QUESTION BANK

Object Oriented Programming Using C++

SECTION-1 Introduction to C++ and Object Oriented Programming Language

SR NO.	QUESTIONS
1	Define Object-oriented programming and Explain feature of Object oriented programming. How it is different than procedure oriented programming.
2	Explain following : a. Exception handling b. Abstract class. c. seekg and tellg functions d. setw() and setfill. e. ios::ate and ios::out f. Container class g. Extractor and manipulators. h. This pointer i. Default arguments j. Static data members and member functions k. Data abstraction and encapsulation. l. Message Passing. m. Dynamic Binding. n. Data hiding o. polymorphism
3	Difference between object oriented programming and procedure oriented programming.
4	Benefits of OOP.

Tokens, Expressions and Control Structures

SR NO.	QUESTIONS
5	Describe data types in C++ in Details.
6	Explain public, private and protected access specifiers and show their visibility when they are inherited as public, private and protected.

Function in C++

SR NO.	QUESTIONS
7	What is a virtual function? Write rules for virtual function. Explain wit example.
8	Explain Friend function with example.
9	Describe inline function in C++ with example.
10	Explain function prototyping with example.
11	Explain function overloading with example.

SECTION –B Classes and Objects

SR NO.	QUESTIONS
12	Explain friend function with example and list sum of the special properties of friend function.
13	What is a friend function? What are the merits and demerits of using the friend function?
14	What is object and how to implement in C++ program.
15	What is container class in oops.

Constructors and Destructors

SR NO.	QUESTIONS
16	What is Constructor? Explain types of Constructor with example.
17	Explain following with respect to C++ wit examples. 1)new operator 2) destructor
18	What is copy constructor? When it is used implicitly for what purpose?

SECTION _C Operator Overloading and Type Conversions

SR NO.	QUESTIONS
19	Define operator overloading? Explain how to overload unary operator and binary operator.
20	Give a programming example that overloads = = operator with its use.
21	What do you mean by type conversion? Give an example of basic to object conversion.
22	What is typecasting? What are explicit and implicit type conversions?
23	Which operators cannot be overloaded? Write steps to overload + operator so that it can add two complex numbers. Explain with example how can a function template be created.
24	What are a Dynamic cast and a Constant cast?

Inheritance : Extending Classes

SR NO.	QUESTIONS
25	What does inheritance means in c++? What are different forms of inheritance?Give an example of each.
26	Show the use of multiple inheritance with the help of proper programming example
27	Explain Inheritance in C++ with example.
28	Explain Public Inheritance with Example.
29	Explain Protected inheritance with Example.

Pointers, Virtual Functions and Polymorphism

SR NO.	QUESTIONS
30	What does inheritance means in c++? What are different forms of inheritance?Give an example of each.
31	Write a C++ program demonstrating use of the pure virtual function with the use of base and derived classes.
32	Define polymorphism and Explain Virtual functions with example. What is the difference between static & dynamic binding?
33	Explain use of pointer in C++.
34	What are the differences between pointers to constants and constant pointers?

I/O Operations

SR NO.	QUESTIONS
35	List and explain in brief various functions required for random access file operations.
36	Illustrate with an example, how endl and setw manipulator works.
37	What is the difference between opening a file with constructor function and opening a file with open ( ) function

SCTION -D Templates

SR NO.	QUESTIONS
38	Explain with example how can a class template be created.
39	What is Standard Template Library? How is it different from the C++ Standard Library?

40	Explain Generic functions and Generic class.
41	Write C++ program to find sum of three integer float number using templet class.

Exception Handling

SR NO.	QUESTIONS
42	What is exception handling ? Explain types of exception handling and explain suitable example.
43	What is Try ,Catch and Throw ? Explain with example.

Logical Question

SR NO.	Program
44	Write a program in C++ to check whether the given no is prime or not.
45	Write a program in C++ that display entered string into reverse order.
46	Write a program in C++ that checks whether the given string is palindrome or not.
47	Write a program in C++ that prints the sum of digit of a given number.
48	Write a program using put() to write characters to a file until user enters a dollar sign.
49	Write a generic function that will sort an array of integer, float value. Create a menu with appropriate options and accept the values from the user.
50	Define a class to represent a bank account. Include the following members: