
- B. Alpha.
- C. System.
- D. Security.

ANSWER: D

141. _____ is designed to confront programs with abnormal situations.

- A. Recovery tests.
- B. System tests.
- C. Stress tests.
- D. Sensitivity tests.

ANSWER: C

142. A variation of stress testing is a technique called _____.

- A. recovery testing.
- B. sensitivity testing.
- C. stress testing.
- D. mock testing.

ANSWER: B

143. _____ testing is used to test the run time process.

- A. Performance.
- B. Sensitivity.
- C. Stress.
- D. Mock.

ANSWER: A

144. A very small range of data contained within the bounds of valid data for a program may cause _____.

- A. performance degradation.
- B. improper processing.
- C. stress.
- D. error handling.

ANSWER: A

145. _____ attempts to uncover data combinations within valid input classes.

- A. Performance testing.
- B. Sensitivity testing.
- C. Stress testing.
- D. Mock testing.

ANSWER: B

146. Members of walkthrough team may include _____.

- A. project leader.
- B. technical writer.
- C. representative from the quality assurance group.
- D. All the above.

ANSWER: D

147. In data flow diagram _____ specify data flow.

- A. shaded rectangle.
- B. rectangle.
- C. open rectangle.
- D. arc.

ANSWER: D

148. _____ testing is a series of different tests whose primary purpose is to fully exercise the computer based system.

- A. Stress.
- B. Security.
- C. System.
- D. Performance.

ANSWER: C

149. _____ modules are identified at integration testing.

- A. Critical.
- B. Basic
- C. Lengthy.
- D. Interface.

ANSWER: A

150. _____ is the process of correcting the known errors.

- A. Analysis.
- B. Verification.
- C. Validation.
- D. Debugging.

ANSWER: D

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