Seat No.: _____   *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER–II • EXAMINATION – WINTER 2015

Subject code: 620003   **Date :02-12-2015**
Subject Name: Object Oriented Concepts & Programming (OOCP)
Time:02.30 pm to 05.00 pm   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Answer the following questions in short.   **07**
(1) What do you mean by Object Oriented Programming language? Give two examples of it.
(2) What is default argument in member function?
(3) What is an abstract class?
(4) What is the main difference between static variable and a normal variable of member function?
(5) What is the use of protected access specifier in class?
(6) RTTI stands for ....
(7) Define term : Namespace

(b) (1) Write short note on destructor function with suitable example.   **03**

(2) Differentiate Member function & Non-Member function   **04**

Q.2 **(a)** (1) Write short note on MIL with suitable example.   **04**
(2) How inline function is differ from preprocessor? Explain with suitable example. **03**
(b) What do you mean by operator overloading? How unary operator is overloaded? Explain with suitable example. **07**
OR
(b) What is an Inheritance? List out its advantages? Explain any one type of Inheritance in detail. **07**

Q.3 **(a)** (1) Is it possible to access private member of a class in non member function? Justify your answer with example. **04**
(2) Write short note on Function Template with example.   **03**
(b) Write short note on Compile Time & Run Time Polymorphism.   **07**
OR
Q.3 **(a)** (1) Write short note on any two casting operators of C++.   **04**
(2) Differentiate Text & Binary files.   **03**
(b) What is Exception Handling ? Explain its components.   **07**

Q.4 **(a)** What is Manipulator? Explain with example.   **07**
(b) Write detail short note on constructor with different types.   **07**
OR
Q.4 **(a)** What is a file ? List out different file opening modes? Explain different steps of file handling process. **07**

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Q.4 **(b)** What is Type conversion? Explain different methods of Type conversion in C++.   **07**

Q.5 **(a)** Write a c++ code which calculate sum of two objects of 3 x 3 matrix using operator over loading.   **07**

  (b) Explain the concept of Call by value & Call by reference in function with example.   **07**

OR

Q.5 **(a)** Write detail short note on Standard Template Library   **07**
  (b) Explain Namespace with suitable example.   **07**

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