1. While evaluating the quality of a product, one must ask the key question, "Does the product satisfy customer needs and expectations? which software quality view most describe this idea.

a. Transcendental View

b. Manufacturing View

c. User View

d. Value Based View

2. Why we application of software design pattern during software development process?

a. Design patterns are solutions to general software development Problems

b. Design patterns capture the best practices of experienced object- Oriented software developers

c. Both A and B

d. None of the mentioned above

3. Which of the following is the first callback method that is invoked by the system during an activity life-cycle?

a. onRestart() method

b. onStart() method

c. onClick() method

d. onCreate() method

4. Which of the following is the process of understanding the knowledge, skills, and abilities needed to manage a task and then matching the team members with the right skills to do that work?

a.Benchmarking

b.Procurement

c.Delegation

d.Expediting

5. Which of the following is true about back-end frameworks?

a.They are primarily used for client-side animations and effects.

b.They execute code on the client-side.

c.They determine the layout and styling of web pages.

d.They handle requests, process data, and interact with databases.

6. Which of the following is used to output data to the console in C++?

a.std::output

b.std::print

c.std::cout

d.std::display

7. Which of the following is/are considered as system quality attribute scenario?

a. Stimulus

b. Source of stimulus

c. Environment

d. All

e. None of the mentioned above

8. Which of the following refers to the violation of the principle if a computer is no more accessible?

a.Availability

b.Access control

c. Confidentiality

d. All

9. Which of the following stages or patterns of requirements modeling produces state and sequence diagrams?

a.Behavioral modeling

b. Class-based modeling

c.Data modeling

d.Flow-oriented modeling

10. Which one is the benefits of subnetting?

a. It divides one large network into several smaller ones

b. It divides network into network classes

c. It speeds up the speed of network

d. All

11. Which one is true in software design principle?

a.The design should exhibit uniformity and integration.

b.The design should be traceable to the analysis model

c.The design principle enable the software engineer to navigate the design process

d.All

e.None of the mentioned above

12. Which one is true statement about network topology

a.Star topology is the highest reliability topology

b.In star topology, every node is connected to each other

c.Mesh topology is the highest reliability topology

d.In bus topology, hub is a central connected device

13. which one is wrong about the rational behind using Multiprogramming?

a.It has shorter response time and helps to have improved throughputs

b.It's ease of scheduling implementations

c.It enables high CPU utilization

d.It can assign priority to jobs specified

14. Which one of the following is not a penetration test tool for ethical hacking in windows environment?

a.Nmap   b.Raxis

c.Net sparker   d.Burp Suite

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

a.documentation   b.Elicitation

c.Design   d.Analysis

16. Which one true statement about LAN and WAN network

a.LAN is higher network speed

b.LAN works on the principle's point to point

c.WAN has less congestion network

d.WAN is shorter propagation delay

17. Which one true statement about OSI and TCP/IP?

a.TCP/IP is a vertical approach

b.TCP/IP model was developed prior to OSI model

c.OSI is protocol dependent

d.OSI model was developed prior to TCP/IP model

18. Which technology is used for storing session data and maintaining user state in a web-based application?

a.PHP   b.JavaScript

c.CSS   d.HTML

19. Which testing technique is responsible to represent the actions of the software application when contrasting input values are given to the identical function?

a.Cause-effect graph testing

b.State-transition testing

c.All pair testing

d.Decision table testing

20. Which type of software testing requires the checking of each and every single line of code by the developer?

a.Gray box testing   b.White box testing

c. Black box testing   d. None

21. Which web development terminologies are important for building and integrating different web applications?

a.Cache Management

b.Frontend Development

c.Application Program Interfaces (APIs)

d.Backend Development

22. While assessing your project processes, you have identified some uncontrolled process variations. Which of the following would be the appropriate chart you may use for this purpose?

a.Pareto diagram

b.PERT chart

c.HR personnel chart

d.Control chart

23. What is the purpose of the return statement in a C++ program?

a.It defines a loop condition

b.It returns a value from a function

c.It specifies the exit code of the program

d.It terminates the program

24. When would you use a switch statement instead of an if-else statement?

a.When you need to compare floating-point numbers.

b.When you need to perform a series of logical operations.

c.When you want to execute a block of code repeatedly.

d.When the number of conditions is large and complex.

25. When you decide what is inside and what is outside the context boundary, you are doing what?

a.Defining inputs and outputs   b.Hiding information

c.Setting scope   d.Defining interfaces

26. Which back-end framework is written in PHP and follows the convention over configuration principle?

a.Ruby on Rails

b.Express

c.Laravel

d.Django

27. Which cable is used for telephone application

a. Coaxial cable

b. Un-Shielded twisted cable

c. Shielded twisted cable

d. All

28. Which class is used to write binary files in Java?

a.FileWriter

b.PrintWriter

c.FileOutputStream

d.BufferedWriter

29. Which from the following represents the correct project cycle?

a.Planning→ Initiating→ Executing→ Closing

b.Initiating→ Executing→ Planning→ Closing

c.Initiating→ Planning→ Executing→ Closing

d.Planning→ Executing→ Initiating→ Closing

30. Which front-end framework is known for its minimalistic approach and lightweight size?

a.Vue.js

b.Ember.js

c.React

d.Angular

31. Which function in C++ is used to read input from the standard input stream (keyboard)?

a.cin.read()

b.cin.get()

c.cin.readln()

d.cin >>

32. Which method is used to select an HTML element by its ID in JavaScript?

a.querySelector()

b.getElementsByTagName()

c.getElementsByClassName()

d.getElementById()

33. Which of the following android component displays the part of an activity on screen?

a.Manifest

b.Fragment

c.Intent

d.View

34. Which of the following is a tool used for processing and analyzing Big Data?

a.PostgreSQL

b.MySQL

c.Hadoop

d.Oracle

35. Which of the following is an essential process in which the intelligent methods are applied to extract data patterns?

a.Warehousing

b.Text Mining

c.Data Selection

d.Data Mining

36. Which of the following is an objective of Information security?

a.Confidentiality

b.Integrity

c. Availability

d. All

37. Which of the following is defined as an attempt to steal, spy, damage or destroy computer systems, networks, or their associated information?

a.Digital hacking

b.Cryptography

c.Cyber-attack

d.Computer security

38. Which of the following is not a diagram studied in Requirement Analysis?

a.Activity Diagram

b.Use Case

c.State Transition Diagram

d.Entity Relatioship Diagram

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

a.Maintenance activities

b.Negotiating with client

c.Development activities

d.Re-engineering activities

40. Which of the following is not defined in a good Software Requirement Specification (SRS) document?

a.Goals of implementation.   b.Functional Requirement.

c.Nonfunctional Requirement.   d.Algorithm for software implementation.

41. Which of the following is the correct structure of a basic C++ program?

a.int main() { }

b.main() { }

c.int main(void) { }

d.void main() { }

42. Which of the following is the correct syntax for dynamically allocating memory for an integer variable in C++?

a.int num = malloc(int);

b.int num = new int;

c.int* num = malloc(sizeof(int));

d.int* num = new int();

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

a.Efficiency

b.Complexity

c.Accuracy

d.Quality

44. Think of that you are an emplee of A software company. if you have a will to ensure wise use of resource efficiency specific to Time and memory resources, what is your recommendations as a baseline?

a.Focuses on an Operating System features

b.focuses on the system's hardware parameters

c.Focuses on Application Program Interfaces

d.Focuses on system's software parameters

45. Unauthorized access over a web server, or database and making a change in the information.

a.Email hacking

b.Website hacking

c.Computer hacking

d.Password hacking

46. What is a constructor?

a.It is a method that initializes an object

b.It is a keyword in Java

c.It is a method that returns data

d.It is a variable that holds data

47. What is a disaster recovery plan?

a.A plan for reducing data redundancy

b.A plan for optimizing database performance

c.A plan for restoring the database in case of a disaster

d.A plan for securing database data

48. What is a method overriding?

a.It is the ability to have multiple methods with the same name and same parameters in a class

b.It is the ability to override a method in a subclass that was already defined in the superclass

c.It is the ability to have multiple methods with the same name and differentparameters in a class

d.It is the ability to have multiple methods with the same nameC in a class

49. What is a system context diagram?

a.A high-level map of a system and its surrounding environment

b.A system that generates diagrams for a company

c.A diagram that shows how external entities relate to each other

d.A company's in-house method for diagramming systems

50. What is an activity in android?

a. Android class

b. A single screen in an application with supporting java code

c. Android package

d. None of the above

51. What is data normalization?

a.The process of organizing data in the database

b.The process of securing database data

c.The process of backing up database data

d.The process of optimizing database performance

52. What is database optimization?

a.The process of deleting unnecessary data from the database

b.The process of improving database performance

c.The process of securing database data

d.The process of backing up database data

53. What is garbage collection?

a.It is the process of allocating memory to objects when they are created

b.It is the process of creating a memory location

c. It is the process of releasing memory used by objects that are no longerin use

d. All

54. What is inheritance?

a.It is the process of creating new classes from existing classes

b.It is the process of creating new objects from existing objects

c.It is the process of creating new objects from classes

d.It is the process of creating new interfaces from existing interfaces

55. What is performance tuning?

a.The process of organizing data in the database

b.The process of securing database

c.The process of backing up database data

d.The process of optimizing database performance

56. What is polymorphism?

a.It is the ability of objects to have many methods

b.It is the ability of objects to have many constructors

c.It is the ability of objects to take on many forms

d.It is the ability of objects to have many attributes

57. What is the output of the code? int i = 10;if (i > 5){cout << "A";} if (i > 7){ cout << "B";} if (i > 12) { cout << "C";}

a. CB   b. A

c. C   d. AB

58. What is the output of the following code snippet? int i = 0; while (i < 5) {cout << i << " ";i++;}

a. 0 1 2 3 4 5

b.1 2 3 4 5

c. The code will result in an infinite loop.

d. 0 1 2 3 4

59. What is the primary advantage of a relational model over hierarchical and network models?

a.Relational models are easier to use and understand

b.Relational models are more flexible and adaptable to changing requirements

c.Relational models can handle larger amounts of data

d.Relational models are more efficient for complex queries

60. What is the primary difference between a hierarchical and a network model?

a.In a hierarchical model, nodes are organized in a tree-like structure, while in a network model, nodes are organized in a graph-like structure

b.In a hierarchical model, nodes represent instances or records, while in a network model, nodes represent relationships

c.In a hierarchical model, nodes can have multiple relationships to other nodes, while in a network model, each node can have only one parent

d.In a hierarchical model, each node can have only one parent, while in a network model, a node can have multiple relationships to other nodes

61. What is the process of examining large and varied data sets to uncover hidden patterns, unknown correlations, market trends, customer preferences, and other useful information?

a.Data Mining

b.Data Integration

c.Data Warehousing

d.Data Processing

62. What is the process of storing and managing data in a way that allows for efficient retrieval and analysis?

a.Data Mining

b.Data Integration

c.Data Warehousing

d.Data Processing

63. If you are experianced in your computer and interruption of short periodic jobs many time and contenueal running of longer periodic once, the problem can be,

a.Failure to response

b.Starvations

c.Deadlocks

d.Limited throughputs

64. If you need to pass data back from an activity, Which method you should use?

a.startActivity()

b.startActivityForResult()

c.ActivityForResult()

d.None of the above.

65. In Android studio, which of the following callback is called when an activity starts interacting with the user?

a.onResume   b.onStop

c.onCreate   d.onDestroy

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

a.Analysis

b.Design

c.Development and Documentation

d.Maintenance and Evaluation

67. Informed search algorithms use _____ functions to apply knowledge about the structure of the search space to try to reduce the amount of time spent in searching.

a.Built-in

b.Complex

c.Heuristic

d.User-defined

68. It is an indirect measure of software development process

a.Efficiency

b.Cost

c. Effort Applied

d. All of the mentioned

69. It is the definition of objects in the database that leads directly to a standard approach for the creation of software documentation.

a.Information sharing

b.Document standardization

c.Data/data integration

d.Data integrity

70. Linked lists permit insertion and removal of nodes at any point in the list in constant time, but do not allow _____.

a.Searching

b. Random access.

c. Displaying items

d. All of these

71. Most of the algorithms studied by computer scientists that solve problems are kinds of
_____

a.Sort algorithms

b.Data structures

c.Search algorithms.

d.None of these

72. One of the following is not a Super global predefined variable?

a.$_NETWORK

b.$_REQUEST

c.$_GET

d.$_SERVER

73. Specialization is a feature of which organizational structure?

a.Divisional

b.Functional

c.Multi-divisional

d.Matrix

74. Suppose you are requested to apply a starvation free CPU scheduling algorithm for a
system, which one is your recommendations?

a.Round Robin CPU scheduling algorithm

b.Shortest Time remaining First CPU scheduling Algorithms

c.First come first served Scheduling Algorithms

d.Rate monotonic CPU scheduling algorithms

75. Testing wherein we subject the target of the test, to varying workloads to measure and
evaluate the performance behaviors and ability of the target and of the test to continue
to function properly under these different workloads.

a.Usability Testing   b.Load Testing

c.Volume Testing   d.Stress Testing

76. The algorithm should be effective which means it must have _____

a.Complex primitive

b.Basic primitive

c.Basic steps

d.Complex steps

77. The binary search method needs no; more than _____ comparisons.

a.[log2n]+1

b.log2n

c.[log2n]+2

d.[log2n]-1

78. The data Warehouse is_____.

a.Write only.

b.Read write only.

c. Read only.

d. None.

79. The examination of large amounts of data to see what patterns or other useful information can be found is known as

a.Data examination

b.Data analysis

c.Information analysis

d.Big data analytics

80. The learning which is used to find the hidden pattern in unlabeled data is called?

a.Unsupervised learning

b.Supervised learning

c.Reinforcement learning

d.None

81. The main organizational justification for implementing a data warehouse is to provide _____.

a.Access to data.

b.Cheaper ways of handling transportation.

c.Decision support.

d.Storing large volume of data.

82. The set of all possible solutions to a problem is called the _____

a.Search space

b.Data structure

c.Database

d.None of these

83. _____ refers to the ability to turn your data useful for business

a.Volume

b.Value

c.Velocity

d.Variety

84. _____network is formed that bit is transmitted as pulse of light

a.Fiber based network

b.Copper based network

c. Wireless based network

d. All

85. A data structure is said to be _____ if its elements form a sequence.

a.Bipolar

b.Scalar

c.Linear

d.Polar

86. A stack is very useful in situations when data have to be stored and then retrieved in the _____ order.

a.Same

b.Descending

c.Ascending

d.Reverse

87. A type software testing technique which emphasizes the correlation between a specified outcome and complete factors influencing the outcome?

a.All pair testing

b.Decision table testing

c.State-transition testing

d.Cause-effect graph testing

88. A types of test selection guidelines for automation in which test cases that are repetitive in nature and need to be executed for longer periods of time should be automated.

a.High Risk

b.Easy to Automate

c.Less Volatile

d.Boring and Time Consuming

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

a.Lack of adequate training

b.Management issues in the company

c. Lack of software ethics and understanding

d. All of the mentioned

Question text

90. All of the following accurately describe Hadoop, EXCEPT _____

a.Open-source   b.Real-time

c.Distributed computing approach   d.Java-based

91. Among the following testing techniques which one comes under white box testing?

a.Data flow testing

b.Equivalent partition testing

c.Boundary value testing

d.Control flow testing

92. Amongst which of the following is / are the functionality of Pattern-based design?

a.A software engineer examines each problem encountered for existing application

b.Attempts to find a relevant solution by searching one or more patterns repositories

c.A software engineer examines each problem encountered for a new application

d.None of the mentioned above

e.Both A and B

93. Assume you are working as a software tester in a particular software development organization and required to conduct tests on "Tourism management System" and you have faced some defects as well. What type of tests should you incorporate after the developers have fixed such defects?

a.Localization Testing

b.Regression Testing

c.Smoke Testing

d.Sanity Testing

94. Business Intelligence and data warehousing is used for_____.

a.Analysis of large volumes of product sales data.

b.Data Mining.

c.Forecasting.

d.All of the above

95. Data mining is?

a.The actual discovery phase of a knowledge

b.Time variant non-volatile collection of data

c. The stage of selecting the right data

d. None of these

96. Due to the rapid expansion of your company, your boss decides to establish a project management office (PMO) within the company and asks you to take the lead. According to the PMBOK guide, to be the ideal PMO you can do which of the following?

a.Reassign the resources that have been assigned to ongoing projects.

b.Find opportunities for collaborative project management.

c.Reduce the assigned resources to existing projects.

d.Speed u p a specific ongoing project.

Table 1

97. From the above tables , you are asked to filter posts with a corresponding user and their status should be active. So which query provides the required output?

a.$query = "SELECT users.id, user. role, posts.id, posts. title, posts. description, posts.user_id FROM users, posts WHERE posts. user_id == users. id "

b. $query = "SELECT id, role FROM users AND exists (SELECT FROM posts WHERE user_id = users.id AND status = 'active')";

c. $query = "SELECT * FROM 'posts' WHERE status='active' ";

d. B and C

98. How can organizational structures that are characterized by democratic and inclusive styles of management be described?

a.Flat

b.Bureaucratic

c.Functional

d.Hierarchical

99. How can we stop the services in android?

a. By using the stopSelf() and stopService() method

b. By using system.exit() method

c. By using the finish() method

d. None of the above

100. How to prevent buffer overflow attacks in software security?

a.Regularly testing code to detect and fix errors.

b.By building security measures into their development code

c.Using programming languages that include built-in protection

d.All

101. Identify the wrong statements about multitasking

a.It's objective focuses on increasing CPU and system throughput.

b.It's based on the mechanism of time-sharing mechanism.

c.It takes maximum time to execute the process

d.CPU switches between the processes of various programs within a single process

102. If a user requets you as software profession, what is your recommendation of operating system architecture? Why?

a.32 based architecture, because of it's compatibility and size

b.64 based architecture, because of it's compatibility and size

c.64 based architecture, because of it's cost, ease of use and incompatibility

d.32 based architecture, because of its ease of use