**7OOSE PRACTICE MCQs by SIR**

1. The most important feature of spiral model is

(A) requirement analysis.

(B) risk management.

(C) quality management.

(D) configuration management.

**Answer: B**

1. The worst type of coupling is

(A) Data coupling.

(B) control coupling.

(C) stamp coupling.

(D) content coupling.

**Answer: D**

1. IEEE 830-1993 is an IEEE recommended standard for

(A) Software requirement specification.

(B) Software design.

(C) Testing.

(D) Both (A) and (B).

**Answer: A**

1. One of the fault-based testing techniques is

(A) unit testing.

(B) beta testing.

(C) Stress testing.

(D) mutation testing.

**Answer: D**

1. Changes made to an information system to add the desired but not necessarily the required features is called

(A) Preventative maintenance.

(B) Adaptive maintenance.

(C) Corrective maintenance.

(D) Perfective maintenance.

**Answer: D**

1. All the modules of the system are integrated and tested as a complete system in the case of

(A) Bottom-up testing

(B) Top-down testing

(C) Sandwich testing

(D) Big-Bang testing

**Answer: D**

1. If every requirement stated in the Software Requirement Specification (SRS) has only one interpretation, SRS is said to be

(A) correct.

(B) unambiguous.

(C) consistent.

(D) verifiable.

**Answer: B**

1. A fault simulation testing technique is

(A) Mutation testing

(B) Stress testing

(C) Black box testing

(D) White box testing

**Answer: A**

1. Modules X and Y operate on the same input and output data, then the cohesion is

(A) Sequential

(B) Communicational

(C) Procedural

(D) Logical

**Answer: B**

1. If the objects focus on the problem domain, then we are concerned with

(A) Object-Oriented Analysis.

(B) Object-Oriented Design.

(C) Object-Oriented Analysis & Design.

(D) None of the above.

**Answer: A**

1. SRS is also known as a specification of

(A) White box testing

(B) Stress testing

(C) Integrated testing

(D) Black box testing

**Answer: D**

1. The model in which the requirements are implemented by category is

(A) Evolutionary Development Model

(B) Waterfall Model

(C) Prototyping

(D) Iterative Enhancement Model

**Answer: A**

1. SRD stands for

(A) Software requirements definition

(B) Structured requirements definition

(C) Software requirements diagram

(D) Structured requirements diagram

**Answer: B**

1. A COCOMO model is

(A) Common Cost Estimation Model

(B) Constructive Cost Estimation Model

(C) Complete Cost Estimation Model

(D) Comprehensive Cost Estimation Model

**Answer: B**

1. Which of the following statements is true

(A) Abstract data types are the same as classes

(B) Abstract data types do not allow inheritance

(C) Classes cannot inherit from the same base class

(D) Objects have state and behavior

**Answer: B**

1. The desired level of coupling is

(A) No coupling

(B) Control coupling

(C) Common coupling

(D) Data coupling

**Answer: D**

1. In the spiral model, 'risk analysis' is performed

(A) In the first loop

(B) In the first and second loop

(C) In every loop

(D) Before using the spiral model

**Answer: C**

1. For a well-understood data processing application, it is best to use

(A) The waterfall model

(B) Prototyping model

(C) The evolutionary model

(D) The spiral model

**Answer: A**

1. Coupling and cohesion can be represented using a

(A) Cause-effect graph

(B) Dependence matrix

(C) Structure chart

(D) SRS

**Answer: B**

1. The symbol represents

(A) Mandatory 1 cardinality

(B) Mandatory many cardinality

(C) Optional 0 or 1 cardinality

(D) Optional zero-many cardinality

**Answer: D**

1. Each time a defect gets detected and fixed, the reliability of a software product

(A) Increases

(B) Decreases

(C) Remains constant

(D) Cannot say anything

**Answer: A**

1. Output comparators are used in

(A) Static testing of a single module

(B) Dynamic testing of a single module

(C) Static testing of single and multiple modules

(D) Dynamic testing of single and multiple modules

**Answer: D**

1. The feature of the object-oriented paradigm that helps code reuse is

(A) Object

(B) Class

(C) Inheritance

(D) Aggregation

**Answer: C**

1. The level at which the software uses scarce resources is

(A) Reliability

(B) Efficiency

(C) Portability

(D) All of the above

**Answer: B**

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

(A) Verifiable

(B) Traceable

(C) Modifiable

(D) Complete

**Answer: A**

1. Modifying the software to match changes in the ever-changing environment is called

(A) Adaptive maintenance

(B) Corrective maintenance

(C) Perfective maintenance

(D) Preventive maintenance

**Answer: A**

1. All activities lying on the critical path have slack time equal to

(A) 0

(B) 1

(C) 2

(D) None of above

**Answer: A**

1. Alpha and Beta Testing are forms of

(A) Acceptance testing

(B) Integration testing

(C) System Testing

(D) Unit testing

**Answer: A**

1. An object encapsulates

(A) Data

(B) Behavior

(C) State

(D) Both Data and behavior

**Answer: D**

1. In function point analysis, the number of general system characteristics used to rate the system are

(A) 10

(B) 14

(C) 20

(D) 12

**Answer: B**

1. Aggregation represents

(A) Is\_a relationship

(B) Part\_of relationship

(C) Composed\_of relationship

(D) None of the above

**Answer: C**

1. If P is risk probability, L is loss, then Risk Exposure (RE) is computed as

(A) RE = P/L

(B) RE = P + L

(C) RE = P*L (D) RE = 2* P \*L

**Answer: C**

1. The number of clauses used in ISO 9001 to specify quality system requirements is:

(A) 15

(B) 20

(C) 25

(D) 28

**Answer: B**

1. ER model shows the

(A) Static view.

(B) Functional view.

(C) Dynamic view.

(D) All the above.

**Answer: A**

1. The tools that support different stages of the software development life cycle are called:

(A) CASE Tools

(B) CAME tools

(C) CAQE tools

(D) CARE tools

**Answer: A**

1. Changes made to the system to reduce the future system failure chances are called

(A) Preventive Maintenance

(B) Adaptive Maintenance

(C) Corrective Maintenance

(D) Perfective Maintenance

**Answer: A**

1. Requirements can be refined using

(A) The waterfall model

(B) Prototyping model

(C) The evolutionary model

(D) The spiral model

**Answer: B**

1. The model that assumes that effort and development time are functions of product size alone is

(A) Basic COCOMO model

(B) Intermediate COCOMO model

(C) Detailed COCOMO model

(D) All the three COCOMO models

**Answer: A**

1. Structured charts are a product of

(A) Requirements gathering

(B) Requirements analysis

(C) Design

(D) Coding

**Answer: C**

1. The problem that threatens the success of a project but which has not yet happened is a

(A) Bug

(B) Error

(C) Risk

(D) Failure

**Answer: C**

1. The main purpose of integration testing is to find

(A) Design errors

(B) Analysis errors

(C) Procedure errors

(D) Interface errors

**Answer: D**

1. Pseudocode can replace

(A) Flowcharts

(B) Structure charts

(C) Decision tables

(D) Cause-effect graphs

**Answer: A**

1. If a program in its functioning has not met user requirements is some way, then it is

(A) An error.

(B) A failure.

(C) A fault.

(D) A defect.

**Answer: D**

1. The testing that focuses on the variables is called

(A) Black box testing

(B) White box testing

(C) Data variable testing

(D) Data flow testing

**Answer: A**

1. CASE Tool is

(A) Computer-Aided Software Engineering

(B) Component Aided Software Engineering

(C) Constructive Aided Software Engineering

(D) Computer Analysis Software Engineering

**Answer: A**

1. Software consists of

(A) Set of instructions + operating procedures

(B) Programs + documentation + operating procedures

(C) Programs + hardware manuals

(D) Set of programs

**Answer: B**

1. Which is the most important feature of the spiral model?

(A) Quality management

(B) Risk management

(C) Performance management

(D) Efficiency management

**Answer: B**

1. Which phase is not available in the software life cycle?

(A) Coding

(B) Testing

(C) Maintenance

(D) Abstraction

**Answer: D**

1. Which is not a step of requirement engineering?

(A) Requirements elicitation

(B) Requirements analysis

(C) Requirements design

(D) Requirements documentation

**Answer: C**

1. FAST stands for

(A) Functional Application Specification Technique

(B) Fast Application Specification Technique

(C) Facilitated Application Specification Technique

(D) None of the above

**Answer: C**

1. For a function of two variables, boundary value analysis yields

(A) 4n + 3 test cases

(B) 4n + 1 test cases

(C) n + 4

(D) None of the above

**Answer: B**

1. Site for Alpha Testing is

(A) Software Company

(B) Installation place

(C) Anywhere

(D) None of the above

**Answer: A**

1. Which is not a size metric?

(A) LOC

(B) Function count

(C) Program length

(D) Cyclomatic complexity

**Answer: D**

1. As the reliability increases, failure intensity

(A) Decreases

(B) Increases

(C) No effect

(D) None of the above

**Answer: A**

1. 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: B**

1. What are the three generic phases of software engineering?

(A) Definition, development, support

(B) What, how, where

(C) Programming, debugging, maintenance

(D) Analysis, design, testing

**Answer: A**

1. 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: C**

1. Which of these terms is a level name in the Capability Maturity Model?

(A) Ad hoc

(B) Repeatable

(C) Reusable

(D) Organized

**Answer: C**

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

(A) Process

(B) Manufacturing

(C) Methods

(D) Tools

**Answer: B**

1. Which of the following are advantages of using LOC (lines of code) as a size-oriented metric?

(A) LOC is easily computed.

(B) LOC is a language-dependent measure.

(C) LOC is a language-independent measure.

(D) LOC can be computed before a design is completed.

**Answer: A**

1. Top-down approach is used for

(A) Development.

(B) Identification of faults.

(C) Testing and validation.

(D) Reverse engineering.

**Answer: A**

1. Which of the following is not an attribute of software engineering?

(A) Efficiency.

(B) Scalability.

(C) Dependability.

(D) Usability.

**Answer: C**

1. A key concept of quality control is that all work products

(A) Are delivered on time and under budget.

(B) Have complete documentation.

(C) Have measurable specification for process outputs.

(D) Are thoroughly tested before delivery to the customer.

**Answer: C**

1. The ISO quality assurance standard that applies to software engineering is

(A) ISO 9000

(B) ISO 9001

(C) ISO 9002

(D) ISO 9003

**Answer: B**

1. What types of models are created during software requirements analysis?

(A) Functional and behavioral

(B) Algorithmic and data structure

(C) Architectural and structural

(D) Usability and reliability

**Answer: A**

1. What is the normal order of activities in which software testing is organized?

(A) Unit, integration, system, validation

(B) System, integration, unit, validation

(C) Unit, integration, validation, system

(D) None of the above

**Answer: A**

1. Software feasibility is based on which of the following?

(A) Business and marketing concerns

(B) Scope, constraints, market

(C) Technology, finance, time, resources

(D) Technical prowess of the developers

**Answer: C**

1. FP-based estimation techniques require problem decomposition based on

(A) Information domain values

(B) Project schedule

(C) Software functions

(D) Process activities

**Answer: C**

1. The software metrics chosen by an organization are driven by the business or technical goals an organization wishes to accomplish.

(A) True

(B) False

**Answer: A**

1. The goal of quality assurance is to provide management with the data needed to determine which software engineers are producing the most defects.

(A) True

(B) False

**Answer: B**

1. In the context of requirements analysis, partitioning results in the elaboration of data, function, or behavior.

(A) True

(B) False

**Answer: A**

1. Units and stubs are not needed for unit testing because the modules are tested independently of one another.

(A) True

(B) False

**Answer: A**

1. Software is  
    A. Superset of programs

B. Subset of programs

C. Set of programs

D. None

Answer: A

1. Which is NOT the part of operating procedure Manuals? A. User Manuals B. Documentation Manuals C. Operational Manual D. Installation Manual Answer: B
2. Product is A. Deliverables B. User Expectations C. Organization’s effort in development D. None Answer: A
3. To produce a good quality product, process should be A. Complex B. Efficient C. Rigorous D. None Answer: B
4. During s/w development which factor is most crucial? A. People B. Product C. Process D. All of the above Answer: A
5. UML Stands for A. Uniform modeling language B. Unit Modeling Language C. Unified modeling language D. Universal Modeling Language Answer: C
6. Software Consists of A. set of instructions + operating system B. Programs + documentation + operating procedure C. Programs + hardware D. Set of programs Answer: B
7. Software Engineering approach is used to achieve A. Better performance of h/w B. Error free s/w C. Reusable software D. Quality software product Answer: D
8. Which is not a software life cycle model A. Water fall B. Spiral C. Prototype D. Capability Maturity Model Answer: D
9. Project Risk Factor is considered in A. Water fall B. Spiral C. Prototype D. Iterative enhancement model Answer: B
10. If requirements are understandable, easy, defined, which model is best suited A.Water fall B. Spiral C.Prototype D.None Answer: A
11. If requirements are frequently changing, which model is best suited A.Water fall B. Spiral C. Prototype D.RAD Answer: C
12. Which one is the most important feature of spiral model? A.Quality management B.Risk Management C.Performance Management D.Efficiency management Answer:B
13. Statistically, the maximum percentage of errors belong to the following phase of SDLC A.Coding B.Design C.Specifications D.Installation and maintenance Answer:C
14. Most suitable model for new technology that is not well understood is: A.Waterfall model B.RAD Model C.Iterative enhancement model D.Evolutionary development model Answer:D
15. Which phase is not available in s/w life cycle? A.Coding B.Design C.Specifications D.Installation & Maintenance Answer: D
16. The development is supposed to proceed linearly through the phases in A.Spiral model B.Waterfall model C.Prototyping model D.None Answer:B
17. Process of generating analysis and design documents is called A.Inverse Engineering B.Reverse Engineering C.Software Engineering D.Re-Engineering Answer: B
18. Regression testing is primarily related to A.functional testing B.data flow testing C.Development testing D.Maintenance Testing Answer:D
19. Which one is not a category of maintenance? A.Corrective maintenance B.Effective maintenance C.Adaptive Maintenance D.Perfective maintenance Answer:B
20. The maintained initiated by defects in the s/w is called A.Corrective maintenance B.Effective maintenance C.Adaptive Maintenance D.Perfective maintenance Answer: A
21. Patch is known as A. Emergency fixes B.Routine fixes C.Critical fixes D.None Answer: A
22. The following s/w process model can be represented schematically as a series of major technical activities and there associated sate? A.Incremental model B.Component assembly C.Concurrent development model D.All of the above Answer:C
23. A data model consists of the following information? A.Data Object B.The attributes that describe data object C.Relationship that connect data object to one another D.All of the above Answer: D
24. What is the modality of relationship, if there is no explicit need for relationship to occur? A.One B.Two C.Three D.four Answer: A
25. The object relationship pair of data model is represented graphically by using A. Data flow diagram B. Flow chart C. Entity relationship diagram D. All of the above Answer: C
26. Which architecture provide framework for information needs of a business function? A.Application architecture B.Technology infrastructure C.Data structure D.All of the above Answer: A
27. Which life cycle mode suggests a systematic, sequential, approach to s/w development that begins at system level and processes through analysis, design, coding and maintenance A.Waterfall model B.Prototype model C.Sequential model D.RAD model Answer:A
28. Which s/w package model composes application from prepackaged s/w components A.Component assembly model B.Concurrent development model C.Incremental model D.None Answer: A
29. The primary aim of the s/w engg. Is to provide A.Reliable s/w B.According to requirement a complete s/w C.Cost- effective s/w D.All of the above Answer: D
30. A good requirement specification should be, A.Unambiguous B.Distinctly specific C.Functional D.None Answer: A
31. Related to object oriented design of s/w, which of the following is not true A.Object inherit the properties of a class B.Classes are defined based on attributes of objects [C.An](http://c.an/) object can belongs to two classes D.None Answer:C
32. Design phase include A.Data architectural and procedural design only B.Architectural, procedural, and interface design only C.Data, Architectural, and interface design only D.Data, architectural, interface and procedural design only Answer: D
33. In s/w engineering approach the design phase is, A.Top down B.Bottom up C.Random D.Centre fringing Answer: A
34. Following are the categories of the automated system A.Online system B.Real time system C.Decision support system D.None

Answer : D

1. The main difference between program testing and system testing is, A.Program testing is more comprehensive that system testing B.System testing focuses on testing the interface between program and program testing focuses on individual programs. C. System testing is tough and program testing is easy. D.None Answer: B
2. The largest percentage of total life cycle cost of s/w is A. Design cost B. Maintenance cost C. Coding cost D. Testing cost Answer: A
3. The static system model exhibits which type of relationship? A. Time cost B. Activity time C. Quantity time D. None Answer: B
4. System implementation phase consists of A. System checkout B. Pilot run C. Parallel run D. All of the above Answer: B
5. The computer programs produced by structural design are, A. Easily maintained B. Easily understood C. Tested in a bottom –up fashion D. a and b only Answer: D
6. Increase in profits caused by a new system. Select the best fit for this answer A. Cost/benefit analysis B. Costs C. Regrets D. Benefits Answer: A
7. Determines the organization’s economic, technical and operational feasibility of a proposed informativ system. Select the best fit for this answer A. Benefits B. System development life cycle C. System investigation D. Feasibility study Answer: D
8. The technique which is used to totally remove existing system and immediately implimenting new system is called A. Crash converstion B. Phased converstion C. Pilot conversion D. Parallel converstion Answer: A
9. Which of the followin is not considered a tool at system design phase? A. Data flow diagram B. Decision table C. Pie charts D. System flow chart Answer: C
10. Coding & testing is done in following manner. A. Adhoc B. Cross sectional C. Bottom up D. Top-down Answer: D
11. Checking quality of s/w in both simulated and live environments is known as, A. Checking B. Usability C. Validity D. Validation Answer: D
12. The most creative and challenging phase of system life cycle is, A. Feasibility study B. Maintenance C. Design D. None Answer: C
13. Which of the following is not a component of object oriented s/w engineering? A. Process B. Method C. Architecture D. None Answer: B
14. The largest percentage of total life cycle cost of s/w is A. Design cost B. Maintenance cost C. Coding cost D. Testing cost Answer: A
15. With thorough testing it is possible to remove all defects from a program prior to delivery to the customer. A. True B. False ANSWER: B
16. Which of the following are characteristics of testable software ? A. observability B. simplicity C. stability D. all of the above ANSWER: D
17. The testing technique that requires devising test cases to demonstrate that each program function is operational is called A. black-box testing B. glass-box testing C. grey-box testing D. white-box testing ANSWER: A
18. The testing technique that requires devising test cases to exercise the internal logic of a software module is called A. behavioral testing B. black-box testing C. grey-box testing D. white-box testing ANSWER: D
19. What types of errors are missed by black-box testing and can be uncovered by white-box testing ? A. behavioral errors B. logic errors C. typographical errors D. BOTH B AND C ANSWER: D
20. Program flow graphs are identical to program flowcharts. A. True B. False ANSWER: B
21. The cyclomatic complexity metric provides the designer with information regarding the number of A. cycles in the program B. errors in the program C. independent logic paths in the program D. statements in the program ANSWER: C
22. The cyclomatic complexity of a program can be computed directly from a PDL representation of an algorithm without drawing a program flow graph. A. True B. False ANSWER: A
23. Condition testing is a control structure testing technique where the criteria used to design test cases is that they A. rely on basis path testing B. exercise the logical conditions in a program module C. select test paths based on the locations and uses of variables D. focus on testing the validity of loop constructs ANSWER: B
24. Data flow testing is a control structure testing technique where the criteria used to design test cases is that they A. rely on basis path testing B. exercise the logical conditions in a program module C. select test paths based on the locations and uses of variables D. focus on testing the validity of loop constructs ANSWER: C
25. Loop testing is a control structure testing technique where the criteria used to design test cases is that they A. rely basis path testing B. exercise the logical conditions in a program module C. select test paths based on the locations and uses of variables D. focus on testing the validity of loop constructs ANSWER: D
26. Black-box testing attempts to find errors in which of the following categories A. incorrect or missing functions B. interface errors C. performance errors D. all of the above ANSWER: D
27. Graph-based testing methods can only be used for object-oriented systems A. True B. False ANSWER: B
28. Equivalence testing divides the input domain into classes of data from which test cases can be derived to reduce the total number of test cases that must be developeD. A. True B. False ANSWER: A
29. Boundary value analysis can only be used to do white-box testing. A. True B. False ANSWER: B
30. Comparison testing is typically done to test two competing products as part of customer market analysis prior to product release. A. True B. False ANSWER: B
31. Orthogonal array testing enables the test designer to maximize the coverage of the test cases devised for relatively small input domains. A. True B. False ANSWER: A
32. Test case design "in the small" for OO software is driven by the algorithmic detail of the individual operations. A. True B. False ANSWER: A
33. Encapsulation of attributes and operations inside objects makes it easy to obtain object state information during testing. A. True B. False ANSWER: B
34. Use-cases can provide useful input into the design of black-box and state-based tests of OO software. A. True B. False ANSWER: A
35. Fault-based testing is best reserved for A. conventional software testing B. operations and classes that are critical or suspect C. use-case validation D. white-box testing of operator algorithms ANSWER: B
36. Testing OO class operations is made more difficult by A. encapsulation B. inheritance C. polymorphism D. both b and c ANSWER: D
37. Scenario-based testing A. concentrates on actor and software interaction B. misses errors in specifications C. misses errors in subsystem interactions D. both a and b ANSWER: A
38. Deep structure testing is not designed to A. examine object behaviors B. exercise communication mechanisms C. exercise object dependencies D. exercise structure observable by the user ANSWER: D
39. Random order tests are conducted to exercise different class instance life histories. A. True B. False ANSWER: A
40. Which of these techniques is not useful for partition testing at the class level A. attribute-based partitioning B. category-based partitioning C. equivalence class partitioning D. state-based partitioning ANSWER: C
41. Multiple class testing is too complex to be tested using random test cases. A. True B. False ANSWER: B
42. Tests derived from behavioral class models should be based on the A. data flowdiagram B. object-relation diagram C. state diagram D. use-case diagram ANSWER: C
43. Client/server architectures cannot be properly tested because network load is highly variable. A. True B. False ANSWER: B
44. Real-time applications add a new and potentially difficult element to the testing mix A. performance B. reliability C. security D. time ANSWER: D
45. What is the meaning of COSO ? A. Common Sponsoring Organizations B. Committee Of Sponsoring Organizations C. Committee Of Standard Organizations D. Common Standard Organization ANSWER: B
46. Which one is not key term used in internal control and security A. Threat B. Risk Control C. Vulnerability D. Exposure ANSWER: B
47. Management is not responsible for an organization internal control system A. True B. False ANSWER: B
48. Who is ultimate responsible for the internal control system A. CEO B. Project Manager C. Technical Manager D. Developer ANSWER: A
49. The sole purpose of the Risk Control is to avoid risk A. True B. False ANSWER: B
50. Management controls involves limiting access to computer resources A. True B. False ANSWER: A
51. Software developed by contractors who are not part of the organization is referred to as in sourcing organizations A. True B. False ANSWER: B
52. Which one is not tester responsibilities ? A. Assure the process for contracting software is adequate B. Review the adequacy of the contractors test plan C. Perform acceptance testing on the software D. Assure the ongoing operation and maintenance of the contracted software ANSWER: A
53. The software tester may or may not be involved in the actual acceptance testing A. True B. False ANSWER: A
54. In the client systems, testing should focus on performance and compatibility A. True B. False ANSWER: B
55. A database access applications typically consists of following elements except A. User Interface code B. Business login code C. Data-access service code D. Data Driven code ANSWER: D
56. Wireless technologies represent a rapidly emerging area of growth and importance for providing ever-present access to the internet and email. A. True B. False ANSWER: A
57. Acceptance testing involves procedures for identifying acceptance criteria for interim life cycle products and for accepting them. A. True B. False ANSWER: A
58. Acceptance testing is designed whether or not the software is “fit” for the user to use. The concept of “fit” is important in both design and testing. There are four components of “fit”. A. True B. False ANSWER: A
59. Acceptance testing occurs only at the end point of the development process; it should be an ongoing activity that test both interim and final products. A. True B. False ANSWER: B
60. Acceptance requirement that a system must meet can be divided into \_\_\_\_\_\_\_\_ categories. A. Two B. Three C. Four D. Five ANSWER: C
61. \_\_\_\_\_\_\_ categories of testing techniques can be used in acceptance testing. A. Two B. Three C. Four D. Five ANSWER: A
62. \_\_\_\_\_\_\_\_\_\_\_\_\_ define the objectives of the acceptance activities and a plan for meeting them. A. Project Manager B. IT Manager C. Acceptance Manager D. ICO ANSWER: C
63. Software Acceptance testing is the last opportunity for the user to examine the software for functional, interface, performance, and quality features prior to the final acceptance review. A. True B. False ANSWER: A
64. \_\_\_\_\_\_\_\_\_ categories of data will be collected during testing. A. Two B. Three C. Four D. Five ANSWER: C
65. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is normally a reverse of the test development process. In other words, it begins at the very lowest level and the results are rolled up to the highest levels. A. Conducting testing B. Resuming testing C. Acceptance testing D. None of the above ANSWER: A
66. Which one is called as most common test report ? A. Test Summary Report B. Check List C. Spreadsheet D. Cause-Effect Graphing ANSWER: C
67. Verification that the process deliverables/ phases are meeting the user’s true needs is called as A. Inspections B. Reviews C. Acceptance testing D. Acceptance criteria ANSWER: B
68. \_\_\_\_\_\_\_\_\_\_\_\_\_ the reporting process is very important because software tools are being upgraded, and manual supporting activities sometimes break down. A. Analyzing B. Monitoring C. Both A & B D. None of the above ANSWER: B
69. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ report provides information related to a specific project component. A. Individual Project Status Report B. Major Project Status Report C. Both A & B D. None of the Above ANSWER: B
70. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ report provides general information about all projects. A. Individual Project Status Report B. Major Project Status Report C. Both A & B D. None of the Above ANSWER: D
71. The Project Status Report contains the project activities information and give a history of the project over a 16-month perioD. A. True B. False ANSWER: A
72. The test reports are for use by the testers, the test manager, and the software development team. A. True B. False ANSWER: A
73. \_\_\_\_\_\_\_\_\_ is a risk-oriented activity in which resources should be expended to minimize the major risks. A. Testing B. Development C. Quality Control D. Quality Assurance ANSWER: A
74. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ measure the characteristics of the documentation and code. A. Process metric B. Product metric C. Software quality metric D. Software metric ANSWER: B
75. Software is (a) Superset of programs (b) subset of programs (c) Set of programs (d) none of the above Ans. A
76. Which is NOT the part of operating procedure manuals? (a) User manuals (b) Operational manuals (c) Documentation manuals (d) Installation manuals Ans. C
77. Which is NOT a software characteristic? (a) Software does not wear out (b) Software is flexible (c) Software is not manufactured (d) Software is always correct Ans. D
78. Product is (a) Deliverables (b) User expectations (c) Organization's effort in development (d) none of the above Ans. A
79. To produce a good quality product, process should be (a) Complex (b) Efficient (c) Rigorous (d) none of the above Ans. B
80. Which is not a product metric? (a) Size (b) Reliability (c) Productivity (d) Functionality Ans. C
81. Which is NOT a process metric? (a) Productivity (b) Functionality (c) Quality (d) Efficiency Ans. B
82. Effort is measured in terms of: (a) Person-months (b) Rupees (c) Persons (d) Months Ans. A
83. UML stands for (a) Uniform modeling language (b) Unified modeling language (c) Unit modeling language (d) Universal modeling language Ans. B
84. An independently deliverable piece of functionality providing access to its services through interface is called (a) Software measurement (b) Software composition (c) Software measure (d) Software component Ans. D
85. Infrastructure software are covered under (a) Generic products (b) Customized products (c) Generic and Customized products (d) none of the above Ans. A
86. Management of software development is dependent on (a) People (b) product (c) Process (d) all of the above Ans. D
87. During software development, which factor is most crucial? (a) People (b) Product (c) Process (d) Project Ans. A
88. Program is (a) Subset of software (b) super set of software (c) Software (d) none of the above Ans. A
89. Milestones are used to (a) Know the cost of the project (b) know the status of the project (c) Know user expectations (d) none of the above Ans. B
90. The term module used during design phase refers to (a) Function (b) Procedure (c) Sub program (d) All of the above Ans. D
91. Software consists of (a) Set of instructions + operating system (b) Programs + documentation + operating procedures (c) Programs + hardware manuals (d) Set of programs Ans. B
92. Software engineering approach is used to achieve: (a) Better performance of hardware (b) Error free software (c) Reusable software (d) Quality software product Ans. D
93. Concept of software engineering is applicable to (a) FORTRAN language only (b) Pascal language only (c) ‘C’ language only (d) All of the above Ans. D
94. CASE Tool is (a) Computer Aided Software Engineering (b) Component Aided Software Engineering (c) Constructive Aided Software Engineering (d) Computer Analysis Software Engineering Ans. A
95. Spiral Model was developed by (a) Bev Little wood (b) Berry Boehm (c) Roger Pressman (d) Victor Basili Ans. B
96. Which model is most popular for student’s small projects? (a) Waterfall model (b) Spiral model (c) Quick and fix model (d) Prototyping model Ans. C
97. Which is not a software life cycle model? (a) Waterfall model (b) Spiral model (c) Prototyping model (d) Capability maturity model Ans. D
98. Project risk factor is considered in (a) Waterfall model (b) Prototyping model (c) Spiral model (d) Iterative enhancement model Ans. C
99. SDLC stands for (a) Software design life cycle (b) Software development life cycle (c) System development life cycle (d) System design life cycle Ans. B
100. Build and fix model has (a) 3 phases (b) 1 phase (c) 2 phases (d) 4 phases Ans. C
101. Which of the following is a type of software? (a) System Software (b) Embedded Software (c) Application (d) all of the above Ans. A
102. Waterfall model is not suitable for (a) small projects (b) accommodating change (c) complex projects (d) none of the above Ans. B
103. RAD stands for (a) Rapid application development (b) Relative application development (c) Ready application development (d) Repeated application development Ans. A
104. RAD model was proposed by (a) Lucent Technologies (b) Motorola (c) IBM (d) Microsoft Ans. C
105. If requirements are easily understandable and defined, which model is best suited? (a) Waterfall model (b) Prototyping model (c) Spiral model (d) None of the above Ans. A
106. If requirements are frequently changing, which model is to be selected? (a) Waterfall model (b) Prototyping model (c) RAD model (d) Iterative enhancement model Ans. B
107. If user participation is available, which model is to be chosen? (a) Waterfall model (b) Iterative enhancement model (c) Spiral model (d) RAD model Ans. D
108. If limited user participation is available, which model is to be selected? (a) Waterfall model (b) Spiral model (c) Iterative enhancement model (d) any of the above Ans. D
109. If project is the enhancement of existing system, which model is best suited? (a) Waterfall model (b) Prototyping model (c) Iterative enhancement model (d) Spiral model Ans. C
110. Which one is the most important feature of spiral model? (a) Quality management (b) Risk management (c) Performance management (d) Efficiency management Ans. B
111. Most suitable model for new technology that is not well understood is: (a) Waterfall model (b) RAD model (c) Iterative enhancement model (d) Evolutionary development model Ans. D
112. Statistically, the maximum percentage of errors belong to the following phase of SDLC (a) Coding (b) Design (c) Specifications (d) Installation and maintenance Ans. C
113. Which phase is not available in software life cycle? (a) Coding (b) Testing (c) Maintenance (d) Abstraction Ans. D
114. The development is supposed to proceed linearly through the phase in (a) Spiral model (b) Waterfall model (c) Prototyping model (d) None of the above Ans. B
115. The outcome of construction phase can be treated as: (a) Product release (b) Beta release (c) Alpha release (d) All of the above Ans. B
116. Which one is not a step of requirement engineering? (a) Requirements elicitation (b) Requirements analysis (c) Requirements design (d) Requirements documentation Ans. C
117. Requirements elicitation means (a) Gathering of requirements (b) Capturing of requirements (c) Understanding of requirements (d) All of the above Ans. D
118. SRS stands for (a) Software requirements specification (b) System requirements specification (c) Systematic requirements specifications (d) None of the above Ans. A
119. SRS document is for (a) “What” of a system? (b) How to design the system? (c) Costing and scheduling of a system (d) System’s requirement. Ans. A
120. Requirements review process is carried out to (a) Spend time in requirements gathering (b) Improve the quality of SRS (c) Document the requirements (d) None of the above Ans. B
121. Which one of the statements is not correct during requirements engineering? (a) Requirements are difficult to uncover (b) Requirements are subject to change (c) Requirements should be consistent (d) Requirements are always precisely known. Ans. D
122. Which one is not a type of requirements? (a) Known requirements (b) Unknown requirements (c) Undreamt requirements (d) Complex requirements Ans. D
123. Which one is not a requirements elicitation technique? (a) Interviews (b) The use case approach (c) FAST (d) Data flow diagram. Ans. D
124. FAST stands for (a) Functional Application Specification Technique (b) Fast Application Specification Technique (c) Facilitated Application Specification Technique (d) None of the above Ans. C
125. QFD in requirement engineering stands for

(a) Quality function design

(b) Quality factor design

(c) Quality function development

(d) Quality function deployment

Ans. D

1. Which is not a type of requirements under quality function deployment?

(a) Normal requirements

(b) Abnormal requirements

(c) Expected requirements

(d) Exciting requirements

Ans. B

1. Use case approach was developed by

(a) I. Jacobson and others

(b) J.D. Musa and others

(c) B. Littlewood

(d) None of the above

Ans. A

1. Context diagram explains

(a) The overview of the system

(b) The internal view of the system

(c) The entities of the system

(d) None of the above

Ans. A

1. DFD stands for

(a) Data Flow design

(b) Descriptive functional design

(c) Data flow diagram

(d) None of the above

Ans. C

1. ERD stands for

(a) Entity relationship diagram

(b) Exit related diagram

(c) Entity relationship design

(d) Exit related design

Ans. A

1. Which is not a characteristic of a good SRS?

(a) Correct

(b) Complete

(c) Consistent

(d) Brief

Ans. D

1. Outcome of requirements specification phase is

(a) Design Document

(b) SRS Document

(c) Test Document

(d) None of the above

Ans. B

1. The basic concepts of ER model are:

(a) Entity and relationship

(b) Relationships and keys

(c) Entity, effects and relationship

(d) Entity, relationship and attribute

Ans. D

1. The DFD depicts

(a) Flow of data

(b) Flow of control

(c) Both (a) & (b)

(d) None of the above

Ans. A

1. Product features are related to:

(a) Functional requirements

(b) Non functional requirements

(c) Interface requirement

(d) None of the above

Ans. A

1. Which one is a quality attribute?

(a) Reliability

(b) Availability

(c) Security

(d) All of the above

Ans. D

1. IEEE standard for SRS is:

(a) IEEE Standard 837-1998

(b) IEEE Standard 830-1998

(c) IEEE Standard 832-1998

(d) IEEE Standard 839-1998

Ans. B

1. Which one is not a functional requirement?

(a) Efficiency

(b) Reliability

(c) Product features

(d) Stability

Ans. C

1. APIs stand for:

(a) Application performance interfaces

(b) Application programming interfaces

(c) Application programming integration

(d) Application performance integration

Ans. B

1. After the finalization of SRS, we may like to estimate

(a) Size

(b) Cost

(c) Development time

(d) All of the above

Ans. D

1. Which one is not a size measure for software

(a) LOC

(b) Function Count

(c) Cyclomatic Complexity

(d) Halstead’s program length

Ans. C

1. Function count method was developed by

(a) B.Beizer

(b) B.Boehm

(c) M.halstead

(d) Alan Albrecht

Ans. D

1. Function point analysis (FPA) method decomposes the system into functional units. The total numbers of functional units are

(a) 2

(b) 5

(c) 4

(d) 1

Ans. B

1. COCOMO was developed initially by

(a) B.W.Bohem

(b) Gregg Rothermal

(c) B.Beizer

(d) Rajiv Gupta

Ans. A

1. A COCOMO model is

(a) Common Cost estimation model

(b) Constructive cost Estimation model

(c) Complete cost estimation model

(d) Comprehensive Cost estimation model

Ans. B

1. Estimation of software development effort for organic software is COCOMO is

(a) E=2.4(KLOC)1.05PM

(b) E=3.4(KLOC)1.06PM

(c) E=2.0(KLOC)1.05PM

(d) E-2.4(KLOC)1.07PM

Ans. A

1. Estimation of size for a project is dependent on

(a) Cost

(b) Schedule

(c) Time

(d) None of the above

Ans. D

1. In function point analysis, number of Complexity adjustment factor is

(a) 10

(b) 20

(c) 14

(d) 12

Ans. C

1. COCOMO-II estimation model is based on

(a) Complex approach

(b) Algorithm approach

(c) Bottom up approach

(d) Top down approach

Ans. B

1. Cost estimation for a project may include

(a) Software Cost

(b) Hardware Cost

(c) Personnel Costs

(d) All of the above

Ans. D

1. In COCOMO model, if project size is typically 2-50 KLOC, then which mode is to be selected?

(a) Organic

(b) Semidetached

(c) Embedded

(d) None of the above

Ans. A

1. COCOMO-II was developed at

(a) University of Maryland

(b) University of Southern California

(c) IBM

(d) AT & T Bell labs

Ans. B

1. Which one is not a Category of COCOMO-II?

(a) End User Programming

(b) Infrastructure Sector

(c) Requirement Sector

(d) System Integration

Ans. C

1. Which one is not infrastructure software?

(a) Operating system

(b) Database management system

(c) Compilers

(d) Result management system

Ans. D

1. How many stages are in COCOMO-II?

(a) 2

(b) 3

(c) 4

(d) 5

Ans. B

1. Which one is not a stage of COCOMO-II?

(a) Application Composition estimation model

(b) Early design estimation model

(c) Post architecture estimation model

(d) Comprehensive cost estimation model

Ans. D

1. The most desirable form of coupling is

(a) Control

(b) Data

(c) Common

(d) Content

Ans. B

1. The worst type of coupling is

(a) Content

(b) Common

(c) External

(d) Data coupling

Ans. A

1. The most desirable form of cohesion is

(a) Logical cohesion

(b) Procedural cohesion

(c) Functional cohesion

(d) Temporal cohesion

Ans. C

1. The worst type of cohesion is

(a) Temporal cohesion

(b) Coincidental cohesion

(c) Logical cohesion

(d) Sequential cohesion

Ans. B

1. Which one is not a strategy for design?

(a) Bottom up design

(b) Top down design

(c) Embedded design

(d) Hybrid design

Ans. C

1. Software testing is:

(a) The process of demonstrating that errors are not present

(b) The process of establishing confidence that a program does what it is supposed to do

(c) The process of executing a program to show it is working as per specifications

(d) The process of executing a program with the intent of finding errors

Ans. D

1. Software mistakes during coding are known as:

(a) Failures

(b) Defects

(c) Bugs

(d) Errors

Ans. C

1. Functional testing is known as:

(a) Structural testing

(b) Behavior testing

(c) Regression testing

(d) None of the above

Ans. B

1. Regression testing is primarily related to:

(a) Functional testing

(b) Data flow testing

(c) Development testing

(d) Maintenance testing

Ans. D

1. The relationship of data elements in a module is called

(a) Coupling

(b) Cohesion

(c) Modularity

(d) None of the above

Ans. B

1. The extent to which different modules are dependent upon each other is called

(a) Coupling

(b) Cohesion

(c) Modularity

(d) Stability

Ans. A

1. A system that does not interact with external environment is called

(a) Closed system

(b) Logical system

(c) Open system

(d) Hierarchical system

Ans. A

1. Which one is not a phase of the “bathtub curve” of hardware reliability

(a) Burn-in

(b) Useful life

(c) Wear-out

(d) Test-out

Ans. D

1. Software reliability is

(a) The probability of failure free operation of a program for a specified time in a specified environment

(b) The probability of failure of a program for a specified time in a specified environment

(c) The probability of success of a program for a specified time in any environment

(d) None of the above

Ans. A

1. Fault is

(a) Defect in the program

(b) Mistake in the program

(c) Error in the program

(d) All of the above

Ans. D

1. One fault may lead to

(a) One failure

(b) Two failures

(c) Many failures

(d) All of the above

Ans. D

1. Which ‘time’ unit is not used in reliability studies?

(a) Execution time

(b) Machine time

(c) Clock time

(d) Calendar time

Ans. B

1. Failure occurrences can be represented as

(a) Time to failure

(b) Time interval between failures

(c) Failures experienced in a time interval

(d) All of the above

Ans. D

1. As the reliability increases, failure intensity

(a) decreases

(b) increases

(c) no effect

(d) None of the above

Ans. A

1. Maximum possible value of reliability is

(a) 100

(b) 10

(c) 1

(d) 0

Ans. C

1. Minimum possible value of reliability is

(a) 100

(b) 10

(c) 1

(d) 0

Ans. D

1. Software Quality is

(a) Conformance to requirements

(b) Fitness for the purpose

(c) Level of satisfaction

(d) All of the above

Ans. D

1. Defect rate is

(a) Number of defects per million lines of source code

(b) Number of defects per function point

(c) Number of defects per unit of size of software

(d) All of the above

Ans. D

1. How many product quality factors have been proposed in McCall quality model?

(a) 2

(b) 3

(c) 11

(d) 6

Ans. D

1. Which one is not a product quality factor of McCall quality model?

(a) Product revision

(b) Product operation

(c) Product specification

(d) Product transition

Ans. C

1. The second level of quality attributes in McCall quality model are termed as

(a) quality criteria

(b) quality factors

(c) quality guidelines

(d) quality specifications

Ans. A

1. Which one is not a level in Boehm software quality model?

(a) Primary uses

(b) Intermediate constructs

(c) Primitive constructs

(d) Final constructs

Ans. D

1. Which one is not a software quality model?

(a) McCall model

(b) Boehm model

(c) ISO 9000

(d) ISO 9126

Ans. C

1. Basic execution time model was developed by

(a) Bev.Littlewood

(b) J.D.Musa

(c) R.Pressman

(d) Victor Baisili

Ans. D

1. NHPP stands for

(a) Non Homogeneous Poisson Process

(b) Non Heterogeneous Poisson Process

(c) Non Homogeneous Poisson Product

(d) Non Heterogeneous Poisson Product

Ans. A

1. In Basic execution time model, failure intensity is given by

(a) λ(µ)=λ0(1-µ²/V0)

(b) λ(µ)=λ0(1-µ/V0)

(c) λ(µ)=λ0(1-V0/µ²)

(d) λ(µ)=λ0(1- V0/µ)

Ans. B

1. In Basic execution time model, additional number of failures required to achieve a failure intensity objective is expressed as

(a) 0/λ0(λP - λF)

(b) 0/λ0(λF – λP)

(c) λ0 0(λF – λP)

(d) λ0/0 (λP - λF)

Ans. A

1. In Logarithmic Poisson execution model, ‘θ’ is known as

(a) Failure intensity function parameter

(b) Failure intensity decay parameter

(c) Failure intensity measurement

(d) Failure intensity increment parameter

Ans. B

1. Failure intensity function of Logarithmic Poisson execution model is given as

(a) λ(µ)= λ0LN(-θµ)

(b) λ(µ)= λ0exp(θµ)

(c) λ(µ)= λ0exp(-θµ)

(d) λ(µ)= λ0log(-θµ)

Ans. C

1. CMM level 1 has

(a) 6 KPAs

(b) 2 KPAs

(c) 0 KPAs

(d) None of the above

Ans. C

1. MTBF stands for

(a) Mean time between failure

(b) Maximum time between failures

(c) Minimum time between failures

(d) Many time between failures

Ans. A

1. CMM model is a technique to

(a) Improve the software process

(b) Automatically develop the software

(c) Test the software

(d) All of the above

Ans. A

1. Total numbers of maturing levels in CMM are

(a) 1

(b) 3

(c) 5

(d) 7

Ans. C

1. Reliability of software is dependent on number of errors

(a) removed

(b) remaining

(c) both (a) & (b)

(d) None of the above

Ans. B

1. Reliability of software is usually estimated at

(a) Analysis phase

(b) Design phase

(c) Coding phase

(d) Testing phase

Ans. D

1. CMM stands for

(a) Capacity maturity model

(b) Capability maturity model

(c) Cost management model

(d) Comprehensive maintenance model

Ans. B

1. Which level of CMM is for basic project management?

(a) Initial

(b) Repeatable

(c) Defined

(d) Managed

Ans. B

1. Which level of CMM is for process management?

(a) Initial

(b) Repeatable

(c) Defined

(d) Optimizing

Ans. D

1. CMM was developed at

(a) Harvard University

(b) Cambridge University

(c) Carnegie Mellon University

(d) Maryland University

Ans. C

1. The number of clauses used in ISO 9001 are

(a) 15

(b) 25

(c) 20

(d) 10

Ans. C

1. In reliability models, our emphasis is on

(a) errors

(b) faults

(c) failures

(d) bugs

Ans. C

1. McCall has developed a

(a) Quality model

(b) Process improvement model

(c) Requirement model

(d) Design model

Ans. A

1. The model to measure the software process improvement is called

(a) ISO 9000

(b) ISO 9126

(c) CMM

(d) Spiral model

Ans. C

1. In ISO 9126, each characteristic is related to

(a) one attribute

(b) two attributes

(c) three attributes

(d) four attributes

Ans. A

1. Each maturity model in CMM has

(a) One KPA

(b) Equal KPAs

(c) Several KPAs

(d) No KPA

Ans. C

1. ISO 9126 contains definitions of

(a) quality characteristics

(b) quality factors

(c) quality attributes

(d) All of the above

Ans. D

1. Which is not a software reliability model?

(a) The Jelinski-Moranda Model

(b) Basic execution time model

(c) Spiral model

(d) None of the above

Ans. C

1. In McCall quality model, the product revision quality factor consists of

(a) Maintainability

(b) Flexibility

(c) Testability

(d) None of the above

Ans. D

1. In reliability models, our emphasis is on

(a) errors

(b) faults

(c) failures

(d) bugs

Ans. C

1. MTTF stands for

(a) Mean time to failure

(b) Maximum time to failure

(c) Minimum time to failure

(d) None of the above

Ans. A

1. Software does not break or wear out like hardware. What is your opinion?

(a) True

(b) False

(c) Cannot say

(d) Not fixed

Ans. A

1. Software reliability is defined with respect to

(a) time

(b) speed

(c) quality

(d) None of the above

Ans. A

1. KPA in CMM stands for

(a) Key Process Area

(b) Key Product Area

(c) Key Principal Area

(d) Key Performance Area

Ans. A

1. For a function of n variables, boundary value analysis yields:

(a) 4n+3 test cases

(b) 4n+1 test cases

(c) n+4 test cases

(d) None of the above

Ans. B

1. For a function of two variables, how many cases will be generated by robustness testing?

(a) 9

(b) 13

(c) 25

(d) 42

Ans. B

1. For a function of n variables robustness testing of boundary value analysis yields:

(a) 4n+1

(b) 4n+3

(c) 6n+1

(d) None of the above

Ans. C

1. A node with indegree=0 and outdegree ≠ 0 is called

(a) Source node

(b) Destination node

(c) Transfer node

(d) None of the above

Ans. A

1. A node with indegree ≠ 0 and out degree=0 is called

(a) Source node

(b) Predicate node

(c) Destination node

(d) None of the above

Ans. C

1. A decision table has

(a) Four portions

(b) Three portions

(c) Five portions

(d) Two portions

Ans. A

1. Beta testing is carried out by

(a) Users

(b) Developers

(c) Testers

(d) All of the above

Ans. A

1. Equivalence class partitioning is related to

(a) Structural testing

(b) Black box testing

(c) Mutation testing

(d) All of the above

Ans. B

1. Cause-effect graphing techniques is one form of

(a) Maintenance testing

(b) Structural testing

(c) Function testing

(d) Regression testing

Ans. C

1. During validation

(a) Process is checked

(b) Product is checked

(c) Developer’s performance is evaluated

(d) The customer checks the product

Ans. D

1. Verification is (a) Checking the product with respect to customer’s expectation (b) Checking the product with respect to specification (c) Checking the product with respect to the constraints of the project (d) All of the above Ans. b
2. Validation is (a) Checking the product with respect to customer’s expectation (b) Checking the product with respect to specifications (c) Checking the product with respect to the constraints of the project (d) All of the above Ans. a
3. Alpha testing is done by (a) Customer (b) Tester (c) Developer (d) All of the above Ans. C
4. Site for Alpha testing is (a) Software company (b) Installation place (c) Anywhere (d) None of the above Ans. a
5. Site for Beta testing is (a) Software company (b) User’s site (c) Anywhere (d) All of the above Ans. b
6. Acceptance testing is done by (a) Developers (b) Customers (c) Testers (d) All of the above Ans. b
7. One fault may lead to (a) One failure (b) No failure (c) Many failures (d) All of the above Ans. d
8. Test suite is (a) Set of test cases (b) Set of inputs (c) Set of outputs (d) None of the above Ans. a
9. Behavioral specification is required for: (a) Modeling (b) Verification (c) Validation (d) None of the above Ans. b
10. During the development phase, the following testing approach is not adopted (a) Unit testing (b) Bottom up testing (c) Integration testing (d) Acceptance testing Ans. d
11. Which is not a functional testing technique? (a) Boundary value analysis (b) Decision table (c) Regression testing (d) None of the above Ans. c
12. Decision tables are useful for describing situations in which: (a) An action is taken under varying sets of conditions. (b) A number of combinations of actions are taken under varying sets of conditions (c) No action is taken under varying sets of conditions (d) None of the above Ans. d
13. One weakness of boundary value analysis and equivalence partitioning is (a) They are not effective (b) They do not explore combinations of input circumstances (c) They explore combinations of input circumstances (d) None of the above Ans. b
14. In cause-effect graphing technique, cause & effect are related to (a) Input and output (b) Output and input (c) Destination and source (d) None of the above Ans. a
15. DD path graph is called (a) Design to Design Path graph (b) Defect to Defect Path graph (c) Destination to Destination Path graph (d) Decision to decision Path graph Ans. d
16. Cyclomatic complexity is developed by (a) B.W. Boehm (b) T.J. McCabe (c) B.W. Lettlewood (d) Victor Basili Ans. d
17. An independent path is (a) Any path through the DD path graph that introduces at least one new set of processing statements or new conditions (b) Any path through the DD path graph that introduces at most one new set of processing statements or new conditions (c) Any path through the DD path graph that introduces one and only one new set of processing statements or new conditions (d) None of the above Ans. a
18. Cyclomatic complexity is denoted by (a) V(G) = e - n + 2P (b) V(G) = \_ + 1 (c) V(G) = Number of regions of the graph (d) All of the above Ans. d
19. The equation V(G) = ∏ + 1 of cyclomatic complexity is applicable only if every predicate node has (a) Two outgoing edges (b) Three or more outgoing edges (c) No outgoing edges (d) None of the above Ans. a
20. The size of the graph matrix is (a) Number of edges in the flow graph (b) Number of nodes in the flow graph (c) Number of paths in the flow graph (d) Number of independent paths in the flow graph Ans. b
21. Every node is represented by (a) One row and one column in the graph matrix (b) Two rows and two columns in the graph matrix (c) One row and two columns in the graph matrix (d) None of the above Ans. a
22. Cyclomatic complexity is equal to (a) Number of independent paths (b) Number of paths (c) Number of edges (d) None of the above Ans. a
23. Data flow testing is related to (a) Data flow diagrams (b) E-R diagrams (c) Data dictionaries (d) None of the above Ans. d
24. In data flow testing, the objective is to find (a) All dc-paths that are not du-paths (b) All du-paths (c) All du-paths that are not dc-paths (d) All dc-paths Ans. c
25. Mutation testing is related to (a) Fault seeding (b) Functional testing (c) Fault checking (d) None of the above Ans. a
26. The overhead code required to be written for unit testing is called (a) Drivers (b) Stubs (c) Scaffolding (d) None of the above Ans. c
27. Which is not a debugging technique (a) Core dumps (b) Traces (c) Print statements (d) Regression testing Ans. d
28. A break in the working of a system is called (a) Defect (b) Failure (c) Fault (d) Error Ans. b
29. Alpha and Beta testing techniques are related to (a) System testing (b) Unit testing (c) Acceptance testing (d) Integration testing Ans. c
30. Which one is not the verification activity (a) Reviews (b) Path testing (c) Walkthrough (d) Acceptance testing Ans. d
31. Testing the software is basically (a) Verification (b) Validation (c) Verification and validation (d) None of the above Ans. c
32. Integration testing techniques are (a) Top down (b) Bottom up (c) Sandwich (d) All of the above Ans. d
33. Functionality of the software is tested by (a) White box testing (b) Black box testing (c) Regression testing (d) None of the above Ans. b
34. Top-down approach is used for (a) Development (b) Identification of faults (c) Validation (d) Functional testing Ans. b
35. Thread testing is used for testing (a) Real-time systems (b) Object-oriented systems (c) Event-driven systems (d) All of the above Ans. b
36. Testing of software with actual data and in the actual environment is called (a) Alpha testing (b) Beta testing (c) Regression testing (d) None of the above Ans. b
37. Level-0 DFD is similar to (a) Use case diagram (b) Context diagram (c) System diagram (d) None of the above Ans. b
38. Temporal cohesion means (a) Cohesion between temporal variables (b) Cohesion between local variables (c) Cohesion with respect to time (d) Coincidental cohesion Ans. c
39. Functional cohesion means (a) Operations are part of a single functional task and are placed in the same procedure (b) Operations are part of a single functional task and are placed in multiple procedures (c) Operations are part of multiple tasks (d) None of the above Ans. a
40. When two modules refer to the same global data area, they are related as (a) External coupled (b) Data coupled (c) Content coupled (d) Common coupled Ans. d
41. The module in which instructions are related through the flow of control is (a) Temporal cohesion (b) Logical cohesion (c) Procedural cohesion (d) Functional cohesion Ans. a
42. The most desirable form of coupling is (a) Control coupling (b) Data coupling (c) Common coupling (d) Content coupling Ans. b
43. The worst type of coupling is (a) Control coupling (b) Data coupling (c) Common coupling (d) Content coupling Ans. d
44. The most desirable form of cohesion is (a) Logical cohesion (b) Procedural cohesion (c) Functional cohesion (d) Temporal cohesion Ans. c
45. The worst type of cohesion is (a) Coincidental cohesion (b) Procedural cohesion (c) Functional cohesion (d) Temporal cohesion Ans. a
46. Which one is not a strategy for design (a) Bottom-up design (b) Top-down design (c) Embedded design (d) Hybrid design Ans. c
47. Function Point can be calculated by (a) UFP \* CAF (b) UFP \* FAC (c) UFP \* Cost (d) UFP \* Productivity Ans. b
48. Which is the first step in the software development life cycle? (a) Analysis (b) Design (c) Problem/Opportunity Identification (d) Development and Documentation Ans. c
49. In the Analysis phase, the development of the \_\_\_\_\_\_\_\_\_\_\_\_ occurs, which is a clear statement of the goals and objectives of the project. (a) Documentation (b) Flowchart (c) Program specification (d) Design Ans. c
50. Which level of CMM is for process control? (a) Initial (b) Repeatable (c) Defined (d) Optimizing Ans. d
51. Which of the following is the reason that software is delivered late? a) Changing customer requirements that are not reflected in schedule changes b) Technical difficulties that could not have been foreseen in advance c) Human difficulties that could not have been foreseen in advance d) All of the mentioned
52. Which of the following is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks? a) Software Macroscopic schedule b) Software Project scheduling c) Software Detailed schedule d) None of the mentioned
53. Every task that is scheduled should be assigned to a specific team member is termed as a) Compartmentalization b) Defined milestones c) Defined responsibilities d) Defined outcomes
54. What is a collection of software engineering work tasks, milestones, and deliverables that must be accomplished to complete a particular project? a) Task set b) Degree of milestone c) Adaptation criteria d) All of the mentioned
55. Ensuring that no more than the allocated number of people are allocated at any given time in Software Scheduling is known as a) Time Allocation b) Effort Validation c) Defined Milestone d) Effort Distribution
56. What is used to determine the recommended degree of rigor with which the software process should be applied on a project? a) Degree of Rigor b) Adaptation criteria c) Task Set d) Both degree of Rigor and adaptation criteria
57. What evaluates the risk associated with the technology to be implemented as part of project scope? a) Concept scoping b) Preliminary concept planning c) Technology risk assessment d) Customer reaction to the concept
58. Which of the following is not an adaptation criteria for software projects? a) Size of the project b) Customers Complaints c) Project staff d) Mission criticality
59. Which of the following is a project scheduling method that can be applied to software development? a) PERT b) CPM c) CMM d) Both PERT and CPM
60. A technique for performing quantitative analysis of progress is known as a) BCWS b) EVA c) BAC d) CBSE
61. What is the recommended distribution of effort for a project? a) 40-20-40 b) 50-20-30 c) 30-40-30 d) 50-30-20
62. A project usually has a timeline chart which was developed by a) Henry Gantt b) Barry Boehm c) Ivar Jacabson d) None of the mentioned