Government Zirtiri Residential Science College

BACHELOR OF COMPUTER APPLICATIONS

(SOFTWARE ENGINEERING)

Paper No. :BCA-404

Full Marks: 70

(OBJECTIVE)

1. **Tick** [✓] **the correct answer:** **(1 X 70=70)**

   1) Which is NOT a software characteristic?
      (i) Software does not wear out
      (ii) Software is flexible
      (iii)Software is always correct
      (iv)none of the above

   2) Milestones are use to_____
      (i) know the cost of the project
      (ii) know the status of the project
      (iii)know user expectations
      (iv)none of the above

   3) Effort is measured in terms of _____
      (i) Person-months
      (ii) Persons
      (iii)Kilo watt
      (iv)none of the above

   4) During software development, which factor is most crucial?
      (i) People
      (ii) Product
      (iii)Process
      (iv)none of the above

   5) Software engineering approach is used to achieve _____
      (i) Error free software
      (ii) Reusable software
      (iii)Quality software product
      (iv)none of the above

   6) Which is not software life cycle model?
      (i) Spiral model

(ii) Prototyping model
(iii)Capability maturity model
(iv)none of the above

7) Build and fix model has _____
   (i) 1 phase
   (ii) 2 phases
   (iii)3 phases
   (iv)none of the above

8) If user participation is available, which model is to be chosen?
   (i) RAD model
   (ii) Iterative enhancement model
   (iii)Waterfall model
   (iv)none of the above

9) Statistically, the maximum percentage of errors belong to the following phase of SDLC
   (i) Coding
   (ii) Testing
   (iii)Design and maintenance
   (iv)none of the above

10) The Waterfall model of software development is _____
   (i) an old-fashioned model that is rarely used any more
   (ii) a reasonable approach, when requirements are well-defined
   (iii)a good approach, when a working program is required quickly
   (iv)none of the above

11) Requirement elicitation means_____
   (i) Capturing of requirements
   (ii) Understanding of requirements
   (iii)Gathering of requirements
   (iv)all of the above

12) SRS document is for _____
   (i) How to design the system?
   (ii) Costing and scheduling of a system
   (iii)"What" of a system?
   (iv)none of the above

13) Prototyping aims at_____
   (i) end user understanding and approval
   (ii) program logic
   (iii)planning and data flow organization
   (iv)none of the above

14) _____ depends upon each requirement in the SRS having a unique name or reference number

(i) Backward traceability
(ii) Forward traceability
(iii)Consistency
(iv)none of the above

15) In _____ the prototype is built with the idea that it will eventually be converted into the final system.
(i) Throw-away prototyping
(ii) Evolutionary prototyping
(iii)Prototyping model
(iv)none of the above

16) _____ are used widely for modeling the requirements
(i) Data dictionaries
(ii) DFD
(iii)ER diagrams
(iv)none of the above

17) Requirement specification which describes hardware and software it is _____
(i) SRS
(ii) Requirements specification
(iii)System requirements specification
(iv)none of the above

18) _____ is an attribute that uniquely identifies each instance of an entity type.
(i) Identifier
(ii) Candidate key
(iii)Cardinality
(iv)none of the above

19) Which is NOT a characteristic of a good SRS?
(i) Reliable
(ii) Verifiable
(iii)Consistent
(iv)none of the above

20) The DFD depicts _____
(i) flow of data
(ii) flow of control
(iii)both (i) and (ii)
(iv)none of the above

21) Temporal cohesion means _____
(i) Cohesion between local variables
(ii) Cohesion between temporary variables
(iii)Cohesion with respect to time
(iv)none of the above

22) A form of coupling in which a module has a dependency to other module, external to the software being developed is _____
   (i) Control coupling
   (ii) External coupling
   (iii)Stamp coupling
   (iv)none of the above

23) The purpose of _____ phase is to produce a solution to a problem given in SRS document.
   (i) Testing
   (ii) Design
   (iii)Implementation
   (iv)none of the above

24) A good software design will have _____ coupling
   (i) low
   (ii) high
   (iii)medium
   (iv)none of the above

25) _____ design is an approach to software design where the design is decomposed into a set of interacting units where each unit has a clearly defined function.
   (i) Bottom-up
   (ii) Top-down
   (iii)Function oriented
   (iv)none of the above

26) _____ is a representation of a software system that is used as a medium for communicating software design information
   (i) SRS
   (ii) SDD
   (iii)COCOMO
   (iv)none of the above

27) In OOD, _____ is the elimination of the irrelevant and the amplification of the essentials.
   (i) Polymorphism
   (ii) Abstraction
   (iii)Encapsulation
   (iv)none of the above

28) The _____design tells the customer exactly what the system will do
   (i) Conceptual
   (ii) Technical
   (iii)Intermediate
   (iv)none of the above

29) Cohesion is a measure of the degree to which the elements of a module are _____ related
   (i) technically
   (ii) systematically
   (iii) functionally
   (iv) none of the above

30) Software design with _____ coupling will have more errors
   (i) high
   (ii) low
   (iii) medium
   (iv) none of the above

31) Software consists of _____
   (i) set of programs
   (ii) set of instructions + operating procedures
   (iii) program + documentation + operating procedures
   (iv) program + hardware manuals

32) In _____ a usable product is released at the end of each cycle, with each release providing additional functionality.
   (i) Iterative enhancement model
   (ii) Evolutionary development model
   (iii) RAD model
   (iv) Prototyping model

33) Which one is not a type of requirement?
   (i) known requirement
   (ii) unknown requirement
   (iii) undreamt requirement
   (iv) complex requirement

34) COCOMO was developed initially by _____
   (i) B. W Bohem
   (ii) B. Beizer
   (iii) Alan Albrecht
   (iv) M. Halstead

35) The module in which instructions are related through flow of control is _____
   (i) Functional cohesion
   (ii) Temporal cohesion
   (iii) Logical cohesion
   (iv) Procedural cohesion

36) In the basic information flow model, 'FAN OUT' of a component A is defined as_____
   (i) number of components related to component A
   (ii) number of components dependent on component A

(iii)number of components that are called by component A

(iv)number of components that are pass by component A

37) Software reliability is defined with respect to _____
(i) size
(ii) speed
(iii)quality
(iv)time

38) Verification is _____
(i) checking the product with respect to customer's expectations
(ii) checking the product with respect to specification
(iii)checking the product with respect to constraints of the project
(iv)all of the above

39) During validation:
(i) process is checked
(ii) the customer checks the product
(iii)developer's performance is evaluated
(iv)product is checked

40) The process of transforming a model into source code is _____
(i) Forward engineering
(ii) Reverse engineering
(iii)Re-engineering
(iv)Restructuring

41) The worst type of cohesion is _____ cohesion
(i) coincidental
(ii) temporal
(iii)logical
(iv)none of the above

42) The most desirable form of coupling is _____ coupling
(i) common
(ii) content
(iii)data
(iv)none of the above

43) Process of generating analysis and design documents is called _____
(i) Re-engineering
(ii) Inverse engineering
(iii)Software engineering
(iv)Reverse engineering

44) The testing which involves only observation of the output for certain input values is _____ testing.
(i) alpha
(ii) beta

(iii)acceptance
(iv)functional

45) _____ is the probability of a failure free operation of a program for a specified time in a specified environment
(i) Software metrics
(ii) Software reliability
(iii)Software testing
(iv)Software maintenance

46) A count of the amount of data input to, processed in, and output from software is called a _____
(i) modularity
(ii) data structure metric
(iii)token count
(iv)information flow metric

47) In _____testing, each subsystem is tested separately and then the full system is tested.
(i) Unit testing
(ii) Top down
(iii)Bottom up
(iv)none of the above

48) _____is the activity that leads to 'fitness of purpose'
(i) Quality Assurance
(ii) Reliability
(iii)Maintenance
(iv)none of the above

49) Modular design of a system means
(i) using subroutine libraries
(ii) using models at its phase of system life cycle
(iii)divide the whole system into a number of units, each of which is quite cohesive within itself and is not too dependent on others, and to design and develop the units separately
(iv)delivering a complex system to the customer one piece at a time

50) _____ is language dependent.
(i) LOC
(ii) Function Count
(iii)COCOMO
(iv)SRS

51) _____ describe the effectiveness and quality of the processes that produce the software product.
(i) Product metrics
(ii) Process metrics
(iii)Project metrics
(iv)none of the above

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52) _____ model the degree of cohesion and coupling for a particular system component
   (i) Data structure metrics
   (ii) Information flow metrics
   (iii)Token count
   (iv)none of the above

53) In Token count, the _____ required to implement a program increases as the size of the program increases
   (i) time
   (ii) volume
   (iii)effort
   (iv)none of the above

54) Software science measures are developed by _____
   (i) B. Littlewood
   (ii) T.J McCabe
   (iii)M.Halstead
   (iv)G. Rothermal

55) Which one is the international standard for size measure?
   (i) LOC
   (ii) Function count
   (iii)Program length
   (iv)none of the above

56) Function point can be calculated by_____
   (i) UFP * CAF
   (ii) UFP * FAC
   (iii)UFP * cost
   (iv)UFP * Productivity

57) _____ is a hierarchy of software cost estimation model, which include basic, intermediate and detailed sub models
   (i) Function Count
   (ii) COCOMO
   (iii)Putnam Resource Allocation model
   (iv)none of the above

58) _____ is the process of examining a project and identifying areas of potential risk.
   (i) Risk assessment
   (ii) Risk Control
   (iii)Risk Monitoring
   (iv)none of the above

59) _____ is dependent on the resource requirements and development time
   (i) Project scheduling
   (ii) Testing
   (iii)Maintenance
   (iv)none of the above

60) _____ is a problem that could cause some loss or threaten the success of the project, but which has not happened yet.
(i) Cohesion
(ii) Coupling
(iii)Risk
(iv)none of the above

61) The _____ for a program is the time that is actually spent by a processor in executing the instructions of that program
(i) Clock time
(ii) Calendar time
(iii)Execution time
(iv)none of the above

62) _____ is a strategy for improving the software process, irrespective of the life cycle model.
(i) Software Reliability Model
(ii) Capability Maturity Model(CMM)
(iii)Spiral Model
(iv)none of the above

63) Reliability of software is usually estimated at _____
(i) Testing phase
(ii) Design phase
(iii)Coding phase
(iv)none of the above

64) Software does not break or wearout like hardware? What is your opinion?
(i) True
(ii) False
(iii)Cannot say
(iv)none of the above

65) Regression testing is primarily related to _____
(i) Functional testing
(ii) Maintenance testing
(iii)Data flow testing
(iv)none of the above

66) During the development phase, the following testing approach is NOT adopted
(i) Unit testing
(ii) Integration testing
(iii)Acceptance testing
(iv)none of the above

67) _____ is the activity of locating and correcting errors
(i) Testing

(ii) Debugging
(iii)Maintenance
(iv)none of the above

68) System documentation may NOT have
(i) SRS
(ii) Acceptance Test plan
(iii)Design document
(iv)none of the above

69) The process by which existing processes and methods are replaced by new techniques is
_____
(i) Reverse engineering
(ii) Software configuration management
(iii)Business process re-engineering
(iv)none of the above

70) Software maintenance may span for _____ years, whereas development may be _____ years
(i) 20, 1-2
(ii) 1-2, 20
(iii)20, 10-20
(iv)none of the above

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Answer Key

1. iii
2. ii
3. i
4. i
5. iii
6. iii
7. ii
8. i
9. iv
10. ii
11. iii
12. iii
13. i
14. ii
15. ii
16. ii
17. iii
18. ii
19. i
20. i
21. iii
22. ii
23. ii
24. i
25. iii
26. ii
27. ii
28. i
29. iii
30. i
31. iii
32. i
33. iv
34. i
35. ii
36. iii
37. iv
38. ii

39. ii
40. i
41. i
42. iii
43. iv
44. iv
45. ii
46. ii
47. iii
48. i
49. iii
50. i
51. ii
52. ii
53. iii
54. iii
55. iv
56. i
57. ii
58. i
59. i
60. iii
61. iii
62. ii
63. i
64. i
65. ii
66. iii
67. ii
68. iv
69. iii
70. i