

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-II • EXAMINATION – SUMMER 2013

Subject Code: 620003

Date: 05-06-2013

Subject Name: Object Oriented Concepts & Programming

Time: 10.30 am - 01.00 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) Do as directed. **07**

1) Give the difference between Union and Class in Object Oriented Programming Language. **02**

2) Why do we require the static member function? Explain in short. **02**

3) List and explain various file open modes. **03**

(b) Which are the basic concepts of Object Oriented Programming Language? Explain. **07**

Q.2 (a) What is the friend function? Explain with example. **07**

(b) Why do we require the copy constructor? What is the difference between the following two statements. Explain. **07**

Integer I2(I1); //I1 is object of Integer class.

I2=I1; //I1 and I2 are objects of Integer class.

OR

(b) What is the inheritance and containership? Explain with suitable example. **07**

Q.3 (a) Why do we require the inheritance? Explain multiple inheritance with proper example. **07**

(b) What is Run Time Type Identification (RTTI) ? How it is used? **07**

OR

Q.3 (a) What is class to class conversion? Explain both the methods for class to class conversion. **07**

(b) What is the inline function? Is the Inline function is a request but not command to the compiler? Justify your answer. **07**

Q.4 (a) What is manipulators. Explain any three manipulators with examples. **07**

(b) What is the virtual base class? Why do we require it? **07**

OR

Q.4 (a) What is exception? Explain the use of try ,catch and throw keywords in exception. **07**

Q.4 (b) Create a generic stack class with push and pop operations. **07**

Q.5 (a) What is namespace? What is the use of Koenig lookup in namespace? **07**

(b) What is Standard Template Library (STL)? Explain three types of containers in STL. **07**

OR

- Q.5** **(a)** Explain the use of seekg() and tellg() file functions with example. **07**
 (b) Create a class emp(id,name,age). Overload "<<" and ">>" operators. **07**
