

- 2 (a) What are static class members ? Mention their properties in detail. Write a program to count number of objects created for a particular class using static data member.
- (b) What are classes and objects ? Explain the process of creating and distroying objects dynamically using "new" and "delete" operators.

### UNIT - III

- 3 (a) What is operator overloading ? How will you overload binary unary operators ? Discuss both processes with the help of programming implimentation.
- (b) Explain operator function as the member and non-member (friend function) of class with the help of an example.

OR

- 3 (a) Explain the process of overloading stream function with the help of an examples. What are the restrictions applied to operator overloading process ?
- (b) Explain the process of initializing member values with and without use of constructions.

### UNIT - IV

- 4 (a) Define super class and subclass. Explain the concept of public, private and protected inheritance.
- (b) What is Dynamic binding ? Explain the concept of virtual function with the help of an examples.

OR

- 4 (a) How are ambiguities occured during multiple inheritances ? Explain the process to remove ambiguities occured during above case.
- (b) Define virtual base classes. Explain why we use virtual base classes.

