



Software-Engineering-MCQ

Software Engineering (Dr. A.P.J. Abdul Kalam Technical University)



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SOFTWARE ENGINEERING

Software Engineering	
Course-Outcome(CO)	
At the end of course, the student will be able to understand	
CO1	Explain various software characteristics and analyze different software Development Models.
CO2	Demonstrate the contents of a SRS and apply basic software quality assurance practices to ensure that design, development meet or exceed applicable standards.
CO3	Compare and contrast various methods for software design
CO4	Formulate testing strategy for software systems, employ techniques such as unit testing, Test driven development and functional testing.
CO5	Manage software development process independently as well as in teams and make use of Various software management tools for development, maintenance and analysis.
DETAILED SYLLABUS	
Unit	Topic
I	Introduction: Introduction to Software Engineering, Software Components, Software Characteristics, Software Crisis, Software Engineering Processes, Similarity and Differences from Conventional Engineering Processes, Software Quality Attributes. Software Development Life Cycle (SDLC) Models: Water Fall Model, Prototype Model, Spiral Model, Evolutionary Development Models, Iterative Enhancement Models.
II	Software Requirement Specifications (SRS): Requirement Engineering Process: Elicitation, Analysis, Documentation, Review and Management of User Needs, Feasibility Study, Information Modelling, Data Flow Diagrams, Entity Relationship Diagrams, Decision Tables, SRS Document, IEEE Standards for SRS. Software Quality Assurance (SQA): Verification and Validation, SQA Plans, Software Quality Frameworks, ISO 9000 Models, SEI-CMM Model.
III	Software Design: Basic Concept of Software Design, Architectural Design, Low Level Design: Modularization, Design Structure Charts, Pseudo Codes, Flow Charts, Coupling and Cohesion Measures, Design Strategies: Function Oriented Design, Object Oriented Design, Top-Down and Bottom-Up Design. Software Measurement and Metrics: Various Size Oriented Measures: Halstead's Software Science, Function Point (FP) Based Measures, Cyclomatic Complexity Measures: Control Flow Graphs.
IV	Software Testing: Testing Objectives, Unit Testing, Integration Testing, Acceptance Testing, Regression Testing, Testing for Functionality and Testing for Performance, Top Down and Bottom-Up Testing Strategies: Test Drivers and Test Stubs, Structural Testing (White Box Testing), Functional Testing (Black Box Testing), Test Data Suit Preparation, Alpha and Beta Testing of Products. Static

	Testing Strategies: Formal Technical Reviews (Peer Reviews), Walk Through, Code Inspection, Compliance with Design and Coding Standards.
V	Software Maintenance and Software Project Management: Software as an Evolutionary Entity, Need for Maintenance, Categories of Maintenance: Preventive, Corrective and Perfective Maintenance, Cost of Maintenance, Software Re- Engineering, Reverse Engineering. Software Configuration Management Activities, Change Control Process, Software Version Control, An Overview of CASE Tools. Estimation of Various Parameters such as Cost, Efforts, Schedule/Duration, Constructive Cost Models (COCOMO), Resource Allocation Models, Software Risk Analysis and Management.

**Software Engineering
Solved MCQ**

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Unit-I

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

- a. System Design
- b. Coding
- c. System Testing

d. Preliminary Investigation and Analysis

Answer: Option (d)

2. What does the study of an existing system refer to?

- a. Details of DFD
- b. Feasibility Study
- c. System Analysis**
- d. System Planning

Answer: Option (c)

3. 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**

Answer: Option (d)

4. What does RAD stand for?

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

Answer: Option (b)

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

- a. Domain Prototype
- b. Vertical Prototype

c. Horizontal Prototype

d. Diagonal Prototype

Answer: Option (d)

6. 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.

a. Both (a) & (c)

Answer: Option (d)

7. 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

Answer: Option (d)

8. 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

Answer: Option (b)

9. Model selection is based on _____

- a. Requirements
- b. Development team & users
- c. Project type & associated risk

d. All of the above

Answer: Option (d)

10. 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

Answer: Option (c)

11. 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

Answer: Option (c)

12. 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

Answer: Option (b)

13. 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)**

Answer: Option (D)

14. Software is considered to be collection of

a. programming code

b. associated libraries

c. documentations

d. **All of the above**

Answer: Option (d)

15. 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

Answer: Option (b)

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

a. Transitional

b. Operational

c. Maintenance

d. **All of the above**

Answer: Option (d)

17. 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**

Answer: Option (d)

18. 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**

Answer: Option (d)

19. Efficiency in a software product does not include _____

a. **Licensing**

b. processing time

c. responsiveness

d. memory utilization

Answer: Option (a)

20. What are attributes of good software?

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

Answer: Option (d)

21. 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

Answer: Option (a)

22. RAD stands for

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

Answer: Option (b)

23. 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**

Answer: Option (d)

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

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

Answer: Option (c)

25. 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.

Answer: Option (b)

26. 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**

Answer: Option (d)

27. RAD Model has

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

Answer: Option (c)

28. 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

Answer: Option (c)

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

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

Answer: Option (d)

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

- a. Feasibility Study
- b. Requirement Gathering
- c. Communication**
- d. System Analysis

Answer: Option (c)

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

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

Answer: Option (b)

32. Waterfall model is not suitable for:

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

Answer: Option (c)

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

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

Answer: Option (c)

34. 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**

Answer: Option (d)

35. 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

Answer: Option (c)

36. 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**

Answer: Option (d)

37. 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

Answer: Option (a)

38. Which of the following is correct software metrics?

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

Answer: Option (d)

39. Why is Requirements Elicitation a difficult task?

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

Answer: Option (d)

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

- A. Software Security
- B. Software reuse
- C. Software processes
- D. Software Validation

Answer: Option (d)

41. 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

Answer: Option (b)

42. The spiral model was originally proposed by..

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

Answer: Option (a)

43. 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**

Answer: Option (d)

44. What are attributes of good software?

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

Answer: Option (d)

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

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

Answer: Option (a)

46. Software deteriorates rather than wears out because

- a. Software suffers from exposure to hostile environments

- b. Defects are more likely to arise after software has been used often

c. Multiple change requests introduce errors in component interactions

- d. Software spare parts become harder to order

Answer: Option (c)

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

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

Answer: Option (b)

48. 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

Answer: Option (c)

49. 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.

Answer: Option (b)

50. 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

Answer: Option (c)

51. 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: Option (b)

52. Which question no longer concerns the modern software engineer?

- a. Why does computer hardware cost so much?**
- b. Why does software take a long time to finish?
- c. Why does it cost so much to develop a piece of software?
- d. Why can't software errors be removed from products prior to delivery?

Answer: Option (a)

53. Software is a product and can be manufactured using the same technologies used for other engineering artifacts

- a. True
- b. False**

Answer: Option (b)

54. Software deteriorates rather than wears out because

- a. Software suffers from exposure to hostile environments
- b. Defects are more likely to arise after software has been used often
- c. Multiple change requests introduce errors in component interactions**
- d. Software spare parts become harder to order

Answer: Option (c)

55. WebApps are a mixture of print publishing and software development, making their development outside the realm of software engineering practice.

- a. True
- b. False**

Answer: Option (b)

5. There are no real differences between creating WebApps and MobileApps

- a. True
- b. False**

Answer: Option (b)

56. In its simplest form an external computing device may access cloud data services using a web browser.

- a. True**
- b. False

Answer: Option (a)

57. Product line software developments depends the reuse of existing software components to provide software engineering leverage.

- a. **True**
- b. False

Answer: Option (a)

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

- a. Process
- b. **Manufacturing**
- c. Methods

Tools Answer: Option (b)

59. 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

Answer: Option (a)

60. Most software continues to be custom built because

- a. Component reuse is common in the software world.
- b. Reusable components are too expensive to use.

c. Software is easier to build without using someone else's components.

- d. **Off-the-shelf software components are unavailable in many application domains.**

Answer: Option (d)

61. The nature of software applications can be characterized by their information

- a. Complexity
- b. Content
- c. Determinacy
- d. **both b and c**

Answer: Option (d)

62. Process models are described as agile because they

- a. Eliminate the need for cumbersome documentation
- b. **Emphasize maneuverability and adaptability**
- c. Do not waste development time on planning activities
- d. Make extensive use of prototype creation

Answer: Option (b)

63. Which of these terms are level names in the Capability Maturity Model?

- a. Performed
- b. Repeated
- c. Optimized
- d. **both a and c**

Answer: Option (d)

64. The best software process model is one that has been created by the people who will actually be doing the work.

- a. **True**
- b. False

Answer: Option (a)

65. Which of the following are recognized process flow types?

- a. Concurrent process flow
- b. Iterative process flow
- c. Linear process flow
- d. **both b and c**

Answer: Option (d)

66. Which of these are standards for assessing software processes?

- a. SPICE
- b. ISO 9000
- c. ISO 9001
- d. **both a and c**

Answer: Option (d)

67. The rapid application development model is

- a. Another name for component-based development
- b. A useful approach when a customer cannot define requirements clearly.
- c. **A high speed adaptation of the linear sequential model.**
- d. All of the above.

Answer: Option (c)

68. In the Unified Process model requirements are determined iteratively and may span more than one phase of the process.

- a. **True**
- b. False

Answer: Option (a)

69. The waterfall model of software development is

- a. **A reasonable approach when requirements are well defined.**
- b. A good approach when a working program is required quickly.
- c. The best approach to use for projects with large development teams
- d. An old fashioned model that is rarely used any more

Answer: Option (a)

70. The incremental model of software development is

- a. A reasonable approach when requirements are well defined.
- b. **A good approach when a working core product is required quickly.**
- c. The best approach to use for projects with large development teams
- d. A revolutionary model that is not used for commercial products.

Answer: Option (b)

71. Evolutionary software process models

- a. Are iterative in nature
- b. Can easily accommodate product requirements changes

- c. Do not generally produce throwaway systems

Answer: Option (c)

- d. All of the above.**

Answer: Option (d)

72. The prototyping model of software development is

- a. A reasonable approach when requirements are well defined.
b. A useful approach when a customer cannot define requirements clearly.
 c. The best approach to use for projects with large development teams.
 d. A risky model that rarely produces a meaningful product.

Answer: Option (b)

73. The spiral model of software development

- a. Ends with the delivery of the software product.
 b. Is more chaotic than the incremental model.
c. Includes project risks evaluation during each iteration
 d. All of the above

Answer: Option (c)

74. The concurrent development model is

- a. Another name for concurrent engineering.
 b. Defines events that trigger engineering activity state transitions.
 c. Only used for development of parallel or distributed systems.
d. Both a and b

75. The component-based development model is

- a. Only appropriate for computer hardware design
 b. Not able to support the development of reusable components.
c. Dependent on object technologies for support.
 d. Not cost effective by known quantifiable software metrics

Answer: Option (c)

76. The formal methods model of software development makes use of mathematical methods to

- a. Define the specification for computer-based systems
 b. Develop defect free computer-based systems.
 c. Verify the correctness of computer-based systems.
d. All of the above.

Answer: Option (d)

77. Which of these is not one of the phase names defined by the Unified Process model for software development?

- a. Inception phase
 b. Elaboration phase
 c. Construction phase
d. Validation phase

Answer: Option (d)

78. Which of these is not a characteristic of Personal Software Process?

Answer: Option (d)

- a. Emphasizes personal measurement of work product.
- b. Practitioner requires careful supervision by the project manager.**
- c. Individual practitioner is responsible for estimating and scheduling.
- d. Practitioner is empowered to control quality of software work products.

Answer: Option (b)

79. Which of these are objectives of Team Software Process?

- a. Accelerate software process improvement
- b. Allow better time management by highly trained professionals
- c. Build self-directed software teams
- d. Both b and c**

80. SDLC stands for

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

Answer: Option (a)

81. 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

Answer: Option (c)

Unit- II

1. The process to gather the software requirements from client, analyze and document them is known as _____
- Feasibility Study
 - Requirement Gathering
 - Requirement Engineering**
 - System Requirements Specification

Answer: Option (c)

2. The goal of requirement engineering is to develop and maintain sophisticated and descriptive _____ document.

- Feasibility Study
- Requirement Gathering
- Software Requirement Validation
- System Requirements Specification**

Answer: Option (d)

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

- Requirements gathering
- Organizing Requirements**
- Negotiation & discussion
- D. Documentation

Answer: Option (b)

4. Which of the following is correct software metrics?

- Complexity Metrics
- Quality Metrics**
- Process Metrics
- All of the above

Answer: Option (b)

5. What are the types of requirement in Quality Function Deployment (QFD)?

- Known, Unknown, Undreamed
- User, Developer
- Functional, Non-Functional
- Normal, Expected, Exciting**

Answer: Option (d)

6. Why is Requirements Elicitation a difficult task?

- Problem of scope
- Problem of understanding
- Problem of volatility
- All of the above**

Answer: Option (d)

7. How many phases are there in Brainstorming?

- 2
- 3**
- 4
- 5

Answer: Option (b)

8. Which type of DFD concentrates on the system process and flow of data in the system?

- Physical DFD
- Logical DFD**
- Flowchart DFD
- System DFD

Answer: Option (b)

9. How many levels of DFD is?

- 2
- 3**
- 4
- 5

Answer: Option ()

10. Which of the following is not a component in DFD?

- a. Entities
- b. Attributes**
- c. Process
- d. Data Flow

Answer: Option (b)

11. What is level 2 in DFD means?

- a. Highest abstraction level DFD is known as Level 2.
- b. Level 2 DFD depicts basic modules in the system and flow of data among various modules.
- c. Level 2 DFD shows how data flows inside the modules mentioned in Level 1.**
- d. All of the above

Answer: Option (c)

12. The context diagram is also known as ____.

- a. Level-0 DFD**
- b. Level-1 DFD
- c. Level-2 DFD
- d. All of the above

Answer: Option (a)

13. A directed arc or line in DFD represents

- a. Data Store
- b. Data Process
- c. Data Flow**
- d. All of the above

Answer: Option (c)

14. What are the types of requirements?

- a. Availability

- b. Reliability
- c. Usability
- d. All of the mentioned**

Answer: Option (d)

15. Select the developer-specific requirement?

- a. Portability
- b. Maintainability
- c. Availability
- d. Both Portability and Maintainability**

Answer: Option (d)

16. Which one of the following is not a step of requirement engineering?

- a. Elicitation
- b. Design**
- c. Analysis
- d. documentation

Answer: Option (b)

17. FAST stands for

- a. Functional Application Specification Technique
- b. Fast Application Specification Technique
- c. Facilitated Application Specification Technique**
- d. None of the mentioned

Answer: Option (c)

18. The user system requirements are the parts of which document?

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

Answer: Option (b)

19. Which is one of the most important stakeholders from the following?

- a. Entry level personnel
- b. Middle level stakeholder
- c. Managers
- d. Users of the software**

Answer: Option (D)

20. Choose an internal software quality from given below:

- a. Scalability
- b. Usability
- c. Reusability**
- d. reliability

Answer: Option (c)

21. RUP stands for _____ created by a division of _____

- a. Rational Unified Program, IBM
- b. Rational Unified Process, Infosys
- c. Rational Unified Process, Microsoft
- d. Rational Unified Process, IBM**

Answer: Option (d)

22. Which phase of the RUP is used to establish a business case for the system?

- a. Transition
- b. Elaboration
- c. Construction
- d. Inception**

Answer: Option (d)

23. The longer a fault exists in software

- a. the more tedious its removal becomes
- b. the more costly it is to detect and correct

c. the less likely it is to be properly corrected

d. All of the mentioned

Answer: Option (d)

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

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

Answer: Option (b)

25. _____ & _____ are two kinds of software products.

- a. CAD, CAM
- b. Firmware, Embedded
- c. Generic, Customized**
- d. None of the mentioned

Answer: Option (C)

26. Purpose of process is to deliver software

- a. in time
- b. with acceptable quality
- c. that is cost efficient
- d. both in time & with acceptable quality**

Answer: Option (d)

27. Which one of the following is not an Umbrella Activity that complements the five process framework activities and help team manage and control progress, quality, change, and risk.

- a. Reusability management
- b. Risk management
- c. Measurement

d. User Reviews

Answer: Option (d)

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

- a. Maintainability
- b. Portability
- c. Robustness

d. None of the mentioned

Answer: Option (d)

29. Which one of the following is a requirement that fits in a developer's module?

- a. Availability
- b. Testability**
- c. Usability
- d. Flexibility

Answer: Option (b)

30. "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing?

- a. Functional
- b. Non-Functional
- c. Known Requirement
- d. None of the mentioned

Answer: Option (A)

31. Which of the following statements explains portability in non-functional requirements?

- a. It is a degree to which software running on one platform can easily be converted to run on another platform.**
- b. It cannot be enhanced by using languages, OS' and tools that are universally available and standardized.

- c. The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended.

d. None of the mentioned

Answer: Option (a)

32. Choose the incorrect statement with respect to Non-Functional Requirement (NFR).

- a. Product-oriented Approach – Focus on system (or software) quality
- b. Process-oriented Approach – Focus on how NFRs can be used in the design process
- c. Quantitative Approach – Find measurable scales for the functionality attributes**
- d. Qualitative Approach – Study various relationships between quality goals

Answer: Option (c)

33. What is the first step of requirement elicitation?

- a. Identifying Stakeholder**
- b. Listing out Requirements
- c. Requirements Gathering
- d. All of the mentioned

Answer: Option (a)

34. Arrange the tasks involved in requirements elicitation in an appropriate manner.

- i. Consolidation
- ii. Prioritization
- iii. Requirements Gathering
- iv. Evaluation
- a. iii, i, ii, iv
- b. iii, iv, ii, i**
- c. iii, ii, iv, i
- d. ii, iii, iv, i

Answer: Option (b)

35. Which of the following is not a SQA plan for a project?
- Evaluations to be performed
 - amount of technical work**
 - audits and reviews to be performed
 - documents to be produced by the SQA group

Answer: Option (b)

36. Who writes the Software Requirement Specifications Document (SRS)?
- System Developer
 - System tester
 - System analyst**
 - None of these above

Answer: Option (c)

37. What is the goal of the requirements analysis and specifications phase of software development life cycle?
- Understanding the customer requirements and organize them in an informal document.**
 - Analysing the cost of development
 - Determining scope of the software
 - None of these above

Answer: Option (a)

38. Which of the following is not a desirable characteristic of SRS document?
- Concise
 - Ambiguous**
 - Traceable
 - Verifiable

Answer: Option (b)

39. What is noise in terms of software development?

- Writing irrelevant statement to the software development in the SRS document**
- Adding contradictory requirements in SRS document
- Writing over-specification
- None of these above

Answer: Option (a)

40. Which of the following is not a UML diagram?
- Activity diagram
 - Use case
 - State diagram
 - DFD**

Answer: Option (d)

41. Degree to which design specifications are followed in manufacturing the product is called
- Quality Control
 - Quality of conformance**
 - Quality Assurance
 - None of the mentioned

Answer: Option (B)

42. Who identifies, documents, and verifies that corrections have been made to the software?
- Project manager
 - Project team
 - SQA group**
 - All of the mentioned

Answer: Option (c)

43. What is Six Sigma?
- It is the most widely used strategy for statistical quality assurance**

- b. The “Six Sigma” refers to six standard deviations
- c. It is the most widely used strategy for statistical quality assurance and The “Six Sigma” refers to six standard deviations**
- d. A Formal Technical Review (FTR) guideline for quality walkthrough or inspection

Answer: Option (c)

44. The degree to which the design specifications are followed during manufacturing is known as
- a. Quality of design
 - b. Quality of conformance**
 - c. Quality of testing
 - d. None of the mentioned

Answer: Option (b)

45. Quality also can be looked at in terms of user satisfaction which includes
- a. A compliant product
 - b. Good quality output
 - c. Delivery within budget and schedule
 - d. All of the mentioned**

Answer: Option (d)

46. The primary objective of formal technical reviews is to find _____ during the process so that they do not become defects after release of the software.
- a. Errors**
 - b. Equivalent faults
 - c. Failure cause
 - d. None of the mentioned

Answer: Option (a)

47. Which of the following is not included in External failure costs?

- a. Testing**
- b. Help line support
- c. Warranty work
- d. Complaint resolution

Answer: Option (a)

48. Validation refers to the set of tasks that ensure that software correctly implements a specific function.

- a. True
- b. False**

Answer: Option (b)

49. Quality of design encompasses requirements and specifications of the system.

- a. True**
- b. False

Answer: Option (a)

50. Which of the following is not the primary objectives in the preliminary investigation of system development?

- a. Assess cost and benefit of alternative appoces
- b. Determining the size of the project
- c. Preparing the SRS to cover all the system specifications**
- d. Report finding to the management with recomendation to accept or reject the proposal

Answer: Option (c)

51. If every requirement can be checked by a cost-effective process, then the SRS is _____?

- a. Verifiable**
- b. Complete

- c. Traceable
- d. Modifiable

Answer: Option (a)

52. Information requirements of an organization can be determined by ____?

- a. Finding out what similar organizations do
- b. Interviewing managers and users and arriving at the requirements based on consensus**
- c. Sending a questionnaire to all employees of the organization
- d. Telling organization what they need based on your experience

Answer: Option (b)

53. ____ and ____ are not the subject matter of requirement analysis.

- a. Performance, modelling present system
- b. Functional, non-functional
- c. Internal controls, present system work load
- d. Stakeholder knowledge of computers, developer's staff**

Answer: Option (d)

54. In which testing strategy requirements established during requirements analysis are validated against developed software?

- a. Validation testing**
- b. Regression testing
- c. Integration testing
- d. System testing

Answer: Option (a)

55. Initial requirements specification is ____?

- a. Only a rough indication of the requirement**
- b. Not changed till the end of the project

- c. Continuously changed during project implementation

- d. Changed and finalized after feasibility study

Answer: Option (a)

56. It is necessary to consult the following while drawing up requirement specification.

- a. Only top managers
- b. Only top and middle management
- c. Only top, middle and operational managers
- d. Top, middle and operational managers and also all who will use the system**

Answer: Option (d)

57. It is necessary to prioritize information requirements of an organization at the requirements determination phase as ____?

- a. It is always good to prioritize
- b. There are conflicting demands from users
- c. There are constraints on budgets, available time, human resource and requirement**
- d. All good organization do it

Answer: Option (c)

58. Which of the following statements about SRS is/are true?

- i). SRS is written by customer
- ii). SRS is written by a developer
- iii). SRS serves as a contract between customer and developer

- a. Only i is true
- b. Both ii and iii are true
- c. All are true**
- d. None of the above

Answer: Option (c)

59. Requirement specification is carried out ____?

- a. Simultaneously with requirements determination
- b. Before requirements are determined
- c. After requirements are determined**
- d. Independent of requirements determination

Answer: Option (c)

60. Which of the following is not included in SRS?

- a. Performance
- b. Functionality
- c. Design solutions**
- d. External Interfaces

Answer: Option (c)

61. The main goal of arriving at a final specification is ____?

- a. To compute the cost of implementing the system
- b. To assist in designing the system
- c. To tell the organization's managers how the system will function
- d. To tell the organization's managers what the proposed system will achieve in a language understood by them**

Answer: Option (d)

62. Final specifications are drawn up by ____?

- a. System designers along with users
- b. The managers of user organization
- c. System analyst in consultation with programmers
- d. System analyst in consultation with the management of the organization**

Answer: Option (d)

63. The role of a system analyst drawing up a requirements specification is similar to ____?

- a. Architect designing a building**
- b. A structural engineer designing a building
- c. A contractor constructing a building
- d. The workers who construct a building

Answer: Option (a)

64. Which one from the following is highly associated activity of project planning?

- a. Keep track of the project
- b. Compare actual and planned progress and costs
- c. Identify the activities, milestones and deliverables produced by a project**
- d. Both B and C

Answer: Option (c)

65. The final specifications are arrived at ____?

- a. During feasibility study
- b. After feasibility study**
- c. Just before implementation phase
- d. When the system is being designed

Answer: Option (b)

66. Arrange the given sequence to form a SRS prototype outline as per SRS standard.

- i). General description
- ii). Introduction
- iii). Review
- iv). Appendices
- v). Specific Requirements

- a. iii, i, ii, v, iv
- b. iii, ii, i, v, iv
- c. ii, i, v, iv, iii**
- d. iii, i, ii, v, iv

Answer: Option (c)

67. Requirement prioritization and negotiation belongs to ____?

- a. Feasibility study
- b. Requirement elicitation**
- c. Requirement validation
- d. Requirements reviews

Answer: Option (b)

68. System approval criteria are specified ____?

- a. During feasibility study
- b. During the requirements specifications stage
- c. During system study stage
- d. When the final specifications are drawn up**

Answer: Option (d)

69. Which of the following is used to determine the specificity of requirements? Where n_1 is the number of requirements for which all reviewers have identical interpretations, n_2 is number of requirements in a specification.

- a. n_1/n_2**
- b. n_2/n_1
- c. n_1+n_2
- d. n_1-n_2

Answer: Option (a)

70. Requirement analysis is critical to the success of a development project.

- a. True**
- b. False
- c. Depends upon the size of project
- d. None of the mentioned

Answer: Option (a)

71. How many feasibility studies is conducted in Requirement Analysis?

- a. Two
- b. Three**
- c. Four
- d. None of the mentioned

Answer: Option (b)

72. The statement "Conformity to a standard is maintained" depicts _____ property of SRS.

- a. Correct

b. Complete

- c. Consistent
- d. Modifiable

Answer: Option (b)

73. The SRS is said to be consistent if and only if

- a. its structure and style are such that any changes to the requirements can be made easily while retaining the style and structure
- b. every requirement stated therein is one that the software shall meet
- c. every requirement stated therein is verifiable
- d. no subset of individual requirements described in it conflict with each other**

Answer: Option (d)

74. The SRS document is also known as _____ specification.

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

Answer: Option (a)

75. The dynamic behaviour of the system is represented by which model?

- a. Context Model
- b. Behavioral Model**
- c. Data Model
- d. Object Model

Answer: Option (b)

76. Which aspect in system modelling shows the system or data architecture.

- a. Structural aspect**

- b. Behavioral aspect
- c. External aspect
- d. All of the mentioned

Answer: Option (a)

- b. Internal Failure
- c. External Failure
- d. Appraisal

Answer: Option (d)

77. Which of the following statement is incorrect regarding the Class-responsibility-collaborator (CRC) modeling ?

- a. All use-case scenarios (and corresponding use-case diagrams) are organized into categories in CRC modelling
- b. The review leader reads the use-case deliberately
- c. **Only developers in the review (of the CRC model) are given a subset of the CRC model index cards**
- d. All of the mentioned

Answer: Option (c)

78. Quality Management in software engineering is also known as _____.

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

Answer: Option (a)

79. Quality in software can be looked at in terms of user satisfaction which includes

- a. A compliant product
- b. Good quality output
- c. Delivery within budget and schedule
- d. All of the mentioned

Answer: Option (d)

80. Inspections and testing are _____ kinds of Quality Costs.

- a. Prevention

81. According to Pareto's principle, _____% of defects can be traced to _____% of all causes.

- a. 60, 40
- b. 70, 30
- c. **80, 20**
- d. No such principle exists

Answer: Option (c)

82. Quality Management includes _____.

- a. Defining procedures and standards
- b. Checking that procedures are followed
- c. Collecting and analyzing various quality data
- d. **All of the above mentioned**

Answer: Option (d)

83. Non-conformance to software requirements is known as _____.

- a. Software availability
- b. Software reliability
- c. **Software failure**
- d. None of the mentioned

Answer: Option (c)

84. Software safety is equivalent to software reliability.

- a. TRUE
- b. **FALSE**

Answer: Option (b)

85. Misinterpretation of customer communication is a sample of possible cause defects.

- a. TRUE
- b. FALSE

Answer: Option (a)

86. _____ kind of quality cost is incurred when an error is detected in a product prior to shipment.

- a. Prevention
- b. Internal Failure
- c. External Failure
- d. Appraisal

Answer: Option (b)

87. The degree to which the design specifications are followed during development is known as

- a. Quality of design
- b. Quality of conformance
- c. Quality of testing
- d. None of the mentioned

Answer: Option (b)

88. An informal review may consist of _____.

- a. **Casual meeting**
- b. Correction
- c. Inspection
- d. Pair programming

Answer: Option (a)

89. Which of the following are objectives for FTR?

- a. Allow senior staff members to correct errors
- b. Assess programmer productivity
- c. Determining who introduced an error into a program
- d. **Uncover errors in software work products**

Answer: Option (d)

90. _____ is not one of the activities recommended to be performed by an independent SQA group.

- a. Prepare SQA plan for the project
- b. Review software engineering activities to verify process compliance
- c. Report any evidence of noncompliance to senior management
- d. **Serve as the sole test team for any software produced**

Answer: Option (d)

91. _____ is not a section in the standard for SQA plans recommended by IEEE.

- a. **Budget**
- b. Documentation
- c. Reviews and audits
- d. Test

Answer: Option (a)

92. Statistical quality assurance involves _____.

- a. Using sampling in place of exhaustive testing of software
- b. Surveying customers to find out their opinions about product quality
- c. **Tracing each defect to its underlying cause, isolating the "vital few" causes, and moving to correct them**
- d. Tracing each defect to its underlying causes and using the Pareto principle to correct each problem found

Answer: Option (c)

93. Software safety is a quality assurance activity that focuses on hazards that _____.

- a. Affect the reliability of a software component
- b. May cause an entire system to fail
- c. May result from user input errors

- d. Prevent profitable marketing of the final product

Answer: Option (b)

94. Which of the following is not a core step of Six Sigma?

- a. Define
- b. Control**
- c. Measure
- d. Analyse

Answer: Option (b)

95. According to ISO 9001, inspection and testing comes under which management responsibility?

- a. Process control**
- b. Document control
- c. Control of nonconforming products
- d. Servicing

Answer: Option (a)

Unit-III

1. Software design yields _____ levels of results.

- a. 2
- b. 3**
- c. 4
- d. 5

Answer: Option (b)

2. Which of the following is not an Advantage of modularization?

- a. Smaller components are easier to maintain.
- b. Concurrent execution can be made possible.
- c. Program cannot be divided based on functional aspects.**
- d. Desired level of abstraction can be brought in the program.

Answer: Option (c)

3. How many types of cohesion are there in software design?

- a. 5
- b. 6
- c. 7**
- d. 8

Answer: Option (c)

4. Which of the following defines the degree of intra-dependability within elements of a module?

- a. Cohesion**

b. Coupling

c. Design Verification

d. None of the above

Answer: Option (a)

5. When multiple modules share common data structure and work on different part of it, it is called _____.

- a. Common coupling
- b. Share coupling
- c. Data coupling
- d. Stamp coupling**

Answer: Option (d)

6. Which tool is use for structured designing?

- a. Program Chart
- b. Structure Chart**
- c. Module Chart
- d. All the above

Answer: Option (b)

7. In Design phase, which is the primary area of concern?

- a. Architecture
- b. Data
- c. Interface
- d. All of the above**

Answer: Option (d)

8. Which of the following is the best type of module cohesion?

- a. Functional Cohesion**
- b. Temporal Cohesion

- c. Functional Cohesion
- d. Sequential Cohesion

Answer: Option (a)

9. Which of the following is the worst type of module coupling?

- a. Control Coupling
- b. Stamp Coupling
- c. External Coupling
- d. **Content Coupling**

Answer: Option (D)

10. Choose the option that does not define Function Oriented Software Design.

- a. It consists of module definitions.
- b. **Modules represent data abstraction.**
- c. Modules support functional abstraction.
- d. None of the above

Answer: Option (b)

11. Defects removal efficiency (DRE) depends on:

- a. E: errors found before software delivery
- b. D: defects found after delivery to user
- c. **Both A and B**
- d. None of the above

Answer: Option (c)

12. Which of the following is an indirect measure of product?

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

Answer: Option (d)

13. Which of the following is not a direct measure of SE process?

- a. **Efficiency**
 - b. Cost
 - c. Effort Applied
 - d. All of the above
- Answer: Option (a)

14. Which of the following is false?

- a. The user has no control over the contents of a static web page.
- b. The static content objects are dependent on the actions of the user.
- c. It is expected to have less number of connections for a good web application.
- d. Both A and B

Answer: Option (b)

15. Function Point Computation is given by the formula

- a. $FP = [\text{count total} * 0.65] + 0.01 * \text{sum}(Fi)$
- b. **$FP = \text{count total} * [0.65 + 0.01 * \text{sum}(Fi)]$**
- c. $FP = \text{count total} * [0.65 + 0.01] * \text{sum}(Fi)$
- d. $FP = [\text{count total} * 0.65 + 0.01] * \text{sum}(Fi)$

Answer: Option (b)

16. SMI stands for?

- a. Software Mature Indicator
- b. Software Mature Index
- c. **Software Maturity Index**
- d. Software Maturity Indicator

Answer: Option (c)

17. Statement and branch coverage metrics are part of

- a. Analysis Model
- b. Source Code
- c. Design Model
- d. Testing**

Answer: Option (d)

18. Size and Complexity are a part of

- a. Product Metrics**
- b. Process Metrics
- c. Project Metrics
- d. None of the above

Answer: Option (a)

19. Number of errors found per person hours expended is an example of a

- a. Measurement
- b. Measure
- c. Metric**
- d. None of the above

Answer: Option (c)

20. The arc-to-node ratio is given as $r = a/n$. What does "a" represent in the ratio?

- a. maximum number of nodes at any level
- b. longest path from the root to a leaf
- c. number of modules
- d. lines of control**

Answer: Option (d)

21. Which of these are the various techniques to generate design alternatives?

- a. Determine Functional Component

- b. Determine Component based quality attribute.
- c. Modify an existing architecture.
- d. All of the mentioned**

Answer: Option (d)

22. Which of the following truly describes the approach determining functional component?

- a. This approach is based on studying the SRS and brainstorming candidate architectural constituents responsible for coherent collections of functional and data requirements.
- b. This approach begins by forming constituent and constituent relationship to satisfy non-functional requirements.
- c. This approach is used for similar program if architecture is available, it can be used as starting point.
- d. This approach describes the problem.**

Answer: Option (a)

23. Functional components for a working model can be stated as which of the following?

- a. Configuring Process Start up
- b. Providing User interface
- c. Allowing user to monitor and repair the system.
- d. All of the mentioned**

Answer: Option (d)

24. The Non-functional components consist of

- a. Re usability
- b. Adaptability
- c. Reliability
- d. All of the mentioned**

Answer: Option (d)

25. Which of the following statement is true?

- a. Device interface module is a software simulation of, or interface to, a real hardware device or system.
- b. A virtual device is a way to design a program with complex interfaces to device or other systems.
- c. The program units in the device interface module hides all details of interaction with hardware devices.**
- d. None of the mentioned.

Answer: Option (c)

26. Which of these are followed for an ideal device?

- a. Do exactly one job completely.
- b. Be loosely coupled to the rest of the program.
- c. Never change interface.
- d. All of the mentioned**

Answer: Option (d)

27. Which among these best represents Coupling for an ideal device?

- a. Do exactly one job completely.
- b. Be loosely coupled to the rest of the program.**
- c. Hide its Implementation.
- d. Never change its interface

Answer: Option (b)

28. Which among these best represents simplicity for an ideal device?

- a. Do exactly one job completely.
- b. Be loosely coupled to the rest of the program.

- c. Have a simple and consistent interface meeting the needs of the rest of the program.**

- d. Never change its interface

Answer: Option (C)

29. Which among these are the methods to improve software architecture?

- a. Combine Alternatives
- b. Impose an architectural style.
- c. Apply a mid-level design pattern.
- d. All of the mentioned**

Answer: Option (d)

30. Which among these signifies applying mid-level design pattern?

- a. The best features of two or more design alternatives can be combined into an improved design.
- b. The approximate particular style may be improved by modifying them to fit the style exactly.
- c. The architectural styles applied at low level of abstraction.**
- d. None of the mentioned

Answer: Option (c)

31. The intent of project metrics is:

- a. Minimization of development schedule.
- b. for strategic purposes
- c. assessing project quality on ongoing basis.
- d. minimization of development schedule and assessing project quality on ongoing basis.**

Answer: Option (d)

32. Which of the following is an indirect measure of product?

- a. Quality
- b. Complexity
- c. Reliability
- d. All of the Mentioned**

Answer: Option (d)

33. 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

Answer: Option (c)

34. 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**

Answer: Option (d)

35. Usability can be measured in terms of

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

Answer: Option (d)

36. A graphical technique for finding if changes and variation in metrics data are meaningful is known as

- a. DRE (Defect Removal Efficiency)
- b. Function points analysis
- c. Control Chart**
- d. All of the mentioned

Answer: Option (c)

37. Which of the following does not affect the software quality and organizational performance?

- a. Market**
- b. Product
- c. Technology
- d. People

Answer: Option (a)

38. Size and complexity are part of _____

- a. Process metrics
- b. Project metrics**
- c. Product metrics
- d. All of the mentioned

Answer: Option (b)

39. Architectural design metrics focus on_

- a. Program architect
- b. Data structure
- c. Internal module complexity.
- d. Module effectiveness and Architectural design**

Answer: Option (d)

40. Which are not measurable characteristics of object-oriented design?

- a. Efficiency
- b. Cost**

c. Size

d. Volatibility

Answer: Option (d)

41. Which of the following is not an objective of high-level design activity?

- a. To identify the important components of the system.
- b. To design the layering among the components of the system.
- c. **To design the algorithms used in different components**
- d. To identify the call relationships among different components

Answer: Option (C)

42. In which of the following design phases, do the software designers free to make any alterations, corrections and modifications?

- a. Preliminary design phase**
- b. Detailed design phase
- c. Both a and b
- d. None of the above

Answer: Option (a)

43) Which one of the following types of cohesion can be considered as the best form of cohesion?

- a. Logical
- b. Coincidental
- c. Temporal
- d. Functional**

Answer: Option (d)

44. During the detailed design of a module, which one of the following is designed?

a. Data structures and algorithms

- b. Control structure
- c. Data flow structure
- d. Module call relationships

Answer: Option (a)

45. Which one of the following is the correct ordering of the coupling of modules from strongest to weakest?

- a. Content, common, control, stamp, data**
- b. Common, content, control, stamp, data
- c. Content, data, common, stamp, common
- d. Data, control, common, stamp, content

Answer: Option (a)

46. Which of the following objectives are not the one that the software designing phase claim to offer?

- i. Identify software design activities
 - ii. Identify important items developed during the software design phase
 - iii. To improve the designing skills of the developers
- a. All i, ii and iii are correct.
 - b. Only i and ii are correct.**
 - c. Only i and iii are correct.
 - d. None of the given options is correct.

Answer: Option (b)

47. Which of the following statements is true?

- i. The software design phase comes after the feasibility and resources analysis phase.
- ii. The quality of the software depends upon the design phase a lot.

a. Only i is true.

- b. Only ii is true.
- c. **Both i and ii are true.**
- d. None of them is true.

Answer: Option (c)

48. What encapsulates both data and data manipulation functions?

- a. **Object**
- b. Class
- c. Super Class
- d. Sub Class

Answer: Option (a)

49. Which of the following is a mechanism that allows several objects in a class hierarchy to have different methods with the same name?

- a. **Aggregation**
- b. Polymorphism
- c. Inheritance
- d. All of the mentioned

Answer: Option (A)

50. Which of the following points related to Object-oriented development (OOD) is true?

- a. OOA is concerned with developing an object model of the application domain.
- b. OOD is concerned with developing an object-oriented system model to implement requirements.
- c. **All of the mentioned**
- d. None of the mentioned

Answer: Option (c)

51. Which of the following is not a direct measure of SE process?

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

Answer: Option (a)

52. Function Point Computation is given by the formula

- a. $FP = [\text{count total} * 0.65] + 0.01 * \text{sum}(Fi)$
- b. **$FP = \text{count total} * [0.65 + 0.01 * \text{sum}(Fi)]$**
- c. $FP = \text{count total} * [0.65 + 0.01] * \text{sum}(Fi)$
- d. $FP = [\text{count total} * 0.65 + 0.01] * \text{sum}(Fi)$

Answer: Option (B)

51. Which of the following does not belong to FURPS?

- a. Functionality
- b. Usability
- c. Reliability
- d. **Speed Efficiency**

Answer: Option (d)

52. _____ is the first step in the software development life cycle.

- a. Analysis
- b. Design
- c. Problem/Opportunity Identification
- d. Development and Documentation

Answer: Option (c)

53. _____ tool is used for structured designing.

- a. Program flowchart
- b. **Structure chart**
- c. Data-flow diagram
- d. Module

Answer: Option (b)

54. A clear statement of the goals and objectives of the project is; in the analysis phase, the development of the _____ occurs.

- a. documentation
- b. flowchart
- c. program specification**
- d. design

Answer: Option (c)

55. _____ designs and implement database structures.

- a. Programmers
- b. Project managers
- c. Technical writers
- d. Database administrators**

Answer: Option (d)

56. In the design phase, _____ is the primary area of concern.

- a. Architecture
- b. Data
- c. Interface
- d. All of the mentioned**

Answer: Option (d)

57. m A single word _____ summarize the importance of software design.

- (a) Efficiency
- (b) Accuracy
- (c) **Quality**
- (d) Complexity

Answer: Option (c)

58. _____ is not an area of concern in the design model.

- a. Architecture

- b. Data
- c. Interfaces
- d. Project scope

Answer: Option (d)

59. Which of these are characteristics of a good design?

- a. The design must implement all explicit requirements available in requirement model.
- b. The design must accommodate all implicit requirements given by stakeholders.
- c. voice recognition commands
- d. All of the above options**

Answer: Option (d)

60. Which of the following is not a characteristic common to all design methods?

- a. **configuration management**
- b. functional component representation
- c. quality assessment guidelines
- d. refinement heuristics

Answer: Option (a)

61. _____ is not a characteristic common to all design methods.

- a. configuration management**
- b. functional component representation
- c. quality assessment guidelines
- d. refinement heuristics

Answer: Option (a)

62. Which are the characteristics of good software design?

- a. The design must implement all explicit requirements available in requirement model.
- b. The design must accommodate all implicit requirements given by stakeholders.
- c. The design must be readable & understandable.
- d. All of the above options**

Answer: Option (d)

63. _____ transforms class models into design class realization and prepares data structure (data design) required to implement the software.

- a. Data Design**
- b. Architectural Design
- c. Interface Design
- d. Procedural Design

Answer: Option (a)

64. _____ defines the relationship between major structural elements of the software.

- a. Data Design
- b. Architectural Design**
- c. Interface Design
- d. Procedural Design

Answer: Option (b)

65. _____ defines how software communicates with systems & with humans. An interface implies a flow of information & behavior.

- a. Data Design
- b. Architectural Design
- c. Interface Design**
- d. Procedural Design

Answer: Option (c)

66. _____ transforms structural elements of software into procedural description of software components.

- a. Data Design
- b. Architectural Design
- c. Interface Design
- d. Procedural Design

Answer: Option (d)

67. Which of the following is wrong with reference to Software Design Principles.

- a. Design process should not suffer from “tunnel vision”.
- b. Design should be traceable to the analysis model.
- c. Design should not reinvent the wheel.
- d. Design should “maximize the intellectual distance” between the software and the real-world problem.**

Answer: Option (d)

68. Which of the following is Architectural Styles

- a. Data-centered architecture style
- b. Data-flow architectures
- c. Call and return architecture.
- d. All of the above options**

Answer: Option (d)

69. Filter & Pipes are the concept of which Architectural Style

- a. Data-centered architecture style
- b. Data-flow architectures**
- c. Call and return architecture.
- d. Layered architecture

Answer: Option (b)

70. Main program/subprogram architectures & Remote procedure call architectures are sub styles of _____.

- a. Data-centered architecture style
- b. Data-flow architectures
- c. Call and return architecture.**

d. Layered architecture

Answer: Option (c)

71. Which option does not define Function Oriented Software Design?

- a. It consists of module definitions.
- b. Modules represent data abstraction.**
- c. Modules support functional abstraction.
- d. None of the mentioned

Answer: Option (b)

72. Structured Analysis is based on, which principles?

- a. Top-down decomposition approach
- b. Divide and conquer principle.
- c. Graphical representation of results using DFDs.
- d. All of the mentioned**

Answer: Option (d)

73. Rectangle represents _____ DFD notation.

- a. Transform
- b. Data Store**
- c. Function
- d. None of the mentioned

Answer: Option (b)

74. Structural decomposition is concerned with function calls.

- a. TRUE**
- b. FALSE

Answer: Option (a)

75. A function-oriented design focuses on the entities in the system rather than the data processing activities.

- a. TRUE
- b. FALSE**

Answer: Option (b)

76. The system is denoted by _____ in DFD.

- a. Circle**
- b. Arrow
- c. Rectangle
- d. Triangle

Answer: Option (a)

77. Which of the following is not an activity of Structured Analysis (SA)?

- a. Functional decomposition
- b. Transformation of a textual problem description into a graphic model
- c. All the functions represented in the DFD are mapped to a module structure.**
- d. All of the mentioned

Answer: Option (c)

78. The results of structured analysis can be easily understood by ordinary customers.

- a. TRUE**
- b. FALSE

Answer: Option (a)

79. Structured Analysis is based on the principle of Bottom-Up Approach.

- a. TRUE**
- b. FALSE

Answer: Option (b)

80. Which of the following points are true, with reference to the Object-oriented development (OOD)?

- a. OOA is concerned with developing an object model of the application domain.
- b. OOD is concerned with developing an object-oriented system model to implement requirements.

- c. **All of the mentioned.**
- d. None of the mentioned

Answer: Option (c)

- c. Cyclomatic complexity and modularity
- d. None of the above

Answer: Option (a)

81. _____ is a disadvantage of OOD.

- a. Easier maintenance
- b. Objects may be understood as stand-alone entities.
- c. Objects are potentially reusable components.
- d. None of the mentioned

Answer: Option (d)

86. 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.

Answer: Option (b)

82. A software component

- a. Implements some functionality.
- b. Has explicit dependencies through provides and required interfaces.
- c. Communicates through its interfaces only.
- d. **All of the mentioned**

Answer: Option (d)

87. 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.**

Answer: Option (d)

83. Design patterns are not applicable to the design of object-oriented software?

- a. TRUE
- b. **FALSE**

Answer: Option (b)

88. Which of the property of software modularity is incorrect with respect to benefits software modularity?

- a. Modules are robust.
- b. Module can use other modules.
- c. Modules Can be separately compiled and stored in a library.
- d. **Modules are mostly dependent.**

Answer: Option (d)

84. _____ is/are the characteristics of a well-formed design class.

- a. Primitiveness
- b. High cohesion
- c. Low coupling
- d. **All of the above**

Answer: Option (d)

89. _____ is an indication of the relative functional strength of a module.

- a. **Cohesion**
- b. Coupling
- c. Modularity

85. Independence of module is assessed using two qualitative criteria. What are those criteria?

- a. **Cohesion and coupling**
- b. Module and modularity

d. Cohesion and coupling.

Answer: Option (a)

90. Independent modules are easier to maintain and test because of _____.

- a. Code modification is limited.
- b. Error propagation is reduced.
- c. Reusable modules are possible.
- d. All of the above**

Answer: Option (d)

91. _____ is a measure of the degree of interdependence between modules.

- a. Cohesion
- b. Coupling**
- c. None of the mentioned
- d. All of the mentioned

Answer: Option (b)

92. A software engineer must design the modules with the goal of high cohesion and low coupling.

- a. TRUE**
- b. FALSE

Answer: Option (a)

93. In _____ coupling, the complete data structure is passed from one module to another.

- a. Control Coupling
- b. Stamp Coupling**
- c. External Coupling
- d. Content Coupling

Answer: Option (b)

94. If all tasks must be executed in the same time-span, _____ type of cohesion is being exhibited.

- a. Functional Cohesion
- b. Temporal Cohesion**

c. Functional Cohesion

d. Sequential Cohesion

Answer: Option (b)

95. Which of the following is / are the type of Cohesion?

- a. Functional
- b. Coincidental
- c. Communicational
- d. All of the above.**

Answer: Option (d)

96. What is the meaning of Functional Cohesion?

- a. Operations are part of single functional task and are placed in same procedures.
- b. All operations that access the same data are defined within one class.
- c. All operations that access the data from outside the module.
- d. None of the above.

Answer: Option (a)

97. Which is the worst type of coupling?

- a. Control coupling
- b. Data coupling
- c. Content coupling**
- d. Stamp coupling

Answer: Option (c)

98. Which is the most desirable form of coupling?

- a. Control coupling
- b. Data coupling
- c. Common coupling
- d. Stamp coupling

Answer: Option (b)

99. Which from the following is the most desirable form of cohesion?

- a. Logical cohesion

b. Functional cohesion

- c. Procedural cohesion
- d. Communicational cohesion

Answer: Option (b)

100. Which from the following is the worst form of cohesion?

a. Functional cohesion

- b. Sequential cohesion
- c. Temporal cohesion
- d. Coincidental cohesion

Answer: Option (a)

101. "Three statements are given below regarding the User Interface Design,

1. Place the user in control.
2. Reduce the user's memory load.
3. Make the interface consistent.

These rules are called as _____."

a. Golden Rule

- b. Silver Rule
- c. User Rule
- d. Interface rule

Answer: Option (a)

102. Which of the following is golden rule for interface design?

- a. Place the user in control
- b. Reduce the user's memory load
- c. Make the interface consistent
- d. All of the given options**

Answer: Option (d)

103. _____ is not a design principle that allows the user to maintain control.

- a. Provide for flexible interaction
- b. Allow user interaction to be interrupt-able and undo-able

c. Show technical internals from the casual user

- d. design for direct interaction with objects that appear on the screen

Answer: Option (c)

104. _____ is not a user interface design process.

- a. User, task, and environment analysis and modelling.
- b. Interface design
- c. Knowledgeable, frequent users**
- d. Interface validation

Answer: Option (c)

105. When users are involved in complex tasks, the demand on _____ can be significant.

- a. short-term memory
- b. shortcuts
- c. objects that appear on the screen
- d. all of the mentioned

Answer: Option (a)

106. _____ is not considered by the Interface design.

- a. the design of interfaces between software components
- b. the design of interfaces between the software and human producers and consumers of information
- c. the design of the interface between two computers**
- d. all of the mentioned

Answer: Option (c)

107. A software might allow a user to interact via

- a. keyboard commands
- b. mouse movement

- c. voice recognition commands
- d. all of the mentioned

d. system image

Answer: Option (a)

108. A software engineer designs the user interface by applying an iterative process that draws on predefined design principles.

- a. **TRUE**
- b. FALSE

Answer: Option (a)

110. What establishes the profile of end-users of the system?

- a. design model
- b. **user's model**
- c. mental image
- d. system image

Answer: Option (b)

109. What incorporates data, architectural, interface, and procedural representations of the software?

- a. **design model**
- b. user's model
- c. mental image

Unit-IV

1. The order in which test levels are performed is:

- a. Unit, Integration, Acceptance, System
- b. Unit, System, Integration, Acceptance
- c. Unit, Integration, System, Acceptance
- d. It depends on the nature of a project**

Answer: Option (d)

- a. System testing is a Black box testing.**
- b. Grey box testing
- c. White box testing
- d. Both a and b

Answer: Option (a)

2. What is "V" Model?

- a. Test Design Technique
- b. Test Type
- c. SDLC Model**
- d. Test Level

Answer: Option (c)

3. Test cases are designed during which of the following stages?

- a. Test recording
- b. Test configuration
- c. Test planning
- d. Test specification**

Answer: Option (d)

4. which is not the other name for structural testing?

- a. Behavioural testing**
- b. Glass box testing
- c. White box testing
- d. None of the above

Answer: Option (a)

5. The technique applied for usability testing is:

- a. White box

b. Grey box

c. Black box

d. Regression Testing

Answer: Option (c)

6. Which of the following is not a Test Type?

- a. Database Testing
- b. Security Testing
- c. Statement Testing**
- d. Functional Testing

Answer: Option (c)

7. Static analysis can be best described as:

- a. The reviewing of test plans
- b. The analysis of batch programs
- c. The use of black box testing
- d. The analysis of program code**

Answer: Option (d)

8. Exhaustive testing is:

- a. Always possible
- b. impractical but possible**
- c. practically possible
- d. impractical and impossible

Answer: Option (b)

9. Which is not a type of incremental testing approach?

- a. Bottom up
- b. Top down
- c. Big-bang**

Answer: Option (c)

10. White-box testing can be started:

- a. After installation
- b. After SRS creation
- c. After programming**

d. After designing.

Answer: Option (c)

11. What is Fault Masking?

- a. Creating a test case which does not reveal a fault.
- b. Error condition hiding another error condition.**
- c. Masking a fault by developer
- d. Masking a fault by a tester

Answer: Option (b)

12. Which of the following is the component test standard?

- a. BS7925-2**
- b. IEEE 829
- c. BS7925-1
- d. IEEE 610

Answer: Option (a)

13. Testing of software with actual data and in actual environment is known as?

- a. Regression testing
- b. Beta testing**
- c. Alpha testing
- d. None of the above

Answer: Option (b)

14. Beta Testing is done at:

- a. Developer's end
- b. User's end**
- c. User's & Developer's end
- d. None of the mentioned

Answer: Option (b)

15. A program with high cyclomatic complexity is likely to be:

- a. Large
- b. Small

c. Difficult to write.

d. Difficult to test.

Answer: Option (d)

16. Unit testing is done by:

- a. Users
- b. Developers**
- c. Customers
- d. None of the mentioned

Answer: Option (b)

17. Which of the following is not a Software Development Life Cycle Phase?

- a. Requirements Gathering
- b. Test Closure**
- c. Coding
- d. Testing

Answer: Option (b)

18. In order to control cost, defects should ideally be detected in which phase:

- a. Coding
- b. Design
- c. Implementation
- d. Requirements Gathering**

Answer: Option (d)

20) Error guessing is a:

- a. Test verification techniques
- b. Test data management techniques**
- c. Test control management techniques
- d. Test execution techniques

Answer: Option (b)

20. Which of the following is not a white box technique?

- a. State transition testing**
- b. Path testing
- c. Statement testing

- d. Data flow testing.

Answer: Option (a)

21. Alpha testing is:

- a. Post-release testing by end user representatives at the developer's site
- b. The first testing that is performed.
- c. Pre-release testing by end user representatives at their sites
- d. **Pre-release testing by end user representatives at the developer's site**

Answer: Option (d)

22. Which of the following term describes testing?

- a. Finding broken code
- b. **Evaluating deliverable to find errors.**
- c. A stage of all projects
- d. None of the mentioned

Answer: Option (b)

23. What is Cyclomatic complexity?

- a. Black box testing
- b. **White box testing**
- c. Yellow box testing
- d. Green box testing

Answer: Option (b)

24. Maintenance testing is performed using which methodology?

- a. Retesting
- b. Sanity testing
- c. **Breadth test and depth test**
- d. Confirmation testing

Answer: Option (c)

25. Which of the following is/are White box technique?

- a. **Statement Testing**

- b. Decision Testing

- c. Condition Coverage

- d. **All of the mentioned**

Answer: Option (d)

26. What are the various Testing Levels?

- a. Unit Testing
- b. System Testing
- c. Integration Testing
- d. **All of the mentioned**

Answer: Option (d)

27. Boundary value analysis belongs to?

- a. White Box Testing
- a. **Black Box Testing**
- b. White Box & Black Box Testing
- c. None of the mentioned

Answer: Option (b)

28. Alpha testing is done at

- a. **Developer's end**
- b. User's end
- c. Developer's & User's end
- d. None of the mentioned

Answer: Option (a)

29. Which of the following is also known as "Behavioural" testing?

- a. **Black-box testing**
- b. White-box testing
- c. C. Both A and B
- d. None of the above

Answer: Option (a)

30. Which methodology is used to perform Maintenance testing?

- a. **Breadth test and depth test**
- b. Confirmation testing
- c. Retesting

- d. Sanity testing

Answer: Option (a)

31. Which of the following is not part of the Test document?

- a. Test Case
- b. Requirements Traceability Matrix [RTM]
- c. Test strategy
- d. Project Initiation Note [PIN]**

Answer: Option (d)

32. Which of the following testing is related to the boundary value analysis?

- a. White box and black box testing
- b. White-box testing
- c. Black box testing**
- d. None of the above

Answer: Option (c)

33. Exploratory testing is a -----?

- a. Experience-based Test Design Technique**
- b. White Box Test Design Technique
- c. Black Box Test Design Technique
- d. Grey Box Test Design Technique

Answer: Option (a)

34. What is the best time to perform Regression testing?

- a. After the software has been modified
- b. As frequently as possible
- c. When the environment has been modified
- d. Both option a & c

Answer: Option (d)

35. Which Test Document is used to define the Exit Criteria of Testing?

- a. Defect Report

- b. Test Summary Report

- c. Test Case

- d. Test Plan**

Answer: Option (d)

36. Which testing technique is used for usability testing?

- a. White-box testing
- b. Grey box testing
- c. Black Box testing**
- d. Combination of all

Answer: Option (c)

37. Which is not the right approach of Incremental testing approach?

- a. Big bang approach**
- b. Top-down approach
- c. Functional incrimination
- d. Bottom-up approach

Answer: Option (a)

38. The test levels are performed in which of the following order?

- a. Unit, Integration, System, Acceptance
- b. It is based on the nature of the project.**
- c. Unit, Integration, Acceptance, System
- d. Unit, System, Integration, Acceptance

Answer: Option (b)

39. Which of the below testing is executed without documentation and planning is known as?

- a. Regression Testing
- b. Adhoc Testing
- c. Unit Testing
- d. None of the above

Answer: Option (b)

40. The Regression test case is not a -----?

- a. Tests that focus on the software components, which have been modified.
- b. Low-level components are combined into clusters, which perform a specific software sub-function.**
- c. Additional tests that emphasize software functions, which are likely to be affected by the change.
- d. A representative sample of tests, which will exercise all software functions.

Answer: Option (b)

41. Which of the following abbreviation is correct for the terms SPICE?

- a. Software Process Improvement and Control Determination
- b. Software Process Improvement and Capability Determination**
- c. Software Process Improvement and Compatibility Determination
- d. None of the above

Answer: Option (b)

42. "Automation testing should be performed before starting the manual testing" is the true statement or false?

- a. True
- b. False**

Answer: Option (b)

43. ----- is the process of re-testing the modules that connected to the program or components after the modification has occurred.

- a. Regional regression Testing**
- b. Re-testing
- c. Full Regression Testing
- d. Unit Regression Testing

Answer: Option (a)

44. Who is responsible for sprint meeting?

- a. Scrum team
- b. Scrum master
- c. Product owner
- d. All of the above**

Answer: Option (d)

45. Generally, which testing is used when shrink-wrapped software products are being established and part of an integration testing?

- a. Integration Testing
- b. Validation testing
- c. Regression Testing
- d. Smoke testing**

Answer: Option (d)

46. Given the following sets of test management terms (v-z), and activity descriptions (1-5), which one of the following best pairs the two sets?

- v – Test control
- w – Test monitoring
- x – Test estimation
- y – Incident management
- z – Configuration control

- 1 – Calculation of required test resources
- 2 – Maintenance of record of test results
- 3 – Re-allocation of resources when tests overrun
- 4 – Report on deviation from test plan
- 5 – Tracking of anomalous test results

- a. v-3,w-2,x-1,y-5,z-4
- b. v-2,w-5,x-1,y-4,z-3
- c. v-3,w-4,x-1,y-5,z-2**

- d. v-2,w-1,x-4,y-3,z-5

Answer: Option (C)

47. The oracle assumption:

- a. Is that there is some existing system against which test output may be checked.
- b. Is that the tests are reviewed by experienced testers?
- c. Is that the tester knows everything about the software under test.
- d. Is that the tester can routinely identify the correct outcome of a test.**

Answer: Option (d)

48. Static analysis is best described as:

- a. The analysis of batch programs.
- b. The reviewing of test plans.
- c. The use of black box testing.
- d. The analysis of program code.**

Answer: Option (d)

49. Increasing the quality of the software, by better development methods, will affect the time needed for testing (the test phases) by:

- a. Reducing test time**
- b. Increasing test time
- c. No change
- d. Can't say

Answer: Option (a)

50. Which of the following characterizes the cost of faults?

- a. They are easiest to find during system testing but the most expensive to fix then.
- b. They are cheapest to find in the early development phases and the most expensive to fix in the latest test phases.**
- c. Faults are cheapest to find in the early development phases but the most expensive to fix then.
- d. Although faults are most expensive to find during early development phases, they are cheapest to fix then.

Answer: Option (b)

51. The objective of _____ phase is to transform the design of the system into high-level language.

- a. Design phase
- b. Unit testing
- c. Coding**
- d. Testing

Answer: Option (c)

52. The main advantage of adhering to coding standard is

- a. Uniform appearance to the codes written by different engineers.
- b. Enhances code understanding.
- c. Good programming practice
- d. All of the above**

Answer: Option (d)

53. Which of the following is/are representative coding guidelines.

- a. Do not use a coding style that is too clever or too difficult to understand.
- b. Do not use an identifier for multiple purposes.
- c. The code should be well-documented.
- d. All of the above**

Answer: Option (d)

54. Which activity should be undertaken after the module successfully compiles?

- a. Code review**
- b. Unit testing
- c. Integration testing
- d. All of the given options

Answer: Option (a)

55. Which of the following is Algorithmic fault?

- a. Logic is wrong Code reviews**
- b. Wrong syntax; typos Compiler
- c. Not enough accuracy
- d. Maximum load violated

Answer: Option (a)

56. Which of the following is Syntax fault?

- a. Logic is wrong Code reviews
- b. Wrong syntax; typos Compiler**
- c. Not enough accuracy
- d. Maximum load violated.

Answer: Option (b)

57. Which of the following is Precision fault?

- a. Logic is wrong Code reviews.
- b. Wrong syntax; typos Compiler
- c. Not enough accuracy**
- d. Maximum load violated.

Answer: Option (c)

58. Which of the following is Stress/Overload fault?

- a. Logic is wrong Code reviews.
- b. Wrong syntax; typos Compiler
- c. Not enough accuracy
- d. Maximum load violated.**

Answer: Option (d)

59. Which of the following are type of code review?

- a. Code inspection
- b. Code walkthrough
- c. Both**
- d. None

Answer: Option (c)

60. _____ helps to detect the algorithmic and logical error in code.

- a. Code walkthrough**
- b. Code inspection
- c. Both
- d. None

Answer: Option (a)

61. _____ helps to detect common programming errors in code.

- a. Code walkthrough
- b. Code inspection**
- c. Both
- d. None

Answer: Option (b)

62. Which of the following are some classical programming errors?

- a. Use of uninitialized variables.
- b. Jumps into loops.
- c. Array indices out of bound.
- d. All of the given options**

Answer: Option (d)

63. Which of the following defines Static Analysis?

- a. The analysis of batch programs.
- b. The reviewing of test plans.
- c. The analysis of program code**
- d. The use of black box testing.

Answer: Option (c)

64. Which of the following is true regarding Static Analysis Tools?

- a. It compares actual and expected results.
- b. It can detect memory leaks.
- c. It gives quality information about code without executing it.**
- d. It tells about percentage of a code coverage.

Answer: Option (c)

65. ITG stands for _____.

- a. instantaneous test group
- b. integration testing group
- c. individual testing group
- d. independent test group**

Answer: Option (d)

66. Which term describes testing?

- a. Finding broken code
- b. Evaluating deliverable to find errors.**
- c. A stage of all projects
- d. None of the mentioned

Answer: Option (b)

67. What are the various Testing Levels?

- a. Unit Testing
- b. System Testing
- c. Integration Testing
- d. All of the mentioned**

Answer: Option (d)

68. Unit testing is performed by _____.

- a. Users
- b. Developers**
- c. Customers
- d. None of the mentioned

Answer: Option (b)

69. _____ serve to replace modules that are subordinate (called by) the component to be tested.

- a. Stubs**
- b. Driver
- c. Carrier
- d. All of the given options

Answer: Option (a)

70. _____ is used in Bottom-up testing approach.

- a. Stubs
- b. Driver**
- c. Carrier
- d. All of the given options

Answer: Option (b)

71. _____ is used in Top-down testing approach.

- a. Stubs**
- b. Driver
- c. Carrier
- d. All of the given options

Answer: Option (a)

72. _____ is the process of testing the interface between two software units or modules?

- a. Unit Testing
- b. Integration Testing**
- c. Validation Testing
- d. System Testing

Answer: Option (b)

73. _____ is repeated testing of an already tested program, after modification, to discover any defects introduced or uncovered as a result of the changes in the software being tested?

- a. Unit Testing
- b. Regression Testing**
- c. Validation Testing
- d. System Testing

Answer: Option (b)

74. When to do regression testing?

- a. When new functionalities are added to the application?
- b. When there is a change requirement.
- c. When there is a defect fix.
- d. All of the given options**

Answer: Option (d)

75. _____ is the process of evaluating software to determine whether it satisfies specified business requirements/client's need?

- a. Unit Testing
- b. Integration Testing
- c. Validation Testing**
- d. System Testing

Answer: Option (c)

76. Alpha testing is done at _____.

- a. Developer's end**
- b. User's end
- c. Developer's & User's end
- d. None of the mentioned

Answer: Option (a)

77. Beta testing is done at _____.

- a. User's end**
- b. Developer's end
- c. User's & Developer's end
- d. None of the mentioned

Answer: Option (a)

78. Which testing level focuses on customer usage?

- a. Alpha Testing
- b. Beta Testing
- c. Validation Testing
- d. Both Alpha and Beta**

Answer: Option (d)

79. Black Box techniques are also known as _____.

- a. Design based testing.
- b. Specification-based testing**
- c. Error guessing technique
- d. None of the mentioned

Answer: Option (b)

80. White Box techniques are also classified as _____.

- a. Design based testing
- b. Structural testing
- c. Error guessing technique**
- d. None of the mentioned

Answer: Option (b)

81. Lower and upper limits are present in _____ chart.

- a. Run chart.**
- b. Bar chart
- c. Control chart
- d. None of the mentioned

Answer: Option (a)

82. Behavioural testing is _____.

- a. White box testing
- b. Black box testing**
- c. Grey box testing
- d. None of the mentioned

Answer: Option (b)

83. _____ is Equivalence Partitioning.

- a. **Black box testing**
- b. White box testing
- c. Yellow box testing
- d. Green box testing

Answer: Option (a)

84. _____ is Boundary Value Analysis (BVA).

- a. **Black box testing**
- b. White box testing
- c. Yellow box testing
- d. Green box testing

Answer: Option (a)

85. _____ is Cyclomatic complexity.

- a. Black box testing
- b. **White box testing**
- c. Yellow box testing
- d. Green box testing

Answer: Option (b)

86. Which of the following is/are White box technique?

- a. Statement Testing
- b. Decision Testing
- c. Condition Coverage
- d. **All of the mentioned**

Answer: Option (d)

87. Boundary value analysis belong to?

- a. White Box Testing
- b. **Black Box Testing**
- c. White Box & Black Box Testing
- d. None of the mentioned

Answer: Option (b)

88. Which of the following terms defines the statement, "Every statement in a program is executed at least once"?

- a. **Statement Coverage**
- b. Branch coverage
- c. Path coverage
- d. Program coverage

Answer: Option (a)

89. Which of the following terms defines the statement, "Test cases are designed to make each branch condition to assume true and false values in turn"?

- a. Statement Coverage
- b. **Branch coverage**
- c. Path coverage
- d. Program coverage

Answer: Option (b)

90. Which of the following terms defines the statement, "Every path is executed at least once"?

- a. Statement Coverage
- b. Branch coverage
- c. **Path coverage**
- d. Program coverage

Answer: Option (c)

91. _____ testing checks code.

- a. Black box testing
- b. **White box testing**
- c. Red box testing
- d. Green box testing

Answer: Option (b)

92. Testing done without planning and Documentation is called

- a. Unit testing
- b. Regression testing
- c. **Adhoc testing**
- d. None of the mentioned

Answer: Option (c)

93. Acceptance testing is also known as _____.

- a. Grey box testing
- b. White box testing
- c. Alpha Testing
- d. Beta testing**

Answer: Option (d)

94. _____ is non-functional testing.

- a. Black box testing
- b. Performance testing**
- c. Unit testing
- d. None of the mentioned

Answer: Option (b)

95. _____ is black box testing.

- a. Basic path testing
- b. Boundary value analysis**
- c. Code path analysis
- d. None of the mentioned

Answer: Option (b)

96. Software Debugging is a set of activities that can be planned in advance and conducted systematically.

- a. TRUE
- b. FALSE**

Answer: Option (b)

97. By collecting _____ during software testing, it is possible to develop meaningful guidelines to halt the testing process.

- a. Failure intensity
- b. Testing time
- c. Metrics**
- d. All of the mentioned

Answer: Option (c)

98. Which of the following issues must be addressed if a successful software testing strategy is to be implemented?

- a. Use effective formal technical reviews as a filter prior to testing
- b. Develop a testing plan that emphasizes "rapid cycle testing."
- c. State testing objectives explicitly
- d. All of the mentioned**

Answer: Option (d)

99. Test cases should uncover errors like _____.

- a. Non-existent loop termination**
- b. Comparison of different data types
- c. Incorrect logical operators or precedence
- d. All of the mentioned

Answer: Option (a)

100. _____ is considered as an adjunct to the coding step.

- a. Integration testing**
- b. Unit testing
- c. Completion of Testing
- d. Regression Testing

Answer: Option (a)

101. _____ is not regression test case.

- a. A representative sample of tests that will exercise all software functions.
- b. Additional tests that focus on software functions that are likely to be affected by the change.
- c. Tests that focus on the software components that have been changed.
- d. Low-level components are combined into clusters that perform a specific software sub-function.**

Answer: Option (d)

102. _____ testing integrates the set of classes required to respond to one input or event for the system.

- a. cluster testing
- b. thread-based testing**
- c. use-based testing
- d. none of the mentioned

Answer: Option (b)

103. Which of the following is one of the steps in the integration testing of OO software?

- a. cluster testing**
- b. thread-based testing
- c. use-based testing
- d. none of the mentioned

Answer: Option (a)

104. Which methods can be used to drive validations tests?

- a. Yellow-box testing
- b. Black-box testing**
- c. White-box testing
- d. All of the mentioned

Answer: Option (b)

105 _____ is a part of testing OO code.

- a. Validation tests
- b. Integration tests
- c. Class tests**
- d. System tests

Answer: Option (c)

106. In which of the following testing strategies, a smallest testable unit is the encapsulated class or object?

- a. Unit testing**
- b. Integration testing
- c. System testing
- d. None of the mentioned

Answer: Option (a)

107. Software Testing with real data in real environment is known as _____.

- a. Alpha testing
- b. Beta testing
- c. Regression testing
- d. None of the given options.

Answer: Option (b)

108. Beta Testing is done by _____.

- a. Developers
- b. Testers
- c. Users
- d. All of the mentioned

Answer: Option (c)

57.

Unit- V

1. Software Maintenance includes

- a. Error corrections
- b. Enhancements of capabilities
- c. Deletion of obsolete capabilities
- d. All of the mentioned**

Answer: Option (d)

2. Maintenance is classified into how many categories?

- a. Two
- b. Three
- c. Four**
- d. five

Answer: Option (c)

3. The modification of the software to match changes in the ever-changing environment, falls under which category of software maintenance?

- a. Corrective
- a. Adaptive**
- b. Perfective
- c. Preventive

Answer: Option (b)

4. What type of software testing is generally used in Software Maintenance?

- a. Regression Testing**
- b. System Testing
- c. Integration Testing
- d. Unit Testing

Answer: Option (a)

5. Which selective retest technique selects every test case that causes a modified program to produce a different output than its original version?

- a. Coverage
- b. Minimization
- c. Safe**

d. Maximization

Answer: Option (c)

6. _____ measures the ability of a regression test selection technique to handle realistic applications.

- a. Efficiency
- b. Precision
- c. Generality**
- d. Inclusiveness

Answer: Option (c)

7. Which regression test selection technique exposes faults caused by modifications?

- a. Efficiency
- b. Precision
- c. Generality
- d. Inclusiveness**

Answer: Option (d)

8. Which of the following is true about Corrective Maintenance?

- a. It includes modifications and updates done in order to correct or fix problems, which are either discovered by user or concluded by user error reports.**

b. It includes modifications and updates applied to keep the software product up-to-date and tuned to the ever-changing world of technology and business environment.

c. It includes modifications and updates done in order to keep the software usable over long period of time.

d. It includes modifications and updates to prevent future problems of the software.

Answer: Option (a)

9. Which of the following is not a type of maintenance?

- a. Adaptive Maintenance
- b. Preventive Maintenance
- c. Perfective Maintenance
- d. Performative Maintenance**

Answer: Option (d)

10. Which process is used to achieve system specification by thoroughly analyzing, understanding the existing system?

- a. Program Restructuring
- b. Reverse Engineering**
- c. Forward Engineering
- d. None of the above

Answer: Option (b)

11. What type of software testing is generally used in Software Maintenance?

- a. System Testing
- b. Black-box testing
- c. White-box testing
- d. Regression Testing**

Answer: Option (d)

12. What are legacy systems?

- a. new systems
- b. old systems**
- c. under-developed systems
- d. None of the above

Answer: Option (b)

13. The continued evolution of legacy systems applies which techniques to ensure?

- a. Reverse Engineering and Reengineering
- b. Reverse Engineering
- c. Reengineering**

d. Forward engineering

Answer: Option (c)

14. The Maintenance of software includes.

- a. Error corrections Different activity of a project management
- b. Enhancements of capabilities
- c. Deletion of obsolete capabilities
- d. All of the mentioned**

Answer: Option (d)

15. Different activity of a project management is

- a. Project planning
- b. project control
- c. project monitoring
- d. All the above**

Answer: Option (d)

16. Which of the following activity is undertaken immediately after feasibility study and before the requirement analysis and specification phase?

- a. Project planning**
- b. project control
- c. project monitoring
- d. Project scheduling

Answer: Option (a)

17. This activity is undertaken once the development activities start?

- a. Project planning
- b. project monitoring & control**
- c. project cost estimation
- d. Project size estimation

Answer: Option (b)

18. Which of the following activity is not the part of project planning?

- a. Risk Management
- b. Project control
- c. Project monitoring**
- d. Project scheduling

Answer: Option (c)

19. In the project planning, which of the following is considered as the most basic parameter based on which all other estimates are made?

- a. project cost
- b. project size**
- c. project effort
- d. project duration

Answer: Option (b)

20. During project estimation, project manager estimates following

- a. ALL**
- b. Project size
- c. Project effort
- d. project duration.

Answer: Option (a)

21. Which of the following is not project management goal?

- a. Keeping overall costs within budget
- b. Delivering the software to the customer at the agreed time
- c. Maintaining a happy and well-functioning development team
- d. Avoiding customer complaints**

Answer: Option (d)

22. Which of the following is not considered as a risk in project management?

- a. Specification delays
- b. Product competition
- c. Testing**
- d. Staff turnover

Answer: Option (c)

23. The process each manager follows during the life of a project is known as

- a. Project Management
- b. Manager life cycle
- c. Project Management Life Cycle**
- d. All of the mentioned

Answer: Option (c)

24. A 66.6% risk is considered as

- a. very low
- b. low
- c. moderate
- d. high**

Answer: Option (d)

25. Which of the following is/are main parameters that you should use when computing the costs of a software development project?

- a. travel and training costs
- b. hardware and software costs
- c. effort costs (the costs of paying software engineers and managers)
- d. all of the mentioned**

Answer: Option (d)

26. Quality planning is the process of developing a quality plan for

- a. team
- b. project**
- c. customers
- d. project manager

Answer: Option (b)

27. Which of the following is incorrect activity for the configuration management of a software system?

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

Answer: Option (a)

28. A software project that meets all the given objectives is a success of _____.

- a. Project fundamental purpose
- b. Project quality
- c. Project requirement
- d. Project management myth**

Answer: Option (d)

29. _____ is not an effective software project management focus.

- a. People
- b. Product
- c. Process
- d. popularity.**

Answer: Option (d)

30. _____ is not a project manager's activity.

- a. project design**
- b. project management
- c. project planning
- d. project control

Answer: Option (a)

31. Which of the following software maintenance process models is used when major changes are to be made in a software?

- a. Primary model**
- b. Secondary model
- c. Tertiary model
- d. Any of the above

Answer: Option (a)

32. Which of the following statements is true?

- i. Reverse software engineering cycle is done when the client's need, old code, etc. are not available.
- ii. Reverse software engineering cycle is done when the client's need, old code, etc. are available.

Options:

- a. Only i is true**
- b. Only ii is true
- c. Both i and ii are true
- d. None of them is true.

Answer: Option (a)

33. The Software Configuration Management (SCM) is called the umbrella activity.

- a. False**

b. True

Answer: Option (a)

34. The main aim of Software Configuration Management (SCM) is _____

- a. Identify change
- b. Control change
- c. To ensure that the change is being properly implemented
- d. **All of these**

Answer: Option (d)

35. Select the process that will ensure different versions of the system and components of the system are recorded and maintained?

- a. Workspace
- b. code control
- c. **Configuration Control**
- d. Versions

Answer: Option (c)

36. Select the Software Configuration Management concept that aids to control change?

- a. Procedure
- b. **Baseline**
- c. Audit
- d. None of the above

Answer: Option (b)

37. The output of the Software Process is _____

- a. Computer programs
- b. The Documents which describe the computer programs.
- c. Data (within the program or external to program).
- d. **All of these**

Answer: Option (d)

38. The Software Configuration items are _____

- a. Software Requirements
- b. Design Specification
- c. Source Code
- d. **All of these**

Answer: Option (d)

39. The task that is not a part of Software Configuration Management (SCM) is _____

- a. Change control
- b. Version control
- c. Configuration status reporting
- d. None of the above
- e. **None of these**

Answer: Option (d)

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

- a. Configuration status reporting.
- b. **Version control**
- c. Change control
- d. None of the above

Answer: Option (b)

41. As the reliability increases, what happens to the failure intensity?

- a. Increases
- b. **Decreases**
- c. No effect
- d. None of the above
- e. None of these

Answer: Option (b)

42. The process each manager follows during the life of a project is known as _____?

- a. Project Management
- b. Manager life cycle

c. Project Management Life Cycle

d. All of the mentioned

Answer: Option (c)

43. What stores all changes and info related to the project from development through maintenance in CASE tools?

a. Database

b. Repository

c. Register

d. Files

Answer: Option (b)

44. _____ is the associated with the Product Risk.

a. Test object

b. non-availability of the test environment

c. Negative consequences

d. Control of test item

e. None of these

Answer: Option (a)

45. one of the following factors affect the probable consequences?

a. Risk timing

b. Contingency planning

c. Risk avoidance

d. Risk monitoring

e. None of these

Answer: Option (a)

46. _____ is the Risk management most important jobs.

a. Project manager

b. Production team

c. Investor

d. Client

Answer: Option (a)

47. one of the following is Risk management responsibility?

a. Project team

b. Investor

c. Developer

d. Customer

Answer: Option (a)

48. one of the following ways to deal with a Risk?

a. Transfer

b. Ignore

c. Mitigate

d. All of these

Answer: Option (d)

49. _____ model is used to Project risk factor.

a. Prototyping model

b. Waterfall model

c. Spiral model

d. None of these

Answer: Option (c)

50. _____ strategies means that the impact of the risk will be reduced.

a. Contingency plans

b. Avoidance strategies

c. Minimization strategies

d. All of these

Answer: Option (c)

51. RE indicates _____.

a. Risk exposure

b. Related expense

c. Risk expense

d. Risk evaluation

Answer: Option (a)

52. one of the following is Risk?

a. The negative consequence that must occur

b. The negative consequence that will occur

c. **The negative consequence that could occur**

- d. The negative consequence that shall occur
e. None of these

Answer: Option (c)

53. _____ Risk is the really want Building an excellent product or system.

- a. **Business**
b. Schedule
c. Technical
d. Performance

Answer: Option (a)

54. Legacy systems are _____ .

- a. new systems
b. **old systems**
c. under-developed systems
d. none of the mentioned

Answer: Option (b)

55. _____ is applied to ensure the continued evolution of legacy systems.

- a. Forward engineering
b. Reverse Engineering
c. Reengineering
d. **Reverse Engineering and Reengineering**

Answer: Option (d)

56. Software Maintenance includes

- a. Deletion of obsolete capabilities
b. Enhancements of capabilities
c. Error corrections
d. **All of the given options**

Answer: Option (d)

57. Program modularization and Source code translation are the activities of _____

- a. **Reengineering**

b. Forward engineering

c. Reverse Engineering

d. Reverse Engineering and Reengineering

Answer: Option (a)

58. Reverse engineering is the last activity in a reengineering project.

- a. TRUE
b. **FALSE**

Answer: Option (b)

59. _____ activity transforms a model into source code.

- a. **Forward engineering**
b. Reverse engineering
c. Re-engineering
d. Reconstructing

Answer: Option (a)

60. Software evolution does not comprises:

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

Answer: Option (b)

61. 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**

Answer: Option (d)

62. Which of the following is not a type of software maintenance?

- a. Corrective Maintenance
b. Adaptive Maintenance
c. **Predictive Maintenance**

d. Preventive Maintenance

Answer: Option (c)

63. Which type of software maintenance deals with the repair of defects found in day-to-day system functions?

- a. **Corrective Maintenance**
- b. Adaptive Maintenance
- c. Perfective Maintenance
- d. Preventive Maintenance

Answer: Option (a)

64. Which type of software maintenance includes modifications applied to keep the software product up-to-date?

- a. Corrective Maintenance
- b. **Adaptive Maintenance**
- c. Perfective Maintenance
- d. Preventive Maintenance

Answer: Option (b)

65. Which type of software maintenance includes modifications done in order to keep the software usable over a long period of time, e.g. new features, new user requirements for refining the software and improve its reliability and performance?

- a. Corrective Maintenance
- b. Adaptive Maintenance
- c. **Perfective Maintenance**
- d. Preventive Maintenance

Answer: Option (c)

66. Which type of software maintenance includes modifications to prevent future problems of software?

- a. Corrective Maintenance
- b. Adaptive Maintenance
- c. Perfective Maintenance
- d. **Preventive Maintenance**

Answer: Option (d)

67. _____ can extract design information from source code.

- a. Forward engineering
- b. **Reverse Engineering**
- c. Reengineering
- d. Reverse Engineering and Reengineering

Answer: Option (b)

68. What is the full form of SCM with reference to Software Engineering?

- a. Supply Chain Management
- b. Service Control Manager
- c. **Software Configuration Management**
- d. System Control Module

Answer: Option (c)

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

- a. Data model
- b. Source code
- c. **Baselines**
- d. None of the given options

Answer: Option (c)

70. Software Configuration Management can be administered in several ways. These include

- a. A separate configuration management team for each project
- b. **A single software configuration management team for the whole organization**
- c. Software Configuration Management distributed among the project members
- d. All of the given options

Answer: Option (b)

71. _____ combines procedures and tools to manage different versions of configuration objects that are created during the software process.

- a. Change control
- b. Version control**
- c. SCIs
- d. None of the mentioned

Answer: Option (b)

72. _____ complements the formal technical review by assessing a configuration object for characteristics that are generally not considered during the review.

- a. Software configuration audit
- b. Software configuration management
- c. Baseline
- d. None of the mentioned

Answer: Option (a)

73. _____ is the process of assembling program components, data, and libraries, and then compiling and linking these to create an executable system.

- a. System building**
- b. Release management
- c. Change management
- d. Version management

Answer: Option (a)

74. _____ is not a Software Configuration Management Activity.

- a. Configuration item identification
- b. Risk management**
- c. Release management
- d. Branch management

Answer: Option (b)

75. 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

Answer: Option (d)

76. _____ 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

Answer: Option (b)

77. _____ process ensures that versions of systems and components are recorded and maintained.

- a. Codeline
- b. Configuration control**
- c. Version
- d. Workspace

Answer: Option (b)

78. Which of the following process is concerned with analyzing the costs and benefits of proposed changes?

- a. Version management
- b. System building
- c. Change management**
- d. Release management

Answer: Option (c)

79. Which of the following is not a Version management feature?

- a. Build script generation**
- b. Version and release identification
- c. Change history recording
- d. Project support

Answer: Option (a)

80. Which method recommends that very frequent system builds should be carried out with automated testing to discover software problems?

- a. **Agile method**
- b. Parallel compilation method
- c. Large systems method
- d. All of the given options

Answer: Option (a)

81. _____ is a collection of component versions that make up a system.

- a. Version
- b. Codeline
- c. **Baseline**
- d. None of the mentioned

Answer: Option (c)

82. Which of the following is a configuration item?

- a. Log information
- b. Source code
- c. Design & Test specification
- d. **All of the given options**

Answer: Option (d)

83. A sequence of baselines representing different versions of a system is known as _____.

- a. System building
- b. **Mainline**
- c. Software Configuration Item(SCI)
- d. None of the mentioned

Answer: Option (b)

84. The statement “The creation of a new codeline from a version in an existing codeline” define the term _____.

- a. Branching
- b. Merging
- c. Codeline

d. Mainline

Answer: Option (a)

85. Effective software project management focuses on

- a. people, performance, payoff, product
- b. people, product, performance, process
- c. **people, product, process, project**
- d. people, process, payoff, product

Answer: Option (c)

86. Organizations that achieve high levels of maturity in people management have a higher likelihood of implementing effective software engineering processes

- a. **True**
- b. False

Answer: Option (a)

87. The first step in project planning is to

- a. determine the budget.
- b. select a team organizational model.
- c. determine the project constraints
- d. **establish the objectives and scope**

Answer: Option (d)

88. Process framework activities are populated with

- a. milestones
- b. work products
- c. QA points
- d. **all of the above**

Answer: Option (d)

89. Project management is less important for modern software development since most projects are successful and completed on time

- a. True
- b. **False**

Answer: Option (b)

90. Which of the following is not considered a stakeholder in the software process?

- a. customers
- b. end-users

c. project managers

d. sales people

Answer: Option (d)

91. The best person to hire as a project team leader is the most competent software engineering practitioner available

a. True

b. False

Answer: Option (b)

92. The best project team organizational model to use when tackling extremely complex problems is the

a. closed paradigm

b. open paradigm

c. random paradigm

d. synchronous paradigm

Answer: Option (b)

93. One of the best ways to avoid frustration during the software development process is to

a. give team members more control over process and technical decisions

b. give team members less control over process and technical decisions.

c. hide bad news from the project team members until things improve.

d. reward programmers based on their productivity.

Answer: Option (b)

94. Small agile teams have no place in modern software development.

a. True

b. False

Answer: Option (b)

95. Which of these software characteristics is not a factor contributing to project coordination difficulties?

a. interoperability

b. performance

c. scale

d. uncertainty

Answer: Option (b)

96. Which of these software characteristics are used to determine the scope of a software project?

a. context, lines of code, function

b. context, function, communication requirements

c. information objectives, function, performance

d. communications requirements, performance, information objectives

Answer: Option (c)

97. The major areas of problem decomposition during the project scoping activity are the

a. customer workflow

b. functionality to be delivered

c. process used to deliver functionality

d. software process model

e. b and c

Answer: Option (c)

98. Product and process decomposition occurs simultaneously as the project plan evolves.

a. True

b. False

Answer: Option (a)

99. When can selected common process framework activities be omitted during process decomposition?

a. when the project is extremely small in size

b. any time the software is mission critical

c. rapid prototyping does not require their use

d. never the activities are invariant

Answer: Option (d)

100. How does a software project manager need to act to minimize the risk of software failure?

- a. double the project team size
- b. request a large budget
- c. start on the right foot
- d. track progress
- e. c and d**

Answer: Option (e)

101. The W5HH principle contains which of the following questions?

- a. Why is the system being developed?
- b. What will be done by whom?
- c. Where are they organizationally located?
- d. How much of each resource is required?
- e. a, c d**

Answer: Option (e)

102. Which of these are critical practices for performance-based project management?

- a. assessing product usability
- b. defect tracking against quality targets
- c. empirical cost estimation
- d. formal risk management
- e. b, c, d**

Answer: Option (e)

103. A risk referent level is a risk component value (performance, cost, support, schedule) or combination of values that cause a project to be terminated.

- a. True**
- b. False

Answer: Option (a)

104. An effective risk management plan will need to address which of the following issues?

- a. risk avoidance
- b. risk monitoring
- c. contingency planning

d. all of the above

Answer: Option (d)

105. Proactive risk management is sometimes described as fire fighting

- a. True
- b. False**

Answer: Option (b)

106. Software risk always involves two characteristics

- a. fire fighting and crisis management
- b. known and unknown risks
- c. uncertainty and loss**
- d. staffing and budget

Answer: Option (c)

107. Three categories of risks are

- a. business risks, personnel risks, budget risks
- b. project risks, technical risks, business risks**
- c. planning risks, technical risks, personnel risks
- d. management risks, technical risks, design risks

Answer: Option (b)

108. Generic risks require far more attention than product-specific risks.

- a. True
- b. False**

Answer: Option (b)

109. A risk item checklist would contain known and predictable risks from which of these categories?

- a. product size
- b. development environment
- c. staff size
- d. process definition
- e. all of the above**

Answer: Option (e)

110. Questions that should be asked to assess the overall project risk include:

- a. Have top managers formally committed to support the project?
- b. Are end-users committed to the project and proposed system being built?
- c. Are requirements fully understood by development team and customers?
- d. Does the proposed budget have time allocated for marketing?
- e. a, b, c**

Answer: Option (e)

111. Software risk impact assessment should focus on consequences affecting

- a. planning, resources, cost, schedule
- b. marketability, cost, personnel
- c. business, technology, process
- d. performance, support, cost, schedule**

Answer: Option (d)

112. Risk projection attempts to rate each risk in two ways

- a. likelihood and cost
- b. likelihood and impact
- c. likelihood and consequences**
- d. likelihood and exposure

Answer: Option (c)

113. Risk tables are sorted by

- a. probability and cost
- b. probability and impact**
- c. probability and consequences
- d. probability and exposure

Answer: Option (b)

114. Individual team members can make their own estimate for a risk probability and then develop a consensus value.

- a. True**
- b. False

Answer: Option (a)

115. Which factors affect the probable consequences likely if a risk does occur?

- a. risk cost
- b. risk timing
- c. risk scope
- d. risk resources
- e. b and c**

Answer: Option (e)

116. The reason for refining risks is to break them into smaller units having different consequences.

- a. True
- b. False**

Answer: Option (b)

117. Effective risk management plan needs to address which of these issues?

- a. risk avoidance
- b. risk monitoring
- c. contingency planning
- d. all of the above**

Answer: Option (d)

118. Risk monitoring involves watching the risk indicators defined for the project and not determining the effectiveness of the risk mitigation steps themselves.

- a. True
- b. False**

Answer: Option (b)

119. Hazard analysis focuses on the identification and assessment of potential hazards that can cause

- a. project termination
- b. schedule slippage
- c. cost overruns
- d. an entire system to fail**

Answer: Option (d)

120. Risk information sheets (RIS) are never an acceptable substitute for a full risk mitigation, monitoring, and management (RMMM) plan.

- a. True
- b. False**

Answer: Option (b)

121. A new _____ is defined when major changes have been made to one or more configuration objects.

- a. entity
- b. item
- c. variant
- d. version**

Answer: Option (d)

122. WebApp configuration objects can be managed in much the same way as conventional software configuration objects except for:

- a. content items**
- b. functional items
- c. graphic items
- d. user items

Answer: Option (a)

123. SCI standards take a formal view and do not address guidelines for applying change management in agile environments.

- a. True
- b. False**

Answer: Option (b)

124. How much effort is typically expended by a software organization on software maintenance?

- a. 20 percent
- b. 40 percent
- c. 60 percent**
- d. 80 percent

Answer: Option (c)

125. Software supportability is not concerned with either the provision of hardware or infrastructure.

- a. True
- b. False**

Answer: Option (b)

126. Business process reengineering is often accompanied by software reengineering.

- a. True**
- b. False

Answer: Option (a)

127. Which of the following is not an example of a business process?

- a. designing a new product
- b. hiring an employee
- c. purchasing services
- d. testing software**

Answer: Option (d)

128. Business process reengineering does not have a start or end, it is an evolutionary process.

- a. True**
- b. False

Answer: Option (a)

129. Which of the following activities is not part of the software reengineering process model?

- a. forward engineering
- b. inventory analysis
- c. prototyping**
- d. reverse engineering

Answer: Option (c)

130. Software reengineering process model includes restructuring activities for which of the following work items?

- a. code
- b. documentation
- c. data
- d. all of the above**

Answer: Option (d)

131. Which of the following is not an issue to consider when reverse engineering?

- a. abstraction level
- b. completeness
- c. connectivity**
- d. directionality

Answer: Option (c)

132. Reverse engineering of data focuses on

- a. database structures
- b. internal data structures
- c. both a and b**
- d. none of the above

Answer: Option (c)

133. The first reverse engineering activity involves seeking to understand

- a. data
- b. processing**
- c. user interfaces
- d. none of the above

Answer: Option (b)

134. Reverse engineering should proceed the reengineering of any user interface.

- a. True**
- b. False

Answer: Option (a)

135. Which of these benefits can be achieved when software is restructured?

- a. higher quality programs
- b. reduced maintenance effort
- c. software easier to test
- d. all of the above**

Answer: Option (d)

136. Code restructuring is a good example of software reengineering

a. True

b. False

Answer: Option (b)

137. Which of these is not an example of data restructuring?

- a. data analysis**
- b. data name rationalization
- c. data record standardization
- d. none of the above

Answer: Option (a)

138. Forward engineering is not necessary if an existing software product is producing the correct output.

a. True

b. False

Answer: Option (b)

139. Reengineering client/server systems begins with a thorough analysis of the business environment that encompasses the existing computing system

a. True

b. False

Answer: Option (a)

140. The only time reengineering enters into work with a legacy system is when its components will be implemented as objects.

a. True

b. False

Answer: Option (b)

141. The cost benefits derived from reengineering are realized largely due to decreased maintenance and support costs for the new software product.

a. True

b. False

Answer: Option (a)