K-374

BCA (Fourth Semester) Examination, July-2022

BCA-403(N)

Software Engineering

Time : 1:30 Hours **Maximum Marks-100**

1. The most desirable form of cohesion is:

    (A) Content cohesion

    (B) Functional cohesion

    (C) Logical cohesion

    (D) Procedural cohesion

2. The worst type of coupling is:

    (A) Common coupling

    (B) Content coupling

    (C) External coupling

    (D) Data coupling

3. The most desirable form of coupling is:

    (A) Data coupling

    (B) Control coupling

    (C) Common coupling

    (D) Content coupling

4. Cohesion is the qualitative induction of degree to which a module:

    (A) On just one thing

    (B) Can be written more compactly

    (C) Is able to complete function in timely manner

    (D) Is connected to other module

5. The importance of software is described in single word:

    (A) Efficiency

    (B) Accuracy

    (C) Complexity

    (D) Quality

6. In design phase, which is primary area of concern?

    (A) Architecture

    (B) Data

    (C) Interface

    (D) All of the mentioned

7.   _____is the process of translation a task into a series of commands that computer will use to perform that task.

   (A) Programming

   (B) Project design

   (C) Installation

   (D) System analysis

8.   Actual programming of software code is done during the _____ step in SDLC.

   (A) Maintenance and evaluation

   (B) Design

   (C) Development and Documentation

   (D) Analysis

9.   A step by step instruction is used solve a problem is known as:

   (A) A sequential structure

   (B) A list

   (C) An Algorithm

   (D) A plan

10.   Which tool is used for structure design?

   (A) Structure chart

   (B) Program flow chart

   (C) Data flow diagram

   (D) Module

11.   Outcome of requirements specification phase is:

   (A) Software requirements specification

   (B) Design document

   (C) Test document

   (D) None of the above

12.   Context Diagram explains:

   (A) The overview of the system

   (B) The internal view of the system

   (C) The entities of the system

   (D) None of the above

13. APIs stands for:

   (A) Application Performance Interfaces

   (B) Application Performance Integration

   (C) Application Programming Interfaces

   (D) Application Programming Integration

14. Which one is not a non-functional requirement?

   (A) Reliability

   (B) Efficiency

   (C) Stability

   (D) Product features

15. What requirement gathering method developed at IBM in 1970s is used for managing requirement elicitation?

   (A) JAD

   (B) Traceability

   (C) FAST

   (D) Both (A) and (B)

16. What kind of approach was introduced for elicitation and modeling to give a functional view of the system?

   (A) Use cases (by Jacobson)

   (B) Fusion (by Coleman)

   (C) Object Oriented Design (by Booch)

   (D) Object modeling technique (by Rambaugh)

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

   (A) Requirement gathering

   (B) Feasibility analysis

   (C) Software requirement specification

   (D) Software requirement validation

18. Which document is created by system analyst after the requirement are collected from various stakeholders?

(A) Software requirement specification

(B) Software requirement validation

(C) Requirements gathering

(D) Feasibility study

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

(A) Organizing requirements

(B) Requirements gatherings

(C) Negotiation & Discussion

(D) Documentation

20. Software requirement specification (SRS) is also known as specification of:

(A) Black box testing

(B) Acceptance testing

(C) Integrated testing

(D) White box testing

21. Requirement engineering process includes which of these steps ?

(A) Feasibility study

(B) Requirement gathering

(C) Software Requirement specification and validation

(D) All mentioned above

22. 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 analysis

(C) System analysis

(D) Requirement gathering

23. Which of the following is not defined in a good software requirement specification (SRS) document?

   (A) Functional Requirement

   (B) Algorithm for software implementation

   (C) Goals of implementation

   (D) Nonfunctional requirement

24. Which one is not a characteristic of a good SRS?

   (A) Correct

   (B) Complete

   (C) Consistent

   (D) Brief

25. ERD stands for:

   (A) Entity relationship diagram

   (B) Exit related diagram

   (C) Entity relationship design

   (D) Exit related design

26. Which phase is not available in software life cycle?

   (A) Coding

   (B) Testing

   (C) Maintenance

   (D) Abstraction

27. Most suitable model for new technology that is not well understood is:

   (A) Waterfall model

   (B) RAD model

   (C) Iterative enhancement model

   (D) Evolutionary development model

28. Which one is the most important features of spiral model?

   (A) Quality management

   (B) Risk management

   (C) Performance management

   (D) Efficiency management

29. If limited user participation is available, which model is to be selected?

   (A) Waterfall model

   (B) Prototyping model

   (C) Iterative enhancement model

   (D) Any of the above

30. If user participation is available, which model is to be chosen?

   (A) waterfall model

   (B) Iterative enhancement model

   (C) Spiral model

   (D) RAD model

31. If requirements are frequently changing which model is to be selected?

   (A) Water fall

   (B) Prototyping

   (C) RAD model

   (D) Iterative

32. If requirements are easily understandable and defined, which model is best suited?

   (A) Waterfall

   (B) Prototyping model

   (C) Spiral model

   (D) None of the above

33. RAD model was proposed by:

   (A) Lucent technologies

   (B) Motorola

   (C) IBM

   (D) Microsoft

34. RAD stands for:

   (A) Rapid application development

   (B) Relative application development

   (C) Ready application development

   (D) Repeated application development

35. Validation is:

   (A) Checking the product with respect to customer expectations

   (B) Checking the product with respect to specifications

   (C) Checking the product with respect to the constrains of the project

   (D) All of the above

36. SRS stands for:

   (A) Software requirement specification

   (B) Software requirements solutions

   (C) System requirements specification

   (D) None of the above

37. SDLC stands for:

   (A) Software design life cycle

   (B) Software development life cycle

   (C) System development life cycle

   (D) System design life cycle

38. Which model is not a software life cycle model?

   (A) Waterfall model

   (B) Spiral model

   (C) Prototyping model

   (D) Capability maturity model

39. Which model is most popular for student's small project?

   (A) Waterfall model

   (B) Spiral model

   (C) Quick and fix model

   (D) Prototyping model

40. _____is not suitable for accommodating any change?

   (A) Waterfall model

   (B) RAD model

   (C) Build & Fix model

   (D) Prototyping model

41. _____ is a software development life cycle model that is chosen if the development team has less experience on similar projects.

    (A) Iterative enhancement model

    (B) RAD

    (C) Spiral

    (D) Waterfall

42. _____is not a fundamental activity for software processes in software development.

    (A) Evolution

    (B) Design and Implementation

    (C) Verification

    (D) Validation

43. Which of the following the CASE tools?

    (A) Central Repository

    (B) Integrated case tools

    (C) Upper case tools

    (D) All to the mentioned

44. Who proposed the spiral model?

    (A) IBM

    (B) Pressman

    (C) Royce

    (D) Barry Boehm

45. Attributes of good software is_____.

    (A) Development

    (B) Functionality

    (C) Maintainability& functionality

    (D) Maintainability

46. What is functional requirement?

    (A) Specifies the tasks the program should not complete

    (B) Specifies the tasks the program must complete

    (C) Specifies the tasks the program must not work

    (D) All of the mentioned

47. CASE stands for:

    (A) Control Aided Science and Engineering

    (B) Computer-Aided Software Engineering

    (C) Cost Aided system experiments

    (D) None of the mentioned character

48. _____is defined as the process of generating analysis and designing documents?

    (A) Reverse Engineering

    (B) Re-engineering

    (C) Software Re-engineering

    (D) More than one method with same name, same number of parameters and type but different signature

49. Who is the father of software engineering?

    (A) Watts S. Humphrey

    (B) Margaret Hamilton

    (C) Alan Turing

    (D) Boris Beizer

50. What is software Engineering?

    (A) Testing a software

    (B) Application of engineering principles to the design a software

    (C) Designing a software page

    (D) None of the above

51. In OOD, the attributes (data variables and methods are bundled together is called:

(A) Classes

(B) Encapsulation

(C) Inheritance

(D) Object

52. Which coupling is also known as Global Coupling?

(A) Content coupling

(B) Stamp coupling

(C) Common coupling

(D) Data coupling

53. What is a measure of how well computer system facilities learnings?

(A) Usability

(B) Functionality

(C) Reliability

(D) None of the above

54. Level-0 DFD is similar to:

(A) Use case diagram

(B) Context diagram

(C) System diagram

(D) None of the above

55. Which testing is the re-execution of some subset of tests that have already been conducted to ensure the changes that are not propagated?

(A) Unit testing

(B) Integration testing

(C) Regression testing

(D) Thread-based testing

56. Give the advantages 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

57. SRD stands for:

(A) Software requirements definition

(B) Software requirements diagram

(C) Structured requirements diagram

(D) Structured requirements definition

58. Alpha and Beta testing are forms of_____.

(A) Unit testing

(B) System testing

(C) Integration testing

(D) Acceptance testing

59. If the objects focus on the problem domain then we concerned with_____.

    (A) Object oriented design

    (B) Object Oriented analysis

    (C) Object oriented analysis and design

    (D) None of the above

60. One of the fault base testing techniques is_____.

    (A) Unit testing

    (B) Mutation testing

    (C) Beta testing

    (D) Stress testing

61. Aggregation represents_____.

    (A) Is _ a relationship

    (B) Part _ of relationship

    (C) Composed _ of relationship

    (D) None of the above

62. If every requirements stated in the software requirement specification:

    (A) Consistent

    (B) Unambiguous

    (C) Verifiable

    (D) None of the above

63. Which design identifies the software as a system with many components interacting with each other?

    (A) Architectural design

    (B) High-level design

    (C) Detailed design

    (D) Both (B) and (C)

64. What is the simplest model of software development paradigm?

(A) Big bang model

(B) Spiral model

(C) Waterfall model

(D) V-Model

65. Compilers, Editors software come under which type of software?

(A) Application software

(B) System software

(C) Scientific software

(D) None of the above

66. In Boehm model, ACT stands for:

(A) Actual Change Traffic

(B) Actual Change Time

(C) Annual Change Traffic

(D) Annual Change Time

67. Taute maintenance model has:

(A) Two phase

(B) Eight phase

(C) Six phase

(D) Ten phase

68. In which model, fixes are done without detailed analysis of the long term effects?

(A) Quick-fix model

(B) Reuse oriented model

(C) Taute maintenance model

(D) None of the above

69. Iterative enhancement model is a:

(A) Three stage model

(B) Four stage model

(C) Two stage model

(D) Seven stage model

70. Which one is not a maintenance model:

(A) CMM

(B) Quick-fix model

(C) Iterative enhance model

(D) Reuse-oriented model

71. UML is stands for:

(A) Unified Modeling Language

(B) Uniform Modeling Language

(C) Unit Modeling Language

(D) Universal Modeling Language

72. Which is not a software characteristic?

(A) Software is flexible

(B) Software is not manufactured

(C) Software does not wear out

(D) Software is always correct

73. During software certification, whom to target:

(A) Process

(B) People

(C) Product

(D) All of the above

74. Which one is software process certification?

(A) CISCO certified

(B) ISO-9000

(C) Microsoft certified

(D) Java certified

75. Patch is known as:

(A) Routine fixes

(B) Emergency fixes

(C) Critical fixes

(D) None of the above

76. The maintenance initiated by defects in the software:

(A) Adaptive maintenance

(B) Corrective maintenance

(C) Perfective maintenance

(D) Preventive maintenance

77. Which one is not a category of maintenance

(A) Corrective maintenance

(B) Adaptive maintenance

(C) Effective maintenance

(D) Perfective maintenance

78. Regression testing is related to:

(A) Maintenance testing

(B) Functional testing

(C) Data flow testing

(D) Development testing

79. CASE tools are mainly used while developing which of the following methodologies?

(A) RAD

(B) JAD

(C) OO Approach

(D) All of the above

80. Which of the following is a drawback of using CASE tool?

(A) Standardization of notations and diagrams

(B) Communication between development team member

(C) Reduction of time and effort

(D) Costs associated with the use of the tool

81. 8. CASE-generated updated documentation enables easier and more reliable identification of software failure causes.

(A) False

(B) True

(C) Ambiguous statement

(D) None of the above

82. Logical design errors can be resolved using both classic and real CASE tools:

(A) True

(B) False

(C) Ambiguous statement

(D) None of the above

83. What kind of support is provided by the Code Generation CASE tool?

(A) Cross referencing queries and requirements tracing

(B) Transformation of design records into application software

(C) Compiling, interpreting or applying interactive debugging code

(D) Transformation of design records into application software AND Compiling, interpreting or applying interactive debugging code

84. Which of the following is not a type of CASE tool?

(A) Lower

(B) Classic

(C) Middle

(D) Real

85. CASE tools are used only during the software testing phase.

(A) True

(B) False

(C) Ambiguous statement

(D) None of the above

86. What involves preparing software for external release and keeping track of the system versions that have been released for customer use?

(A) System building

(B) Release management

(C) Change management

(D) Version management

87. The definition and use of configuration management standards is essential for quality certification in:

(A) ISO 9000

(B) CMM

(C) CMMI

(D) All of the mentioned

88. Which of the following is not a Software Configuration Management Activity?

(A) Configuration item identification

(B) Release management

(C) Risk management

(D) Branch management

89. Which of the following option is not tracked by configuration management tools?

(A) Tracking of change proposals

(B) Storing versions of system components

(C) Tracking the releases of system versions to customers

(D) None of the mentioned

90. What complements the formal technical review by assessing a configuration object for characteristics that are generally not considered during review?

(A) Software configuration management

(B) Software configuration audit

(C) Baseline

(D) None of the mentioned

91. What combines procedures and tools to manage different versions of configuration objects that are created during the software process?

    (A) Change control

    (B) SCIs

    (C) Version control

    (D) None of the mentioned

92. Software configuration management can be administered in several ways. These include.

    (A) A single software configuration management team for the whole organization

    (B) A separate configuration management team for each project

    (C) Software configuration management distributed among the project members

    (D) All of the mentioned

93. Which is a software configuration management concept that helps us to control change without seriously impeding justifiable change?

    (A) Source code

    (B) Baselines

    (C) Data model

    (D) None of the mentioned

94. Which of the following categories is part of the output of software process?

    (A) Computer programs

    (B) Documents that describe the computer programs

    (C) Data

    (D) All of the mentioned

95. The extent to which different modules are dependent upon each other is called?

    (A) Cohesion

    (B) Coupling

    (C) Modularity

    (D) Stability

96. A system does not interact with external environment is called:

(A) Closed system

(B) Logical system

(C) Open system

(D) Hierarchal system

97. The relationship of data elements in a module is called:

(A) Coupling

(B) Modularity

(C) Cohesion

(D) None of the above

98. When two modules refer to the same global data area, they are related as:

(A) External coupled

(B) Common coupled

(C) Data coupled

(D) Content coupled

99. Temporal cohesion means:

(A) Cohesion with respect of time

(B) Cohesion between local variables

(C) Cohesion between temporary variables

(D) Coincidental cohesion

100. Which one is not a strategy for design?

(A) Bottom up design

(B) Top down design

(C) Hybrid design

(D) Embedded design

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