Fourth Semester B.Tech. Degree Examination, May 2010
(2008 Scheme)
Branch : Computer Science
08.404 : OBJECT ORIENTED TECHNIQUES (RF)

Time : 3 Hours
Max. Marks : 100

PART – A

Answer all questions.

1. What is meant by encapsulation?

2. Briefly explain the uses of scope resolution operator.

3. Compare structure and class in C++.

4. Write a note on reference variable.

5. Briefly explain dynamic memory operators in C++.

6. Write a note on constructor with default arguments.

7. Explain runtime polymorphism.

8. Explain class templates.

9. Write a note on pure virtual functions.

10. Compare function overloading and function templates. (10×4=40 Marks)

P.T.O.
PART – B

Module – I

11. a) Compare procedure oriented and object oriented languages. 10
   b) Explain inheritance, with examples. 10

OR

12. a) Explain object oriented system design process. 10
   b) Explain the advantages of using inline functions. Explain the situations, 10
   where inline functions cannot be used.

Module – II

13. a) Explain the use of static members of a class, with the help of example. 10
   b) Define a class to represent a vector (a series of float values). Include member 10
      functions to perform the following tasks:
      i) to create vector
      ii) to multiply vector by a scalar value
      iii) to add two vectors (if their size are equal)
      iv) to display vector.

OR

14. a) With the help of examples, illustrate the uses of ‘this’ pointer. 10
   b) Define a class fraction having data members numerator and denominator, and 10
      member functions to
      i) add and
      ii) multiply two fractional numbers.

Module – III

15. a) Explain overloading of unary operators, with examples. 10
    b) Define a function template to sort n given data items. Use it to sort integer and 10
       real valued data items.

OR

16. a) Explain where base class is made virtual. 10
    b) Write a note on file processing in C++. 10