

Question Bank
MODULE-I: OBJECT-ORIENTED FUNDAMENTALS

- 1) Differentiate between procedure oriented and object oriented programming.
- 2) Explain the various features of object oriented programming.
- 3) Give the comparison of C and C++.
- 4) Discuss basic concepts of C++ in detail.
- 5) Examine what are the benefits and applications of OOP?
- 6) What is OOP? Explain the applications of object oriented programming in detail.
- 7) Explain basic concepts / properties / principles of OOPS in detail.
- 8) Describe the following characteristics of OOP -Encapsulation, Inheritance, Polymorphism, Abstraction.
- 9) Explain the structure or layout of C++ Program.
- 10) Explain about data types available in C++ Program.
- 11) Write a note on Access Specifiers.
- 12) Define a class. Explain about class specification.
- 13) Write a note on Creating Objects or object creation. / How do you create objects ?
- 14) Consider Examples - Bank Account, Student, Library, Vehicle :
 - i) Draw Class Diagrams
 - ii) Illustrate creation of classes and objects.
- 15) How to define and access member functions?
- 16) What is meant by constructor? Explain types of constructors.
- 17) Explain Characteristics of Constructors and Destructors
- 18) Define parameterized constructor by taking a C++ program.
- 19) What is Constructor overloading ? Write a program that has Constructor Overloading.
- 20) Explain the application of constructors and destructors in C++ programming.
- 21) What do you mean by default constructor? Explain with examples.
- 22) What do you mean by copy constructor? Explain types of Copy Constructor.
Write a program that demonstrates use of Copy Constructor.
- 23) Explain about destructors. Write a program in C++ to demonstrate the use of destructors.
- 24) What are Default Arguments? Mention their Advantages and Disadvantages.
- 25) Why should default values be given to function arguments in function ?
- 26) Write a program using the 'this' pointer.
- 27) Write a C++ program to implement a class called Circle that has private member variables for radius. Include member functions to calculate the circle's area and circumference.

- 28) Write a C++ program to create a class called Rectangle that has public member variables for length and width. Implement member functions to calculate the rectangle's area and perimeter.
- 29) A Book class that simulates the behavior of a book in a library. This class will use a default constructor, a parameterized constructor, a copy constructor, and a destructor.
- 30) Create a class bankaccount with
- 1) A default constructor Setting Bank Account to 0.
 - 2) Parameter Constructor that sets initial balance.
 - 3) A method deposit() and Withdraw() to modify balance.
 - 4) A copy Constructor that transfers Balance from one Account to another.
 - 5) A destructor that Prints "Account Closed".
- 31) Write a C++ program to create a class called Person that has public member variables for name, age and country. Implement member functions to display values.
- 32) Write a C++ program to implement a class called Employee that has public member variables for name, employee ID, and salary. Include member functions to calculate salary based on employee performance.