

## 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