

C++(Object Oriented Programming)

Question set

Group A

1. What is a loop?
2. How would you make a function inline?
3. What do you mean by static Member function?
4. Define a string.
5. What is operator function?
6. Write the syntax of single inheritance in C++.
7. What is a file?

Group B

8. Why C++ is called object-oriented programming language?
9. WAP to display the following output using single count statement.
10. What do you understand by explicit type conversion?
11. WAP to display the smallest number out of two numbers entered by user using conditional operator.
12. What is the advantage of passing arguments by reference to a function? Explain.
13. What do you mean by function overloading?
14. WAP to read a set of numbers into an array and display the even numbers.
15. State the contents of the objects S_1 and S_3 after executing the following segments of a program.

```
string S1("SEE"),S2;  
S2=S1;  
string S2=S1;  
string S3("Technical"+S2);
```

16. WAP to add two variables and display the sum using class and object.
17. Describe the importance of destructor.
18. In context to operator overloading, what do you understand by the term nameless temporary object?

19. Class A is derived from class B. The class A does not contain any data and members of its own. Does the class A require constructors? Why?
20. Mention four errors that handle the functions during file operation.
21. Draw the stream class hierarchy.

Group C

22. WAP to display all the prime numbers from 1 to 100.
23. What do you understand by default arguments? Explain with examples.
24. Explain copy constructor with a program.
25. WAP to read a set of numbers into an array and display the count of odd and even numbers.
26. WAP to overload '<' operator to compare two objects.
27. What is ambiguity in multiple inheritance? How do you resolve it? Explain with examples.
28. WAP to read item name and cost from the keyboard and write it to a file called "item.txt" and display the information on the screen.

Database Management System

Group A

1. Define Database Management System.
2. What is select operator?
3. Define relation in SQL.
4. What do you mean by data integrity?
5. Define database normalization.
6. What is transaction recovery?
7. What do you mean by security?

Group B

8. Why is E-R model used? Explain in short.
9. Write any four operators used in relational algebra.
10. What is the syntax of tuple relational calculus?
11. Define domain relational calculus.
12. Define embedded SQL.

13. Write the features of SQL? Write any four.
14. How is view constructed? Write its syntax.
15. Data integrity constraints
16. Define transition constraints.
17. What are the conditions to be a relation in 2NF?
18. What is media recovery? Explain in short.
19. What do you mean by intent locking?
20. Why is recovery necessary?
21. What is the use of Encryption?

Group C

22. Write any five differences between relational calculus and relational algebra.
23. What is aggregate function? List out the aggregate functions and give example of any one of them.
24. Explain integrity constraint.
25. What is 3NF? Explain with examples.
26. What is trigger? What are the advantages and disadvantages of trigger?
27. Explain two-phase commit protocol with figure.
28. What is statistical database? How does statistical database ensure data security?