

Roll No

MCA-303**MCA. III Semester**

Examination, June 2016

Object Oriented Methodology And C++*Time : Three Hours**Maximum Marks : 70*

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
 ii) All parts of each question are to be attempted at one place.
 iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.
 iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Give any four application of C++.
- b) Why constructor is important in C++?
- c) Give any four advantages of function.
- d) Explain copy constructor and destructor with suitable C++ coding.

OR

Write a C++ program to perform complex number operations (Add, Sub and Multiply) using a classes?

2. a) List the C++ operators. Which cannot be overloaded?
- b) Why inheritance is important? Explain.
- c) Give any three examples of multiple inheritance.
- d) Make a C++ program that a overloads the operators + and - to perform matrix addition and subtraction.

OR

Explain different types of Inheritance with suitable example.

3. a) What is the need for virtual function in C++?
- b) What is the use of Friend Function?
- c) Explain pure virtual function.
- d) Write a C++ program to illustrate the concept of friend function.

OR

Define early and late binding with suitable example.

4. a) Write the syntax of seekP() function with example.
- b) How open and close a file in C++?
- c) Explain tellg() and tellp() function.
- d) Write a C++ program using any five of the formatted I/O functions.

OR

Explain Try, catch and throw with suitable example.

5. a) Mention the primary goals in the design of the UML.
- b) What do you mean by object diagram?
- c) Write the purpose of activity diagram.
- d) Is UML a programming language? Is it process dependent or independent? Pen down the names all the UML diagrams? Discuss any two.

OR

Write short notes on :

- i) Objective oriented paradigm
- ii) Visual modeling
