Fourth Semester B.Tech. Degree Examination, September 2018  
(2008 Scheme)  
08.404 : OBJECT ORIENTED TECHNIQUES (R F)

Time : 3 Hours  
Max. Marks : 100

PART – A

Answer all questions :

1. Explain encapsulation.
2. What is message passing ?
3. How are data and functions organized in an object-oriented program ?
4. Explain how a static data member differ from ordinary data member.
5. What is the significance of scope resolution operator (::) ?
6. What is dynamic initialization of objects ?
7. Explain any two functions for manipulation of file pointers.
8. What is function overriding ?
9. Discuss the array of objects with examples.
10. What is a file mode ? Describe the various file mode options available.

(10×4=40 Marks)

PART – B

Answer any one from each Module :

Module – 1

11. a) What is the use of a constructor function in a class ? Give a suitable example of a constructor function in a class.  
10
b) Write a C++ program to find the factorial of a number using a Constructor and a Destructor.  
10
OR

12. a) Write a program in C++ which demonstrate the use of inheritance.  
10
b) What do you understand by function returning a pointer ? Give suitable example to support your answer.  
10

P.T.O.
Module – II

13. a) Explain data members, member function, private and public members with example.
   b) What is a class? How objects of a class are created?

OR

14. a) Differentiate between compile time polymorphism and run time polymorphism.
   b) Define a class “string” with members to initialize and determine the length of the string. Overload the operator ‘+=’ for the class “string”.

Module – III

15. a) What is a virtual base class? When do we make it?
   b) What do you mean by dynamic binding? How it is useful in OOPS?

OR

16. a) Write a C++ program to perform multiplication between an integer and complex number object using friend operator function. Why can’t we use member operator function in this case?
   b) Write a program to illustrate overloading binary operators.