

Note: All Questions are Compulsory.

Q.1 Answer the Following. (Any Two)

10 M

1. What are the applications of OOP?
2. Explain different forms of Inheritance.
3. How data hiding can be achieved in OOP? Explain.
4. Explain the concept of Polymorphism with proper example.

Q.2 Answer the Following. (Any Two)

10 M

1. Write a note on member functions in C++.
2. What is parameterised constructor? List some properties of constructor.
3. Write a note on Destructor in C++.
4. Write a C++ program to show the use of pointers to object.

Q.3 Answer the Following. (Any Two)

10 M

1. Explain the concept of assignment operator overloading.
2. Write a note on this pointer.
3. Write a C++ program to overload increment operator.
4. What are the rules for operator overloading?

Q.4 Answer the Following. (Any Two)

10 M

1. What is a virtual function? Why do we need virtual function?
2. Explain the file stream classes.
3. Write a note on file modes to open the file.
4. What are the rules for virtual function?

Q.5 Answer the Following. (Any Two)

10 M

1. Write a C++ program to show the use of copy constructor.
2. Write a note on stream manipulators.
3. Write a note on unformatted input function.
4. Write a C++ program to show the use of assignment operator.

Q.6 Answer the Following. (Any Two)

10 M

1. Write a C++ program to implement bubble sort algorithm using template function.
2. What are the applications of container classes?
3. Write a note on standard C++ library.
4. How we can use string stream class? Explain with proper example.

Q.7 Answer the Following. (Any Three)

15 M

1. Show the implementation of template class library for swap function.
2. Write a note on istream and ostream classes.
3. What is an abstract class? Give the proper programming example.
4. How we can overload relational operator? Explain with example.
5. What are static data members and static member functions?
6. How reusability can be achieved in OOP? Explain.
