Subject:-Computer Application
Paper-18, Semester-VI
Multiple Choice Question

1. Coupling is a qualitative indication of the degree to which a module
   a) can be written more compactly
   b) focuses on just one thing
   c) is able to complete its function in a timely manner
   d) is connected to other modules and the outside world

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

   a) Spiral model
   b) Big Bang model
   c) V-model
   d) Waterfall model

3. Which model is also called as the classic life cycle or the Waterfall model?
   a) Iterative Development
   b) Linear Sequential Development
   c) RAD Model
   d) Incremental Development

4. Which tool is use for structured designing ?
   a) Program flowchart
   b) Structure chart
   c) Data-flow diagram
   d) Module

5.  A step by step instruction used to solve a problem is known as
   a) Sequential structure
   b) A List
   c) A plan
   d) An Algorithm

6. In Design phase, which is the primary area of concern ?
   a) Architecture
   b) Data
   c) Interface
   d) All of the mentioned

7. Cohesion is a qualitative indication of the degree to which a module
   a) can be written more compactly
   b) focuses on just one thing
   c) is able to complete its function in a timely manner
   d) is connected to other modules and the outside world

8.  Coupling is a qualitative indication of the degree to which a module
   a) can be written more compactly
   b) focuses on just one thing
   c) is able to complete its function in a timely manner

d) is connected to other modules and the outside world

9. Which of the following is an indirect measure of product?
   a) Quality
   b) Complexity
   c) Reliability
   d) All of the Mentioned

10. In size oriented metrics, metrics are developed based on the
    _____
    a) number of Functions
    b) number of user inputs
    c) number of lines of code
    d) amount of memory usage

11. Which of the following is not an information domain required for determining function point in FPA ?
    a) Number of user Input
    b) Number of user Inquiries
    c) Number of external Interfaces
    d) Number of errors

12. Function Points in software engineering was first proposed by
    a) Booch
    b) Boehm
    c) Albrecht
    d) Jacobson

13. Function Point Computation is given by the formula
    a) FP = [count total * 0.65] + 0.01 * sum(Fi)
    b) FP = count total * [0.65 + 0.01 * sum(Fi)].
    c) FP = count total * [0.65 + 0.01] * sum(Fi)
    d) FP = [count total * 0.65 + 0.01] * sum(Fi)

14. How many product quality factors are proposed in McCall quality model?
    a) 2
    b) 3
    c) 11
    d) 8

15. Which one of the following is not a software quality model?
    a) ISO 9000
    b) McCall model
    c) Boehm model
    d) ISO 9126

16. . What is MTTF ?
    a) Maximum time to failure
    b) Mean time to failure

c) Minimum time to failure
d) None of the mentioned

17. White Box techniques are also classified as
    a) Design based testing
    b) Structural testing
    c) Error guessing technique
    d) None of the mentioned

18. Which of the following is/are White box technique?
    a) Statement Testing
    b) Decision Testing
    c) Condition Coverage
    d) All of the mentioned
    .

19. What are the various Testing Levels?
    a) Unit Testing
    b) System Testing
    c) Integration Testing
    d) All of the mentioned

20. Boundary value analysis belong to?
    a) White Box Testing
    b) Black Box Testing
    c) White Box & Black Box Testing
    d) None of the mentioned
    .

21. 10. Alpha testing is done at
    a) Developer's end
    b) User's end
    c) Developer's & User's end
    d) None of the mentioned

22. Number of errors found per person hours expended is an example of a
    a) measurement
    b) measure
    c) metric
    d) all of the mentioned
    .

23. Spiral model was developed by
    a) Victor Bisili
    b) Berry Boehm
    c) Bev Littlewood
    d) Roger Pressman

24. Processes for evolving a software product depend on:
    a) Type of software to be maintained

b) Development processes used
c) Skills and experience of the people involved
d) All of the mentioned

25. Which one of the following is a functional requirement ?
    a) Maintainability
    b) Portability
    c) Robustness
    d) None of the mentioned

 Short type Answer
26. What is software engineering?

27. What is software project management?

28. What is project estimation?

29. What are function points?

30. What is SRS(Software Requirement Specification)?

31. What is software metric?

32. What is cohesion?

33. What is coupling?

34. What is level-0 DFD?

35. What is data dictionary?

36. .What is structured design?

37. What is the difference between function oriented and object oriented design?

38. .Differentiate validation and verification?

39. What is black-box and white-box testing?

40. What is ISO 9000 Certificates?

**Long type Question**

41. Explain waterfall  model in detail.
42. Explain prototype  model in detail.
43. Explain the spiral model in detail. What is the difference between the waterfall model and the spiral model?
44. Explain COCOMO model in brief.
45. What is testing? What are the different types of testing?
46. Explain verification and validation testing.
47. What is difference between white box and black box testing?
48. What is software relaibilty? What are different reliability metrics?

49. Write different types of integration testing.
50. Write short notes on
   a. LOC        b. function point       c. DFD
   d. E-R diagram     e. Structure Chart
51. Explain classification of Cohesion and Coupling?

52. Explain characterstics of Good SRS document?