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प्रश्नपुस्तिका क्रमांक
Question Booklet No.

O.M.R. Serial No. | | | | | | | | |

प्रश्नपुस्तिका सीरीज
Question Booklet Series
B

BCA (Fourth Semester) Examination, July-2022

BCA-403(N)

Software Engineering

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

जब तक कहा न जाय, इस प्रश्नपुस्तिका को न खोलें

निर्देश : –

1. परीक्षार्थी अपने अनुक्रमांक, विषय एवं प्रश्नपुस्तिका की सीरीज का विवरण यथास्थान सही– सही भरें, अन्यथा मूल्यांकन में किसी भी प्रकार की विसंगति की दशा में उसकी जिम्मेदारी स्वयं परीक्षार्थी की होगी।
2. **इस प्रश्नपुस्तिका में 100 प्रश्न हैं, जिनमे से केवल 75 प्रश्नों के उत्तर परीक्षार्थियों द्वारा दिये जाने है। प्रत्येक प्रश्न के चार वैकल्पिक उत्तर प्रश्न के नीचे दिये गये हैं। इन चारों में से केवल एक ही उत्तर सही है। जिस उत्तर को आप सही या सबसे उचित समझते हैं, अपने उत्तर पत्रक (O.M.R. ANSWER SHEET) में उसके अक्षर वाले वृत्त को काले या नीले बाल प्वांइट पेन से पूरा भर दें। यदि किसी परीक्षार्थी द्वारा किसी प्रश्न का एक से अधिक उत्तर दिया जाता है, तो उसे गलत उत्तर माना जायेगा।**
3. प्रत्येक प्रश्न के अंक समान हैं। आप के जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
4. सभी उत्तर केवल ओ०एम०आर० उत्तर पत्रक **(O.M.R. ANSWER SHEET)** पर ही दिये जाने हैं। उत्तर पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
5. ओ०एम०आर० उत्तर पत्रक **(O.M.R. ANSWER SHEET)** पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाय।
6. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी ओ०एम०आर० शीट उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें।
7. निगेटिव मार्किंग नहीं है।

महत्वपूर्ण : – **प्रश्नपुस्तिका खोलने पर प्रथमतः जॉच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभॉति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्ष निरीक्षक को दिखाकर उसी सीरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।**

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1. Which one is not a strategy for design?
   (A) Bottom up design
   (B) Top down design
   (C) Hybrid design
   (D) Embedded design
2. Temporal cohesion means:
   (A) Cohesion with respect of time
   (B) Cohesion between local variables
   (C) Cohesion between temporary variables
   (D) Coincidental cohesion
3. 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
4. The relationship of data elements in a module is called:
   (A) Coupling
   (B) Modularity
   (C) Cohesion
   (D) None of the above
5. A system does not interact with external environment is called:
   (A) Closed system
   (B) Logical system
   (C) Open system
   (D) Hierarchal system
6. The extent to which different modules are dependent upon each other is called?
   (A) Cohesion
   (B) Coupling
   (C) Modularity
   (D) Stability

7. 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

8. 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

9. 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

10. 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

11. 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

12. 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

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

(A) Configuration item identification

(B) Release management

(C) Risk management

(D) Branch management

14. 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

15. 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

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

(A) True

(B) False

(C) Ambiguous statement

(D) None of the above

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

(A) Lower

(B) Classic

(C) Middle

(D) Real

18. 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

19. 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

20. 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

21. 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

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

(A) RAD

(B) JAD

(C) OO Approach

(D) All of the above

23. Regression testing is related to:

(A) Maintenance testing

(B) Functional testing

(C) Data flow testing

(D) Development testing

24. Which one is not a category of maintenance

(A) Corrective maintenance

(B) Adaptive maintenance

(C) Effective maintenance

(D) Perfective maintenance

25. The maintenance initiated by defects in the software:

(A) Adaptive maintenance

(B) Corrective maintenance

(C) Perfective maintenance

(D) Preventive maintenance

26. Patch is known as:

(A) Routine fixes

(B) Emergency fixes

(C) Critical fixes

(D) None of the above

27. Which one is software process certification?

(A) CISCO certified

(B) ISO-9000

(C) Microsoft certified

(D) Java certified

28. During software certification, whom to target:

(A) Process

(B) People

(C) Product

(D) All of the above

29. 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

30. UML is stands for:

(A) Unified Modeling Language

(B) Uniform Modeling Language

(C) Unit Modeling Language

(D) Universal Modeling Language

31. Which one is not a maintenance model:

(A) CMM

(B) Quick-fix model

(C) Iterative enhance model

(D) Reuse-oriented model

32. Iterative enhancement model is a:

(A) Three stage model

(B) Four stage model

(C) Two stage model

(D) Seven stage model

33. 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
34. Taute maintenance model has:
    (A) Two phase
    (B) Eight phase
    (C) Six phase
    (D) Ten phase
35. In Boehm model, ACT stands for:
    (A) Actual Change Traffic
    (B) Actual Change Time
    (C) Annual Change Traffic
    (D) Annual Change Time
36. Compilers, Editors software come under which type of software?
    (A) Application software
    (B) System software
    (C) Scientific software
    (D) None of the above
37. What is the simplest model of software development paradigm?
    (A) Big bang model
    (B) Spiral model
    (C) Waterfall model
    (D) V-Model
38. 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)

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

(A) Consistent

(B) Unambiguous

(C) Verifiable

(D) None of the above

40. Aggregation represents_____.

(A) Is _ a relationship

(B) Part _ of relationship

(C) Composed _ of relationship

(D) None of the above

41. One of the fault base testing techniques is_____.

(A) Unit testing

(B) Mutation testing

(C) Beta testing

(D) Stress testing

42. 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

43. Alpha and Beta testing are forms of_____.

(A) Unit testing

(B) System testing

(C) Integration testing

(D) Acceptance testing

44. SRD stands for:

(A) Software requirements definition

(B) Software requirements diagram

(C) Structured requirements diagram

(D) Structured requirements definition

45. 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

46. 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

47. Level-0 DFD is similar to:

(A) Use case diagram

(B) Context diagram

(C) System diagram

(D) None of the above

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

(A) Usability

(B) Functionality

(C) Reliability

(D) None of the above

49. Which coupling is also known as Global Coupling?

(A) Content coupling

(B) Stamp coupling

(C) Common coupling

(D) Data coupling

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

(A) Classes

(B) Encapsulation

(C) Inheritance

(D) Object

51. 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

52. Who is the father of software engineering?

(A) Watts S. Humphrey

(B) Margaret Hamilton

(C) Alan Turing

(D) Boris Beizer

53. _____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

54. 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

55. 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

56. Attributes of good software is_____.

(A) Development

(B) Functionality

(C) Maintainability& functionality

(D) Maintainability

57. Who proposed the spiral model?

(A) IBM

(B) Pressman

(C) Royce

(D) Barry Boehm

58. Which of the following the CASE tools?

(A) Central Repository

(B) Integrated case tools

(C) Upper case tools

(D) All to the mentioned

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

(A) Evolution

(B) Design and Implementation

(C) Verification

(D) Validation

60. _____ 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

61. _____is not suitable for accommodating any change?

(A) Waterfall model

(B) RAD model

(C) Build & Fix model

(D) Prototyping model

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

(A) Waterfall model

(B) Spiral model

(C) Quick and fix model

(D) Prototyping model

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

(A) Waterfall model

(B) Spiral model

(C) Prototyping model

(D) Capability maturity model

64. SDLC stands for:

(A) Software design life cycle

(B) Software development life cycle

(C) System development life cycle

(D) System design life cycle

65. SRS stands for:

(A) Software requirement specification

(B) Software requirements solutions

(C) System requirements specification

(D) None of the above

66. 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

67. RAD stands for:

(A) Rapid application development

(B) Relative application development

(C) Ready application development

(D) Repeated application development

68. RAD model was proposed by:

(A) Lucent technologies

(B) Motorola

(C) IBM

(D) Microsoft

69. 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
70. If requirements are frequently changing which model is to be selected?
    (A) Water fall
    (B) Prototyping
    (C) RAD model
    (D) Iterative
71. If user participation is available, which model is to be chosen?
    (A) waterfall model
    (B) Iterative enhancement model
    (C) Spiral model
    (D) RAD model
72. 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
73. Which one is the most important features of spiral model?
    (A) Quality management
    (B) Risk management
    (C) Performance management
    (D) Efficiency management
74. 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

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

(A) Coding

(B) Testing

(C) Maintenance

(D) Abstraction

76. ERD stands for:

(A) Entity relationship diagram

(B) Exit related diagram

(C) Entity relationship design

(D) Exit related design

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

(A) Correct

(B) Complete

(C) Consistent

(D) Brief

78. 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

79. 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

80. Requirement engineering process includes which of these steps ?

(A) Feasibility study

(B) Requirement gathering

(C) Software Requirement specification and validation

(D) All mentioned above

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

(A) Black box testing

(B) Acceptance testing

(C) Integrated testing

(D) White box testing

82. 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

83. 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

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

(A) Requirement gathering

(B) Feasibility analysis

(C) Software requirement specification

(D) Software requirement validation

85. 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)

86. 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)

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

(A) Reliability

(B) Efficiency

(C) Stability

(D) Product features

88. APIs stands for:

(A) Application Performance Interfaces

(B) Application Performance Integration

(C) Application Programming Interfaces

(D) Application Programming Integration

89. 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

90. Outcome of requirements specification phase is:

(A) Software requirements specification

(B) Design document

(C) Test document

(D) None of the above

91. Which tool is used for structure design?

(A) Structure chart

(B) Program flow chart

(C) Data flow diagram

(D) Module

92. 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

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

(A) Maintenance and evaluation

(B) Design

(C) Development and Documentation

(D) Analysis

94. _____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

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

(A) Architecture

(B) Data

(C) Interface

(D) All of the mentioned

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

(A) Efficiency

(B) Accuracy

(C) Complexity

(D) Quality

97. 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

98. The most desirable form of coupling is:

(A) Data coupling

(B) Control coupling

(C) Common coupling

(D) Content coupling

99. The worst type of coupling is:

(A) Common coupling

(B) Content coupling

(C) External coupling

(D) Data coupling

100. The most desirable form of cohesion is:

(A) Content cohesion

(B) Functional cohesion

(C) Logical cohesion

(D) Procedural cohesion

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