

## Answer Booklet - All Objective Type Questions

1. Which of the following is not a valid keyword in C++?

(C) While. While is a valid keyword in C++, but it's repeated here, making it the incorrect option.

2. Which of the following is used for single-line comments in C++?

(A) //. In C++, // is used to write single-line comments.

3. Which of the following language translators is used in C++?

(C) Compiler. C++ uses a compiler to translate code into machine language.

4. Which operator performs pattern matching in SQL?

(B) Like. The LIKE operator is used for pattern matching in SQL.

5. In SQL, which of the following is a data definition language command?

(A) Rename. The RENAME command is used for changing the name of a database object in SQL, part of Data Definition Language (DDL).

6. Which SQL Statement is used to delete data from a database?

(D) Delete. The DELETE command is used to remove data from a database.

7. The postfix form of  $A * B + C/D$  is?

(A) \*AB/CD+. This is the correct postfix notation of the given infix expression.

8. Which data structure is needed to convert infix notation to postfix notation?

(B) Stack. A stack is used to convert infix expressions to postfix notation.

9. Which data structure is used for implementing recursion?

(B) Stack. A stack is used to implement recursion in programming.

10. Identifying the Logical AND Operator.

(B) &&. In C++, the logical AND operator is &&.

11. Identify the size of int datatype in C++.

(C) 4 byte. The size of an int in C++ is typically 4 bytes, depending on the compiler.

12. Total types of error in C++.

(C) 3. There are three types of errors in C++: Syntax errors, runtime errors, and logical errors.

13. How many types of polymorphism are supported by C++?

(B) 2. C++ supports two types of polymorphism: Compile-time and runtime polymorphism.

14. Which normal form is similar with 3NF?

(B) 2 NF. The 2nd normal form (2NF) is often considered the foundation for achieving 3NF.

15. Which of the following threats is not the external security threats.

(D) Denial of service (DNS). This is an internal security threat.

16. Which protocol is/are defined in Transport layer?

(D) (B) & (C). TCP and UDP are protocols defined in the transport layer.

17. OOP is based on?

(B) Function & Data. Object-Oriented Programming (OOP) is based on both functions and data.

18. Which of the following is illegal in C++?

(C) int 1; double \*dp=&1. Variable names in C++ cannot start with a digit.

19. A technique for direct Search is \_\_\_\_\_?

(A) Hashing. Hashing is a direct search technique used in computer science.

20. What is www.rediffmail.com?

(D) An Email Service. It is a popular email service.

21. Which of the following is not a basic type in C++?

(C) Array. Array is not a basic data type in C++.

22. What is Operator % known as?

(B) Modulus Operator. The % operator is the modulus operator in C++.

23. Which of the following is a correct identifier?

(A) abc2. Identifiers cannot have special characters like %.

24. Which one is not an entity?

(D) hobby. An entity refers to a real-world object or concept.

25. Which of the following is a linear data structure?

(A) Array. Arrays are linear data structures.

26. Choose the correct default return value in C++.

(A) int. The default return type of a function in C++ is int.

27. Choose the type of loop which is guaranteed to execute at least once?

(B) do-while. A do-while loop is guaranteed to execute at least once.

28. In C++, data members and member functions of the class are private by default.

(A) True. By default, members of a class are private in C++.

29. In C++, Identify the correct escape sequence used for the new line.

(B) \n. The escape sequence for a new line in C++ is \n.

30. Identify the correct example for a pre-increment operator in C++.

(A) ++n;. The pre-increment operator in C++ is ++n.

31. The complexity of Binary Search algorithm is?

(B)  $O(\log n)$ . Binary Search has a time complexity of  $O(\log n)$ .

32. The operator of processing each element in the list is known as?

(A) Traversal. Traversal is the process of processing each element in the list.

33. The Post order traversal of a binary tree is DEBFCA. Which of the following pre-order traversal?

(D) ABDCEF. The pre-order traversal corresponding to the post-order traversal DEBFCA is ABDCEF.

34. What does POP stand for?

(B) Post Office Protocol. POP is a protocol used for retrieving email from a mail server.

35. What is the number of layers in the OSI model?

(C) 7 layers. The OSI model consists of 7 layers.

36. What is Hub?

(C) Network device. A hub is a network device used for connecting devices in a network.

37. Identify the protocol primarily used for browsing data.

(D) HTTP. HTTP is the protocol used for browsing data on the web.

38. What is the location of a resource on the internet?

(D) URL. The URL specifies the location of a resource on the internet.

39. Identify the first network which was based on TCP/IP protocol.

(A) ARPANET. ARPANET was the first network to use TCP/IP.

40. Identify the device used to boost up a weak signal.

(B) Repeater. A repeater is used to amplify signals in a network.

41. Which of the following is a component of the DBMS?

(D) All of the above. A DBMS includes data, data language, and a data manager.

42. What is the correct format for writing field names?

(B) First\_name. Field names in databases are often written in this format.

43. Which of the following is not a component of SQL?

(C) ADL. SQL components include DDL, DML, and TCL, but not ADL.

44. Which keyword is used to create a new table in SQL?

(A) Create. The CREATE keyword is used to create new tables in SQL.

45. Which command is used to update a data in a table?

(B) Update. The UPDATE command is used to modify data in an existing table.

46. What does a decimal number represent?

(C) Position. Decimal numbers represent the positional value of digits.

47. What is the octal equivalent of 58, 3-bit binary number?

(A) 0102. The octal equivalent of the 3-bit binary number 58 is 0102.

48. Which of the following is an insertion operator in C++?

(A) <<. The << operator is used for insertion in C++.

49. According to Boolean law:  $A+1=?$

(A) 1. According to Boolean algebra,  $A+1$  equals 1.

50.  $A(A + B) = ?$

(B) 1. According to Boolean algebra,  $A(A + B)$  equals 1.

51. Which of the following correctly declares an array in C++?

(D) `int array[10];`. This is the correct way to declare an array in C++.

52. Which of the following is used to terminate the function declaration in C++?

(A) ;. The semicolon is used to terminate a function declaration in C++.

53. Which of the following symbol is used to declare the preprocessor directives in C++?

(C) #. The # symbol is used to declare preprocessor directives.

54. Which data structure follows the Last in first out (LIFO) principle?

(B) Stack. A stack follows the LIFO principle.

55. Which search algorithm works efficiently for sorted arrays?

(B) Binary search. Binary search works efficiently for sorted arrays.

56. Stack is referred as:

(A) Last in First out. Stack operates on the LIFO principle.

57. In a database, what is unique identifier for each record in a table?

(A) Primary key. The primary key uniquely identifies each record in a table.

58. Which data type is used in SQL to store true or false values?

(B) Boolean. Boolean data type is used to store true or false values.

59. What does DROP command do in SQL?

(B) Delete an existing table. DROP command is used to delete a table in SQL.

60. Which SQL command is used to add a new record to a table?

(D) insert. The INSERT command is used to add new records to a table.

61. Which of the following is not associated with Logic gate?

(C) IF(). IF() is not associated with logic gates.

62. Base of hexa-decimal number system is?

(D) 16. The base of the hexadecimal number system is 16.

63. Which of the following is a device of computer network?

(B) Hub. A hub is a device used in a computer network.

64. What is float?

(A) Data type. Float is a data type used for representing real numbers.

65. In C++, iostream.h is a/an?

(B) Header file. iostream.h is a header file used for input and output operations.

66. Which normal form is similar with 3 NF?

(B) 2 NF. 2NF is similar to 3NF in database normalization.

67. Which one is non-procedural language?

(B) SQL. SQL is a non-procedural language used for querying databases.

68. From where are new nodes added to the Queue?

(B) From behind. In a queue, elements are added from the rear end.

69. If there is no item in the list then it is called?

(B) empty list. A list without items is called an empty list.

70. The evaluation of the above postfix expression is?

(D) 21. The postfix expression evaluates to 21.