

1. Assume you are requested to model the library management system of the classes, and there is the relationship that a library contains students and books. From these classes which of the following relationship is not true?

- A. The relationship between library and books is aggregation
- B. The relationship between library and student is aggregation
- C. The relationship between library and books is composition.
- D. The relationship between books and student is association

2. Consider a file system with a graphical user interface, such as Macintosh's Finder, Microsoft's Windows Explorer, or Linux's KDE. The following objects were identified from a use case describing how to copy a file from a floppy disk to a hard disk: File, Icon, TrashCan, Folder, Disk, and Pointer. Based on the above scenario (description) which of the following is true?

- A. File, Folder, and pointer are boundary objects
- B. Icon, TrashCan, and pointer are entity objects
- C. File, Folder, Disk, and TrashCan are control Objects
- D. File, Folder, and Disk are Entity objects

3. Which one of the following statements is incorrect?

- B. In weakly coupled, changes to one subsystem likely to affect the other
- C. Low cohesion subsystem contains a number of unrelated objects
- A. High cohesion subsystem contains related objects performing similar tasks
- D. In strongly coupled, changes to one subsystem likely to affect the other

4. Suppose you are requested to develop a web-based system with the following functionalities; the user should sign up for the system, the user should log into the system and can send or accept friend request. Firstly, you convert this system into separate modules that is; Module1: Sign up and log in, Module 2: Send Friend request, and Module 3: Accept friend request. When you start your activities, you started with Module 1(signup and login). This module undergoes the phases of requirements gathering and analysis, design, implementation, deployment, and maintenance. When this module is ready, you deliver this module to the customer. After that, you add module2 that sends the friend request. Similarly, this module undergoes the phases of requirements gathering and analysis, design, implementation, deployment, and maintenance. When this module is ready, you deliver this module to the customer. Finally, in similar way the last module added. Based on the above activities and scenarios, what type of software process model (approach) you used?

- A. Agile model
- B. Waterfall model
- C. Incremental model
- D. Iterative model

5. In which type of project used in re-design and/or re-implementation of an existing system using newer technology?

- A. Green field
- B. Interface engineering project



C. Re-engineering

D. None

6. At the time of doing a projects unanticipated risk may occur. Once risks have been identified and prioritized, mitigation strategies need to be designed for the critical risks. Mitigation strategies can include lowering the likelihood of the risk or decreasing its potential impact. Assume the following risk called “selected middleware too slow to meet performance requirement for data logging” has been identified. Then from the following alternatives which one is the mitigation strategy for the mentioned risk?

A. Plan for a performance evaluation prototype

B. Develop alternate interface

C. Assign key developers to this task.

D. Increase the priority of this task with respect to other implementation tasks.

7. What is the correct interpretation of the following CSS script snippet?

```
p.class1 {  
    text-align: center;  
}
```

A. All paragraphs get centered

B. All paragraphs with the class of class1 get centered

C. All elements inside the paragraphs get centered

D. All elements with the class of class1 get centered

8. Which of the following JavaScript display method is used to change the content of HTML elements.

A. innerHTML B. document.write() C. console.log () D. window.alert()

9. Which one is true regarding variable declaration in JavaScript?

A. Const declares read only global variables. B. Let declares block scoped, local variables.
C. Var declares local scope, read-only variables. D. All of the above

10. Choose correct output of the following object looping using for ... in.

```
const obj = {fname:'XYZ'};  
for (x in obj)  
    console.log(obj);
```

A. No output B. XYZ C. name D. All of the above

11. Which one of the following will attach one file to another in PHP?

A. include("file2.php") B. import("file2.php") C. attach("file2.php") D. None of the above.

12. Which one is true about session and cookies?

A. Cookies can be disabled on client machine but sessions are not.
B. Session is stored on web server but cookies are stored on client.
C. Cookies stay on the client until their expiry time.
D. All of the above.



13. One of the following methods is used to send binary input to server in HTML forms.

- A. POST
- B. GET
- C. HTTP
- D. None of the above

14. Which way of setting a new cookie is correct, with key of 'Location' and value of 'AA'?

- A. setcookie("AA", "Location")
- B. setcookie("Location", "AA")
- C. setcookie("Location", time() + 60, "AA")
- D. setcookie(time() + 60, "Location", "AA")

15. Which one of the following is false?

- A. A web browser is a software that runs on a server
- B. A user agent renders resources for a user to view
- C. A website is a collection of resources in various forms
- D. A web page is the basic unit of information storage on the www

16. What is information about data called?

- A. Hyper data
- B. Meta data
- C. Tera data
- D. Relations

17. What does an RDBMS consist of?

- A. Collection of Records
- B. Collection of Tables
- C. Collection of Keys
- D. Collection of Fields

18. The ability to query data, as well as insert, delete, and alter tuples, is offered by _____

- A. TCL (Transaction Control Language)
- B. DCL (Data Control Language)
- C. DDL (Data Definition Language)
- D. DML (Data Manipulation Language)

19. What happens if a piece of data is stored in two places in the database?

- A. Storage space is wasted & changing the data in one spot will cause data inconsistency
- B. Changing the data in one spot will cause data inconsistency
- C. In can be more easily accessed
- D. Storage space is wasted

20. In E-R diagram derived attribute are represented by

- A. Ellipse
- B. Dashed ellipse
- C. Rectangle
- D. Triangle

21. Which of the following is true concerning the following statement: class Manager extends Employee _____

- B. Manager is a concrete class and a superclass
- C. Manager is an abstract class and a subclass
- A. Manager is a concrete class and a subclass
- D. Manager is an abstract class and a superclass

22. Various concurrency-control schemes are used to ensure

- A. Serializability
- B. Deadlock prevention
- C. Timeouts
- D. Locking states

23. The most common concurrency-control schemes include locking protocols and



- A. Timestamp-ordering schemes B. Multiversion schemes
C. Validation techniques D. All of the Above

- 24.** An integral part of database that can restore the database to the consistent state of before failure is called
- A. Recovery scheme B. Restoring scheme C. Backup scheme D. Transaction scheme
- 25.** An autonomous homogenous environment is which of the following?
- A. The same DBMS is at each node and each DBMS works independently.
B. The same DBMS is at each node and a central DBMS coordinates database access.
C. A different DBMS is at each node and each DBMS works independently.
D. A different DBMS is at each node and a central DBMS coordinates database access.
- 26.** A heterogeneous distributed database is which of the following?
- A. The same DBMS is used at each location and data are not distributed across all nodes.
B. The same DBMS is used at each location and data are distributed across all nodes.
C. A different DBMS is used at each location and data are not distributed across all nodes.
D. A different DBMS is used at each location and data are distributed across all nodes.
- 27.** In case of any shut down during transaction before commit which of the following statement is done automatically?
- A. View B. Commit C. Rollback D. Flashback
- 28.** In a function declaration, it is possible to use default argument, in which default value is a value to be used if no one is supplied from the function caller. Accordingly, which one of the following is the correct way of setting default values for a function named as myFunction which has three parameters named as x, y and z of integer data type?
- A. long myFunction (int x = 50, int y, int z); B. long myFunction (int x , int y, int z=150);
C. long myFunction (int x = 50 , int y = 100, int z); D. All of the above
- 29.** A structure definition is a user-defined variable type which is a grouping of one or more variables. Which one of the following is not correct about structure?
- A. Once the type has been defined through the C++ 'struct' keyword, you can create variables from it just like you would any other type.
B. After creating a structure variable you must create a structure definition.
C. The structure definition is a listing of all member variables with their types and names.
D. Defining a structure is giving the compiler a blueprint for creating your type.
- 30.** Which one of the following is an operator specifically used to access structure members through a pointer?
- A. * B. - > C. < - D. .(dot)



31. Assume that enumeration called transport is defined as: enum transport { car, truck, airplane = 10, train, boat};

What will be the output for the following fragment of code?

```
transport t= train;
```

```
cout<
```

```
    A. train
```

```
    B. 3
```

```
    C. 11
```

```
    D. transport
```

32. What is the output of the following program?

```
#include
int main ()
{
    int *ptr1, *ptr2, *ptr3, i = 0, j = 1, k = 2;
    ptr1 = &i;
    i = *ptr1 ? 3 : 4;
    ptr2 = &j;
    j = *ptr2 + *ptr1;
    ptr3 = &k;
    k = *ptr3 + *ptr2;
    std::cout << *ptr1 << '-' << *ptr2 << '-' << *ptr3 << '\n';
    return 0;
}
```

```
A. 2-5-7
```

```
B. 0-1-5
```

```
C. 4-5-7
```

```
D. 0-2-5
```

33. Consider two-dimensional integer array a [ROWS] [COLS]. Since its elements are stored sequentially in computer memory, which one of the following is correct way of computing memory address for a[i][j]?

- A. a + (i × COLS × sizeof(int)) + (j × sizeof(int))
- B. a + (i × ROWS × sizeof(int)) + (j × sizeof(int))
- C. a + (i × sizeof(int)) + (j × COLS × sizeof(int))
- D. a + (i × sizeof(int)) + (j × sizeof(int))

34. What is encapsulation in OOP?

- A. It is a way of combining various data members and member functions that operate on those data members into a single unit.
- B. It is a way of combining various data members and member functions into a single unit which can operate on any data
- C. It is a way of combining various member functions into a single unit
- D. It is a way of combining various member functions into a single unit

35. In which access should a constructor be defined, so that object of the class can be created in any function?

- A. Any access specifier will work
- B. Private
- C. Public
- D. Protected

36. Which of the following OOP concept binds the code and data together and keeps them secure from the outside world?

- A. Polymorphism
- B. Abstraction
- C. Inheritance
- D. Encapsulation

37. Which two features of object-oriented programming are the same?

- A. Abstraction and Polymorphism features are the same
- B. Inheritance and Encapsulation features are the same



- C. Encapsulation and Polymorphism features are the same
- D. Encapsulation and Abstraction

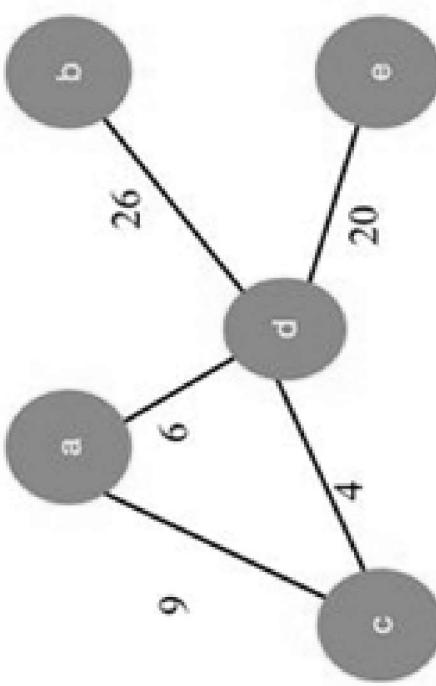
38. Which of the following is not an OOPS concept?

- A. Encapsulation
- B. Polymorphism
- C. Exception
- D. Abstraction

39. Runtime polymorphism feature in java is

- A. Method overriding
- B. Operator overloading
- C. Method overloading
- D. Constructor overloading

40. Consider the graph given. Which of the following are the edges in the MST of the given graph?



- A. (a-c)(c-d)(d-b)(d-e)
- B. (c-a)(a-d)(d-b)(d-e)
- C. (a-d)(d-c)(d-b)(d-e)
- D. (c-a)(a-d)(d-c)(d-b)(d-e)

41. Which of the following is true?

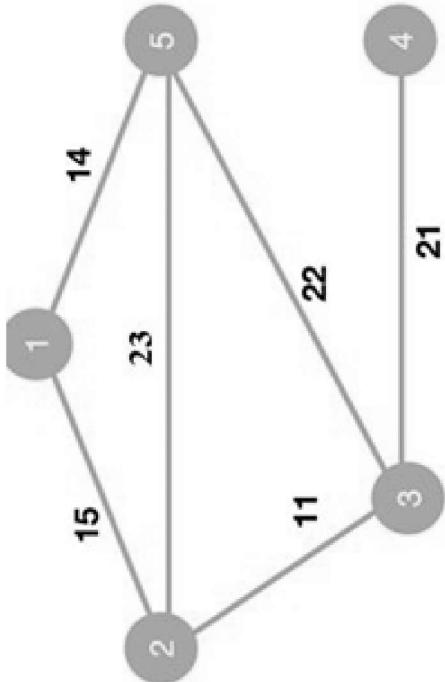
- A. Prim's algorithm initializes with a vertex.
- B. Prim's algorithm initializes with an edge.
- C. Prim's algorithm initializes with a vertex which has smallest edge.
- D. Prim's algorithm initializes with a forest.

42. Worst case is the worst-case time complexity of Prim's algorithm if adjacency matrix is used?

- A. O(log V)
- B. O(V²V²)
- C. O(E²E²)
- D. O(V log E)



43. Consider the graph shown. Which of the following edges form the MST of the given graph using Prim's algorithm, starting from vertex 4.

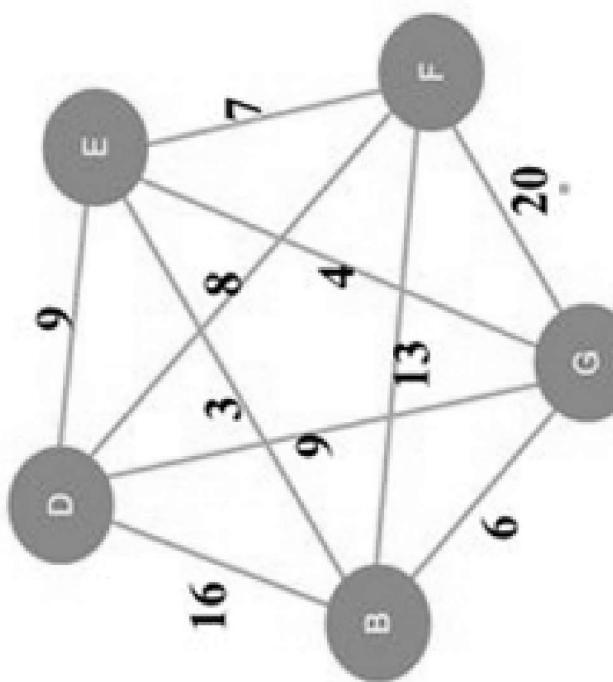


- A. $(4-3)(5-3)(2-3)(1-2)$ B. $(4-3)(3-5)(5-2)(1-5)$ C. $(4-3)(3-5)(5-1)(1-2)$ D. $(4-3)(3-2)(2-1)(1-5)$

44. A person wants to visit some places. He starts from a vertex and then wants to visit every vertex till it finishes from one vertex, backtracks and then explore other vertex from same vertex. What algorithm he should use?

- A. Depth First Search B. Trim's algorithm D. Kruskal's Algorithm C. Breadth First Search

45. Consider the following graph. Using Kruskal's algorithm, which edge will be selected first?



- A. GF B. BE C. DE D. BG

46. Which OSI layer is responsible for order preservation of sequence of packets between source and destination if there is jitter in the arrival time?

- A. Presentation Layer B. Network Layer C. Data link Layer D. Transport Layer

47. According to the IEEE 802 standard, what is the right ordering of the layers:

- A. MAC Layer, LLC Layer, IP Layer, TCP Layer, Application Layer
B. LLC Layer, MAC Layer, TCP Layer, IP Layer, Application Layer



- C. LLC Layer, MAC Layer, IP Layer, TCP Layer, Application Layer
- D. MAC Layer, LLC Layer, TCP Layer, IP Layer, Application Layer

48. A service provider has given you the class B network range of 172.16.0.0 and try to break this network into as many subnets as possible. Now a company needs to break this network to get at least 300 clients per subnet. If you break this network based on the above requirements given which one is true about this scenario?

- A. The new subnet mask & broadcast address of the 3rd subnet is 255.255.254.0 and 172.16.1.255 respectively.
- B. The new subnet mask & broadcast address of the 1st subnet is 255.255.224.0 and 172.16.5.255 respectively.
- C. The new subnet mask & broadcast address of the 3rd subnet is 255.255.224.0 and 172.16.3.255 respectively.
- D. The new subnet mask & broadcast address of the 2nd subnet is 255.255.254.0 and 172.16.3.255 respectively.

49. You want to create a crossover cable to connect two systems directly together. Which wires would you have to switch at one end of the cable?

- A. Wires 1 and 2 with wires 3 and 6
- B. Wires 1 and 2 with wires 3 and 4
- C. Wires 1 and 2 with wires 6 and 8
- D. Wires 2 and 3 with wires 3 and 6

50. A service provider has given you the class C network range of 209.50.1.0. Now a company needs to break this network into 20 separate subnets. Now if you break this network what is the new subnet mask for your subnets?

- A. 255.255.255.0
- B. 255.255.248.0
- C. 255.255.224.0
- D. 255.255.255.248

51. You want to create a crossover cable to connect two systems directly together. Which wires would you have to switch at one end of the cable?

- A. Wires 1 and 2 with wires 3 and 6
- B. Wires 1 and 2 with wires 3 and 4
- C. Wires 1 and 2 with wires 6 and 8
- D. Wires 2 and 3 with wires 3 and 6

52. Mr. Daniel is teaching an introductory computer security course and is trying to explain the terminology to students. What is the term for a person who uses tools to hack without understanding the underlying technology?

- A. A script kiddie
- B. A novice
- C. A gray hat hacker
- D. A white hat hacker

53. Which one of the following is an attack on availability?

- A. Spoofing
- B. Delay
- C. Masquerading
- D. Snooping

54. Which one of the following algorithms is not applicable for digital signature?

- A. RSA
- B. Diffie-Hellman
- C. Elliptic Curve
- D. DSS

55. Which one is a violation against confidentiality?

- A. Azeb copies Abebe's homework.
- B. Bekelle crashes Tulu's system.



- C. Bekele changes the amount of Abebech's check from \$100 to \$1000.
- D. Ayele registers the domain name "aau.edu.et" and refuses to let the publishing house buy or use that domain name.

56. Mr. Tadesse is explaining various malware types to new technical support personnel. He is explaining to them the various types of malwares so that they can recognize them. What type of malware is a key logger?

- A. Virus
- B. Trojan horse
- C. Buffer overflow
- D. Spyware

57. What is the rule in access control?

- A. Grant the most access you can securely give
- B. Grant the least access job requirements allow
- C. Grant standard access for all users
- D. Strictly limited access for most users

58. System administrator must cater to all needs, and ensure the stability of system for the users. Which of the following is not a common user management task in an operating system?

- A. Creating new user accounts
- B. Deleting user accounts
- C. Modifying existing user accounts
- D. Installing software for users

59. What is the purpose of creating groups in an operating system?

- A. To increase system performance
- B. To limit access to specific files or directories
- C. To organize users with similar permissions or roles
- D. None of the above

60. In a window domain, directory resides on computer that are configured as domain controller. Which one of the following is a key function of a domain controller in a Windows network?

- A. To provide internet connectivity to network devices
- B. To manage hardware resources such as printers and scanners
- C. To monitor network performance and troubleshoot issues
- D. To manage user accounts and authentication

61. Which of the following is a key feature of Active Directory Sites and Services in a Windows network?

- A. It allows for centralized management of network devices
- B. It provides real-time monitoring of network traffic
- C. It enables replication of directory data across multiple sites
- D. It allows for remote access to network resources from any location

62. System administration is not only just installing system it about designing efficient community of computers. What are the biggest challenges faced by system administrators when it comes to security?

- A. Keeping up with constantly evolving threats
- B. Ensuring all employees follow security protocols
- C. Implementing complex security measures
- D. Balancing security with accessibility



63. An Active Directory container used to organize a network's users and resources into logical administrative units?

A. Users Units B. Organizational Units C. Container object D. Leaf object

64. As a simple knowledge-based agent, which component enables it to operate based on stored information to make decisions?

- A. Make-percept-sentence that which constructs a sentence asserting that the agent perceived the given percept at the given time.
- B. Make-action-query that constructs a sentence that asks what action should be done at the current time.
- C. Make-action-sentence that constructs a sentence asserting that the chosen action was executed.
- D. All of the Above

65. Searching in a state space by agent involves the following except

- A. Searching down the search space until it finds the goal node
- B. Expanding the child node of the current node
- C. Revisiting the previous explored nodes
- D. Making goal test on every current node

66. _____ is the most effective way to handle partial observability of the agent to keep track of the world.

- A. Simple reflex agents
- B. Model-based reflex agents
- C. Goal-based agents
- D. Utility-based agents

67. In AI, if agent knows exactly about the state, the problem type is _____.

- A. Single-state problem
- B. Exploration problem
- C. Conformant problem
- D. Contingency problem

68. Which one of the following is correct concept of a stochastic hill-climbing search, which has to be applied to an evolutionary algorithm?

- A. It looks ahead beyond the immediate neighbors of the current state.
- B. It generates new states by mutation and crossover, which combines pairs of states.
- C. It continues even when it reaches a “peak” where no neighbor has a higher value.
- D. It uses positive of a heuristic cost function as the objective function

69. Which one of the following is wrong characteristics of iterative deepening search strategy?

- A. Complete
- B. Time complexity is $O(b^d)$
- C. Optimal
- D. None of the Above

70. Consider the given below and calculate both miss and hit ration of memory management page replacement in five frame using optimal page replacement algorithm. Given: 3 8 1 3 5 4 6 1 8 9 4 2 3 1 6 8 9 0 1 2 3

- A. 11:21 hit ration and 10:21 miss ratio
- B. 13:21 miss ratio and 8:21 hit ratio



C. 5:21 hit ratio and 16:21 miss ratio

D. 4:21 hit ratio and 17:21 miss ratio

71. From the following which one is incorrect regarding to whole CPU scheduling algorithm
A. All Non Preemptive CPU scheduling have the same waiting time and response time.
B. First come first serve CPU scheduling algorithm never care about execution time when we design the gantt chart.
C. Preemptive shortest job first CPU algorithm waiting time are smaller than waiting time of first come first serve CPU scheduling
D. Both preemptive and non preemptive priority CPU scheduling are based on burst time.

72. Consider the following processes, with the CPU burst times and arrival times given in mill seconds and If we have five processes (p0, p1, p2, p3, p4 and Execution time, 3, 1, 6, 2, 4, arrival times 0, 2, 7, 3, 4, with priority, 2, 4, 3, 5, 2, if smallest integer represent highest priority value, which order of processes are correct using CPU preemption priority scheduling?
A. P0P1P3P4P2 B. P0P1P3P2P4 C. P0P2P3P4P1 D. P0P1P4P2P3

73. From the following alternatives which one is correct about process and thread?

- A. Process can communicate without IPC as thread.
- B. One process has more than one threads
- C. Thread can communicate with each other using inter-process communication only.
- D. Threads have individual existences.

74. Among the following operating system which one accept ostrich algorithm for deadlock detection techniques?

- A. Mac Operating System
- B. Unix Operating System
- C. Apple I Operating System
- D. DOS Operating System

75. From the following which one is used to Abort all deadlocked processes, or Abort one process at a time until the deadlocked cycle disappears?

- A. Deadlock Detection and Prevention
- B. Process Termination
- C. Deadlock Avoidance
- D. Resource Preemption

76. Which of the architecture is power efficient?

- A. RISC
- B. ISA
- C. IANA
- D. CISC

77. Which of the following is the subcategories of computer architecture?

- A. Microarchitecture
- B. Instruction set architecture
- C. Systems design
- D. All of the mentioned

78. In CISC architecture most of the complex instructions are stored in ____

- A. CMOS
- B. Register
- C. Transistors
- D. Diodes

79. The processing required for a single instruction is called ____.



- A. Fetch cycle B. Instruction cycle C. Execution cycle D. Branch cycle

80. The fetched instruction is stored in the CPU register known as.

- A. IRC Instruction register B. MARC Memory address Register
C. PC Program counter D. MDRC memory Data Register

81. What is a multiplexer?

- A. It is a type of decoder which decodes several inputs and gives one output
B. A multiplexer is a device which converts many signals into one
ral inputs and gives one output
C. It takes one input and results into many output
D. It is a type of encoder which decodes seve

82. Automata theory, computability theory, and complexity theory are all topics covered in the study of the theory of computation. Which of the following represents the main objective of complexity theory?

- A. To classify problems as easy ones and hard ones
B. To deal with definitions and properties of mathematical models of computation.
C. To classify problems by those that are solvable and those that are not solvable.
D. All of the Above

83. What is the language and grammar accepted by pushdown automata?

- A. Regular language and type-3 grammar B. Context-free language and type-3 grammar
C. Context-free language and type-2 grammar D. Context-sensitive language and type-1 grammar

84. Which of the following is the mechanism for simplifying the context-free grammar?

- A. Eliminating useless symbols B. Eliminating unit productions
C. Elimination ϵ -productions D. All of the Above

85. Which one of the following languages over the alphabet {0, 1} is described by the regular expression:

$$(0+1)^*0(0+1)^*0(0+1)^*$$

- A. The set of all strings containing the substring 00
B. The set of all strings containing at least two 0's
C. The set of all strings containing at most two 0's
D. The set of all strings that begin and end with either 0 and 1

86. In a computational complexity theory, a problem with decision making is said to be NP-complete when it is both in NP and NP-hard. What does NP mean?

- A. Non polynomial time B. Non-deterministic probabilistic
C. Non-deterministic polynomial time D. Non-probabilistic time

87. The grammar production: $A \rightarrow aB$ refers to which of the following forms?



A. Greibach Normal Form

B. Backus Naur Form

C. Chomsky Normal Form

D. None of the Above

88. Which compiler runs on one machine and generates code for multiple machines?

A. Multipass compiler B. Optimizing compiler C. Cross compiler D. Onepass compiler

89. Consider a program P that consists of two source modules M1 and M2 contained in two different files. If M1 contains a reference to a function defined in M2 the reference will be resolved at _____.

- A. Edit time
- B. Compile time
- C. Link time
- D. Load time

90. Which phase of the compiler checks the grammar of the programming?

A. Code optimization B. Semantic analysis C. Code generation D. Syntax Analysis

91. Which one of the following doesn't describe syntax-directed definitions?

- A. Hide many implementation details such as order of evaluation of semantic actions
- B. Indicate the order of evaluation of semantic actions associated a production rule
- C. Give high-level specifications for translations
- D. All of the Above

92. Which of the following checks is a typical example of static checking?

A. Flow of control checks B. Uniqueness checks C. Type checks D. All of the Above

93. For the following pieces of code what would be the big-O complexity in terms of the size of the data n (consider assignment statements only). Remember that to prove the complexity you must find values for the constants c and N that satisfy the formal mathematical definition.

```
for (p = 0, sum = 0; p < n; p++)  
for (q = 1; q < n; q = q*2)  
sum += c[p][q];
```

A. O(nlog n) B. O(log n) C. O(n³) D. O(n)

94. In _____ traversal method, the root node is visited first, then the left sub tree and finally the right sub tree.

A. In-Order B. Pre-Order C. Post-Order D. Bi- Order

95. Which element/s would be left in the stack after performing the series of push and pop operations?

Push (A), Push (B), Push (C), Pop(), Push (D), Pop()

A. BC B. AB C. BA D. D

96. Which element/s would be left in the queue after performing the series of Enqueue and Dequeue operations?

Enqueue(A), Enqueue(B), Dequeue(), Enqueue(C), Dequeue(), Enqueue(D)

A. AB B. BC C. C D. CD

97. Of the following statements, which one is not correct about singly linked list?



- A. It is a collection of elements in sequential order
- B. The list can be implemented using static or dynamic memory allocation
- C. The list has head and tail pointers to traverse forward and backward through the list
- D. It is possible to store elements of the list in an array

98. Which one of the following is not correct about tree data structure?

- A. It is a set of nodes and edges that connect pairs of nodes.
- B. It is an abstract model of a hierarchical structure.
- C. The root is the top node that has no parent nodes.
- D. The leaves of the tree are those that have only one child nodes.

99. In _____ sort the original array is first divided into two sub arrays, the first of which contains only elements that are less than or equal to a chosen element, called the bound or pivot. The second sub array contains elements that are greater than or equal to the bound. If each of these sub arrays is sorted separately they can be combined into a final sorted array.

- A. Merge
- B. Quick
- C. Shell
- D. Selection

100. The sequence of computational steps to solve a problem is called _____

- A. Data Structure
- B. Algorithms
- C. Information
- D. Data Processing

