

Roll No

IT-223

B.E., III Semester

Examination, December 2016

Choice Based Credit System (CBCS)

Object Oriented Programming and Methodology

Time : Three Hours

Maximum Marks : 60

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.
iii) Assume suitable data if missing.

1. a) What are fundamental differences between object oriented programming and procedure oriented programming?
b) Explain the concept of encapsulation with suitable example.
2. a) What are the principle features of object oriented system? Explain each of them in brief.
b) Define inline function and its characteristics. How it is used in C++ programming language, Describe with suitable example?
3. a) What do you mean by access specifiers? Define their types and accessibility levels with example.
b) Write a program to show the order in which constructors and destructors are called in a hierarchy of derived classes.

4. a) Write C++ program to overload '+' operator using member function to add two complex numbers.
b) What are the various ways of passing an argument inside a function? Describe with suitable example.
5. a) What do you mean by static members of a class? Write their characteristics.
b) Define abstract class. What is the importance of abstract class justify with suitable example?
6. a) What is virtual class? How it overcome the disadvantage of multiple inheritance?
b) Define inheritance and its types with suitable examples.
7. a) Describe dynamic memory allocation in C++ with suitable example.
b) Define polymorphism and virtual function in brief.
8. a) How exceptions are handles in C++ programming? Explain in brief.
b) What are the different classes to perform output and input of characters to/from files in C++?
