

**DEPARTMENT : MCA , BCET**

**PAPER NAME : SOFTWARE ENGINEERING**

1. Software is defined as \_\_\_\_\_
  - a. set of programs, documentation & configuration of data
  - b. set of programs
  - c. documentation and configuration of data
  - d. None of the mentioned
  
2. What is Software Engineering?
  - a. Designing a software
  - b. Testing a software
  - c. Application of engineering principles to the design a software
  - d. None of the above
  
3. Who is the father of Software Engineering?
  - a. Margaret Hamilton
  - b. Watts S. Humphrey
  - c. Alan Turing
  - d). Boris Beizer
  
4. What are the features of Software Code?
  - a. Simplicity
  - b. Accessibility
  - c. Modularity
  - d. All of the above
  
5. \_\_\_\_\_ is a software development activity that is not a part of software processes.
  - a. Validation
  - b. Specification
  - c. Development
  - d. Dependence
  
6. Define Agile scrum methodology.
  - a. project management that emphasizes incremental progress
  - b. project management that emphasizes decremental progress
  - c. project management that emphasizes neutral progress
  - d. project management that emphasizes no progress
  
7. CASE stands for
  - a. Computer-Aided Software Engineering
  - b. Control Aided Science and Engineeringc.
  - c. Cost Aided System Experiments
  - d. None of the mentioned
  
8. \_\_\_\_\_ is defined as the process of generating analysis and designing documents?
  - a. Re-engineering
  - b. Reverse engineering
  - c. Software re-engineering

d. Science and engineering

9. The activity that distributes estimated effort across the planned project duration by allocating the effort to specific software developing tasks is \_\_\_\_\_

- a. Project scheduling
- b. Detailed schedule
- c. Macroscopic schedule
- d. None of the mentioned

10. What is a Functional Requirement?

- a. specifies the tasks the program must complete
- b. specifies the tasks the program should not complete
- c. specifies the tasks the program must not work
- d. All of the mentioned

11. Why do bugs and failures occur in software?

- a. Because of Developers
- b. Because of companies
- c. Because of both companies and Developers
- d. None of the mentioned

12. Attributes of good software is \_\_\_\_\_

- a. Development
- b. Maintainability & functionality
- c. Functionality
- d. Maintainability

13. The Cleanroom philosophy was proposed by \_\_\_\_\_

- a. Linger
- b. Mills
- c. Dyer
- d. All of the Mentioned

40. What does SDLC stands for?

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

15. Who proposed the spiral model?

- a. Barry Boehm
- b. Pressman
- c. Royce
- d. IBM

16. \_\_\_\_\_ is not among the eight principles followed by the Software Code of Ethics and Professional Practice.

- a. PRODUCT
- b. ENVIRONMENT
- c. PUBLIC
- d. PROFESSION

17. Which of the following are CASE tools?

- a. Central Repository
- b. Integrated Case Tools
- c. Upper Case Tools
- d. All of the mentioned

18. \_\_\_\_\_ suits the Manifesto for Agile Software Development.

- a. Customer collaboration
- b. Individuals and interactions
- c. Working software
- d. All of the mentioned

19. Software patch is defined as \_\_\_\_\_

- a. Daily or routine Fix
- b. Required or Critical Fix
- c. Emergency Fix
- d. None of the mentioned

20. \_\_\_\_\_ software development team has no permanent leader.

- a. Controlled Centralized (CC)
- b. Controlled decentralized (CD)
- c. Democratic decentralized (DD)
- d. None of the mentioned

21. Regardless of application area, project size, or complexity, software development work may be divided into three generic phases: the \_\_\_\_\_ phase, which focuses on *what*, the \_\_\_\_\_ phase, which focuses on *how*, and the \_\_\_\_\_ phase, which focuses on *change*.

- i. support
  - ii. development
  - iii. definition
- a. iii, ii, i
  - b. iii, i, ii
  - c. i, ii, iii
  - d. ii, i, iii

22. \_\_\_\_\_ is not a fundamental activity for software processes in software development.

- a. Evolution
- b. Design and implementation
- c. Validation
- d. Verification

23. What are agile manifesto principles?

- a. Customer satisfaction
- b. Face-to-face communication within a development team
- c. Changes in requirements are welcome
- d. All of the mentioned

24. Faster delivery is possible with CBSE.

- a. False

b. True

25. Who proposed Function Points?

- a. Albrecht
- b. Jacobson
- c. Boehm
- d. Booch

26. \_\_\_\_\_ 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

27. Agile Software Development is based on which of the following type?

- a. Iterative Development
- b. Incremental Development
- c. Both Incremental and Iterative Development
- d. Linear Development

28. \_\_\_\_\_ is a software developing team has a defined leader who coordinates specific tasks and secondary leaders that have responsibility for sub tasks.

- a. Democratic decentralized (DD)
- b. Controlled centralized (CC)
- c. Controlled decentralized (CD)
- d. None of the mentioned

29. 4GT Model is a set of \_\_\_\_\_

- a. Programs
- b. CASE Tools
- c. Software tools
- d. None of the mentioned

30. Engineers developing software should not

- a. be dependent on their colleagues
- b. maintain integrity and independence in their professional judgment
- c. not knowingly accept work that is outside your competence
- d. not use your technical skills to misuse other people's computers

31. \_\_\_\_\_ is not suitable for accommodating any change?

- a. RAD Model
- b. Waterfall Model
- c. Build & Fix Model
- d. Prototyping Model

32. The model which has a major disadvantage in terms of the coding phase of a software life cycle model is \_\_\_\_\_

- a. Rad Model
- b. Spiral Model
- c. 4GT Model

d. Waterfall Model

33. Adaptive Software Development(ASD) has which of the following three framework activities?

- a. speculation, collaboration, learning
- b. analysis, design, coding
- c. requirements gathering, adaptive cycle planning, iterative development
- d. all of the mentioned

34. Which of the following is not a project factor that should be considered when planning the structure of software developing teams?

- a. The rigidity of the delivery date
- b. The degree of sociability required for the project
- c. High frustration caused by personal, business, or technological factors that causes friction among team members
- d. The difficulty of the problem to be solved

35. What is the full form of the “COCOMO” model?

- a. Cost Constructive Estimation Model
- b. Constructive Cost Estimation Model
- c. Constructive Case Estimation Model
- d. Constructive Cost Estimating Model

36. Which one of the following is not a software process quality?

- a. Visibility
- b. Timeliness
- c. Productivity
- d. Portability

37. Cleanroom software development process complies with the operational analysis principles by using a method called known as

- a. referential transparency
- b. degenerative error correction
- c. box structure specification
- d. none of the mentioned

38. What is system software?

- a. computer program
- b. Testing
- c. AI
- d. IOT

39. Quality Management is known as \_\_\_\_\_

- a. SQI
- b. SQA
- c. SQM
- d. SQA and SQM

40. \_\_\_\_\_ is the definition of objects in the database that leads directly to a standard approach for the creation of software documentation.

- a. Data/data integration

- b. Information sharing
- c. Document standardization
- d. Data integrity

41. \_\_\_\_\_ is an indirect measure of software development process.

- a. Cost
- b. Effort Applied
- c. Efficiency
- d. All of the mentioned

42. According to an IBM research, "31% of projects are abandoned before they are completed, 53% exceed their cost projections by an average of 189 percent, and 94 projects are restarted for every 100 projects." What is the significance of these figures?

- a. Lack of software ethics and understanding
- b. Management issues in the company
- c. Lack of adequate training
- d. All of the mentioned

43. Which of the following document contains the user system requirements?

- a. SRD
- b. DDD
- c. SDD
- d. SRS

44. \_\_\_\_\_ specification is also known as SRS document.

- a. white-box
- b. grey-box
- c. black-box
- d. none of the mentioned

45. Which of the following is not a part of Software evolution?

- a. Re-engineering activities
- b. Maintenance activities
- c. Development activities
- d. Negotiating with client

46. \_\_\_\_\_ is a Strategy to achieve Software diversity.

- a. Explicit specification of different algorithms
- b. Different programming languages
- c. Different design methods and tools
- d. All of the mentioned

47. In which step of SDLC actual programming of software code is done?

- a. Development and Documentation
- b. Maintenance and Evaluation
- c. Design
- d. Analysis

48. Software Debugging is known as \_\_\_\_\_

- a. identifying the task to be computerized
- b. creating program code

- c. creating the algorithm
- d. finding and correcting errors in the program code

49. The word which describes the importance of software design is?

- a. Complexity
- b. Quality
- c. Efficiency
- d. Accuracy

50. The incorrect activity among the following for the configuration management of a software system is \_\_\_\_\_

- a. Version management
- b. System management
- c. Change management
- d. Internship management

51. What is the first step in the software development lifecycle?

- a. System Design
- b. Coding
- c. System Testing
- d. Preliminary Investigation and Analysis

52. Which of the following is involved in the system planning and designing phase of the Software Development Life Cycle (SDLC)?

- a. Sizing
- b. Parallel run
- c. Specification freeze
- d. All of the above

53. What does RAD stand for?

- a. Rapid Application Document
- b. Rapid Application Development
- c. Relative Application Development
- d. None of the above

54. Which of the following prototypes does not associated with Prototyping Model?

- a. Domain Prototype
- b. Vertical Prototype
- c. Horizontal Prototype
- d. Diagonal Prototype

55. The major drawback of RAD model is \_

- a. It requires highly skilled developers/designers.
- b. It necessitates customer feedbacks.
- c. It increases the component reusability.
- d. Both (a) & (c)

56. Which of the following does not relate to Evolutionary Process Model?

- a. Incremental Model
- b. Concurrent Development Model
- c. WINWIN Spiral Model
- d. All of the above

57. What is the major drawback of the Spiral Model?

- a. Higher amount of risk analysis
- b. Doesn't work well for smaller projects
- c. Additional functionalities are added later on
- d. Strong approval and documentation control

58. Model selection is based on \_\_\_\_\_

- a. Requirements
- b. Development team & users
- c. Project type & associated risk
- d. All of the above

59. Which of the following option is correct?

- a. The prototyping model facilitates the reusability of components.
- b. RAD Model facilitates reusability of components
- c. Both RAD & Prototyping Model facilitates reusability of components
- d. None

60. Which of the following models doesn't necessitate defining requirements at the earliest in the lifecycle?

- a. RAD & Waterfall
- b. Prototyping & Waterfall
- c. Spiral & Prototyping
- d. Spiral & RAD

61. When the user participation isn't involved, which of the following models will not result in the desired output?

- a. Prototyping & Waterfall
- b. Prototyping & RAD
- c. Prototyping & Spiral
- d. RAD & Spiral

62. Which of the following model will be preferred by a company that is planning to deploy an advanced version of the existing software in the market?

- a. Spiral
- b. Iterative Enhancement
- c. RAD
- d. Both (b) and (c)

63. Software is considered to be collection of

- a. programming code
- b. associated libraries
- c. documentations



d. All of the above

64. The process of developing a software product using software engineering principles and methods is referred to as\_\_\_\_\_.

- a. Software Engineering
- b. software Evolution
- c. System Models
- d. Software Models

65. Which of the following is the Characteristics of good software?

- a. Transitional
- b. Operational
- c. Maintenance
- d. All of the above

66. Where there is a need of Software Engineering?

- a. For Large Software
- b. To reduce Cost
- c. Software Quality Management
- d. All of the above

67. The reason for software bugs and failures is due to\_\_\_\_\_.

- a. Software Developers
- b. Software companies
- c. Both A and B
- d. None of the above)

68. Efficiency in a software product does not include\_\_\_\_\_

- a. Licensing
- b. processing time
- c. responsiveness
- d. memory utilization

69. What are attributes of good software?

- a. Software functionality
- b. Software development
- c. Software maintainability
- d. Both A and C

70. Build & Fix Model is suitable for programming exercises of \_\_\_\_\_LOC (Line of Code).

- a. 100-200
- b. 200-400
- c. 400-1000
- d. above 1000

71. RAD stands for

- a. Relative Application Development
- b. Rapid Application Development
- c. Rapid Application Document

d. None of the mentioned

72. 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

73. Which is not one of the types of prototype of Prototyping Model?

- a. Horizontal Prototype
- b. Vertical Prototype
- c. Diagonal Prototype

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

- a. Quick Design
- b. Coding
- c. Prototype Refinement
- d. Engineer Product
- e. Domain Prototype.

75. 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

76. RAD Model has

- a. 2 phases
- b. 3 phase
- c. 5 phases
- d. 6 phases

77. 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

78. Which of the following are valid step in SDLC framework?

- a. Requirement Gathering
- b. System Analysis
- c. Software Design
- d. All of the above

79. Which of the following is the first step in SDLC framework?

- a. Feasibility Study
- b. Requirement Gathering
- c. Communication

d. System Analysis

80. Which of the following is not correct model in Software Development Paradigm?

- a. Waterfall Model
- b. P model
- c. Spiral Model
- d. V model

81. Waterfall model is not suitable for:

- a. Small projects
- b. Complex projects
- c. Accommodating changes
- d. Maintenance Projects

82. Which one of the following is a functional requirement?

- a. Maintainability
- b. Portability
- c. Business needs
- d. Reliability

83. 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

84. The process to gather the software requirements from client, analyze and document them is known as \_\_\_\_\_.

- a. Feasibility Study
- b. Requirement Gathering
- c. Requirement Engineering
- d. System Requirements Specification

85. The goal of requirement engineering is to develop and maintain sophisticated and descriptive \_\_\_\_\_ document.

- a. Feasibility Study
- b. Requirement Gathering
- c. Software Requirement Validation
- d. System Requirements Specification

86. It is the process in which developers discuss with the client and end users and know their expectations from the software.

- a. Requirements gathering
- b. Organizing Requirements
- c. Negotiation & discussion
- d. Documentation

87. Which of the following is correct software metrics?

- a. Complexity Metrics
- b. Quality Metrics
- c. Process Metrics
- d. All of the above

88. Why is Requirements Elicitation a difficult task?

- a. Problem of scope
- b. Problem of understanding
- c. Problem of volatility
- d. All of the above

89. The fundamental notions of software engineering does not account for?

- a. Software Security
- b. Software reuse
- c. Software processes
- d. Software Validation

90. Which of these software engineering activities are not a part of software processes?

- a. Software development
- b. Software dependence
- c. Software validation
- d. Software specification

91. The spiral model was originally proposed by..

- a. Barry Boehm
- b. Pressman
- c. Royce
- d. Pressman

92. Usability can be measured in terms of:

- a. Time required to become moderately efficient in system usage
- b. Net increase in productivity
- c. Intellectual skill to learn the system
- d. All of the mentioned

93. What are attributes of good software?

- a. Software functionality
- b. Software maintainability
- c. Software development
- d. Both Software functionality & maintainability

94. Which of the following is also known as Verification and Validation Model?

- a. V-Model
- b. Waterfall Model
- c. Prototype Model
- d. Evolutionary Model

95. Software deteriorates rather than wears out because

- a. Software suffers from exposure to hostile environments

- b. Defects are more likely to arise after the software has been used often
- c. Multiple change requests introduce errors in component interactions
- d. Software spare parts become harder to order

96. Which of the items listed below is not one of the software engineering layers?

- a. Process
- b. Manufacturing
- c. Methods
- d. Tools

97. Which of these are the 5 generic software engineering framework activities?

- a. Communication, planning, modeling, construction, deployment
- b. Communication, risk management, measurement, production, reviewing
- c. Analysis, designing, programming, debugging, maintenance
- d. Analysis, planning, designing, programming, testing

98. The incremental model of software development is

- a. A reasonable approach when requirements are well defined
- b. A good approach when working core product is required.
- c. The best approach to use when large development team
- d. A revolutionary model that is not commercially used.

99. The spiral model of software development

- a. Ends with the software delivery of the product
- b. Is more chaotic than incremental model
- c. Calculate risk at each phase
- d. All the three

100. The prototyping software model is

- a. A reasonable approach when requirements are well defined
- b. Useful only when customer can not define requirement clearly
- c. best for large development team
- d. A risky model for producing meaningful product

**Answer Key :**

1.a	11.c	21.a	31.b	41.c	51.d	61.b	71.b	81.c	91.a
2.c	12.b	22.d	32.c	42.c	52.d	62.a	72.d	82.c	92.d
3.b	13.d	23.d	33.d	43.d	53.b	63.d	73.c	83.d	93.d
4.c	14.c	24.b	34.b	44.c	54.d	64.b	74.b	84.c	94.a
5.d	15.a	25.a	35.b	45.d	55.d	65.d	75.d	85.d	95.c
6.a	16.b	26.c	36.d	46.d	56.d	66.d	76.c	86.a	96.b
7.a	17.d	27.c	37.c	47.a	57.b	67.d	77.c	87.d	97.c
8.b	18.d	28.c	38.a	48.d	58.d	68.a	78.d	88.d	98.b
9.a	19.c	29.c	39.b	49.b	59.c	69.d	79.c	89.d	99.c
10.a	20.c	30.a	40.c	50.d	60.c	70.a	80.b	90.b	100.b

