2ND SEMESTER EXAMINATION – 2006

OBJECT ORIENTED PROGRAMMING USING C++

Full Marks – 70

Time : 3 Hours

The figures in the right hand margin indicate full marks for the questions.

Answer questions No. 1 which is compulsory and any five from the rest.

1. Answer the following questions : 2×10

   (i) Define a way other than using the keyword inline to make a function inline.

   (ii) Write the output of the following block of program

P.T.O.

```
class some{
public:
~some()
    {
    cout<<"This is in destructor"<<endl;
    }
};
void main()
{
some s;
s.~some();
}
```

(iii) Justify the use of virtual constructors and destructors in C++.

(iv) Inheritance is also known as _polymorphism_ relationship. Containership as _____ relationship.

(v) Differentiate between a template class and class template.

(vi) Name the operators that cannot be overloaded.

(vii) What is mean by default argument ? Can you change the value of default argument.

(viii) Base class has some virtual method and derived class has a method with the same name. If we initialize the base class pointer with derived object, calling of that virtual method will result in which method being called ?

(ix) Bootch algorithm is used for_____ .

(x) _____ is the parameter that is added to every non-static member function when it is called.

2. Differentiate the following with proper examples.

2.5×4

(i) message and method.

(ii) function overloading and function overriding.

(iii) macro function and inline function.

(iv) use of inheritance and friends.

3. Define the case of ambiguity. When it can found ? How it can be avoided ? Discuss with proper examples. 10

4. Using the multiple constructor, write a program to calculate the area of the triangle and rectangle. 10

5. Discuss the different types of polymorphism with proper example. In which condition this pointer can be used ? 10

6. Write a program using class with constructor and concept of exception handling to addition of two vectors. You may choose any data as per your assumption. 10

7. Write a program to calculate the 2nd lowest values of an array using template class. 10

8. Write short notes on : 5×2

   (i) Object Oriented Analysis and Design

   (ii) Static Members.