

C++ Test

- a. Write C++ program to find factorial of a given number using copy constructor.
- b. Write C++ program to implement multilevel inheritance. Provide the necessary comments to clarify the availability of data members and member functions in different classes.
- c. What is an object in C++? Explain how an object can be passed as an argument to a function with the help of an example.
- d. What do you mean by constructors? Write the characteristics of constructors. Write a program to illustrate the use of constructor in C++ programming.
- e. What happens if we don't use the virtual function in the inheritance? Explain the importance of virtual function in the reference of the above, with the help of an example.
- f. Write C++ program of abstract class which uses the concept of pure virtual function.
- g. What do you mean by polymorphism? How is run time polymorphism different from compile time polymorphism? Give example(s) to support the
- h. Above differentiation.
- i. What is inheritance? Explain different types of inheritance supported by C++.
- j. Differentiate between default constructor and parameterized constructor with the help of an example.
- k. What is an abstract class? How do you create an abstract class? What is
- l. The purpose of creating an abstract class in object oriented programming paradigm ? Explain with the help of an example.
- m. What do you understand by friend function? Write a C++ program to find out the sum of n given numbers using friend function.
- n. Explain the difference between private, protected and public access specifier with respect to class and its object. Write a program in this support.
- o. What do you mean by this pointer? Explain the use of this pointer with the help of an Example.
- p. Consider an example of declaring the examination result of BCA students of a University. Design three classes: Student, Exam and Result. The Student class Has data members such as those representing roll no., name, etc. Create the class Exam by inheriting Student class. The Exam class adds fields representing the marks scored in 6 subjects. Derive the Result from the Exam class, and
- q. It has its own fields such as total marks. Write an interactive program to model this relationship by showing the three classes. Also, show how you can print out the values of each member of these classes.
- r. Define member function. Explain the purpose of member function.