24164

B.Tech. (CSE) 4th Semester F. Scheme

Examination, May–2015

OBJECT ORIENTED PROGRAMMING USING C++

Paper–IT-202 F

Time allowed : 3 hours]   *[Maximum marks : 100*

Note : Question No. 1 is compulsory. Attempt five questions in total selecting one question from each unit.

1. Explain the following :   8×2½=20

    (a) Encapsulation

    (b) Abstract Class

    (c) To declare a member of a class 'static'?

    (d) "const" reference argument in function

    (e) file modes and their purpose

    (f) Copy constructor

    (g) main () function in C++ differ from main () in C ?

    (h) member function

Unit–I

2. In what ways Object oriented paradigm is better than structured programming paradigm ? Explain features of OOP's.   20

3. (a) Explicate what features of C++ makes it different from C ?   10

    (b) What is access specifier ? Explain its types.   10

Unit–II

4. (a) What do you mean by Template ? Differentiate between class template and function template. 10

    (b) What is exception ? Give some reasons which cause exceptions.   10

5. (a) What is a file ? Write a program to create, read and write in a sequential access file.   10

    (b) What do you mean by library files ? Explain their role in C++ with suitable examples.   10

Unit–III

6. What do you mean by operator overloading ? What are various restrictions in operator overloading ? Write a program in C++ to overload binary operator.   20

7. (a) Distinguish between the virtual functions and pure virtual functions. Give suitable examples.   10

    (b) What do you mean by polymorphism ? Explain with the help of example how polymorphism is achieved at (i) compile time (ii) run time.   10

Unit–IV

8. What do you mean by dynamic constructor ? Write a program to implement dynamic constructor.   20

9. (a) Explain the use of 'this' pointer.   10

    (b) What do you mean by Inheritance ? Describe its various types.   10