Note: All Questions are Compulsory.

Q.1 Answer the Following. (Any Two)   10 M
1. Explain following concepts of OOPS: Encapsulation , Inheritance, Polymorphism
2. Discuss problems with traditional programming language and application of OOP.
3. Data hiding can be achieved in OOP. Explain the statement with proper example.
4. What are the features of OOP?

Q.2 Answer the Following. (Any Two)   10 M
1. What are constructor? Explain with proper example.
2. Write a C++ program to show the use of class.
3. What are object? How they are created?
4 Write a note on member functions in C++.

Q.3 Answer the Following. (Any Two)   10 M
1 Write a C++ program to overload increment operator.
2. Explain the concept of binary operator overloading.
3. How we can overload assignment operator? Explain with example.
4. What are the rules for operator overloading?

Q.4 Answer the Following. (Any Two)   10 M
1. Write a note on private access V/S protected access specifiers.
2. Write a note on command line argument.
3. Design a class for single level inheritance using public and private type derivation.
4. What is an abstract class? Give the proper programming example.

Q.5 Answer the Following. (Any Two)   10 M
1. Write a C++ program to show the use of assignment operator.
2. Write a note on unformatted input function.
3. Write a note on constructor & destructor.
4. Write a note on stream operator.

Q.6 Answer the Following. (Any Two)   10 M
1. Write a note on standard C++ library.
2. What are the applications of container classes?
3. What is an iterator? What are it's characterstics?
4. How we can use string stream class? Explain with proper example.

Q.7 Answer the Following. (Any Three)   15 M
1. Explain different forms of Inheritance.
2. What are static data members and static member functions?
3. How we can use this pointer? Explain with example.
4. What is a virtual base class? When do we make a class virtual?
5. Write a note on istream and ostream classes.
6. Write a note on standard C++ library.

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