

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA Sem-II Examination June 2011****Subject code: 620003 Sub. Name: Object Oriented Concepts and Programming (OOCp)****Date: 22/06/11****Total Marks: 70****Time: 2:30pm to 5:00pm****Instructions:**

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

Q.1 (a) Explain Function Template Instantiation process with example of Generic Bubble Sort Function Template. **07**

(b) Explain Class Template with Generic Stack Class example also describe the usage of Stack class for inserting students records. **07**

Q.2 (a) In which case we can use function on Left Hand Side describes the scenario with example. **07**

(b) Which storage class data member is having single copy of variables for all objects? Describe with appropriate example. **07**

OR

(b) Explain Friend Function with example **07**

Q.3 (a) Design Time class with three data members (hours, minutes, seconds) and initialized data members with 4 different constructors. Once value is not passed assign data members with default value zero. Overload operator + which will do summation of 2 time object and return answer time object. **07**

(b) Explain Virtual Base Class with example. **07**

OR

Q.3 (a) Explain catch(...) with example and shortly describe use of uncaught_exception() **07**

(b) How we can achieve following things? **07**
 cin>>employee1 [It will ask for data member input]
 cout<<employee1 [It will print data members of object]
 employee1 is object of employee class.

Q.4 (a) Explain Virtual Function. **07**

(b) Explain Manipulators with example. **07**

OR

Q.4 (a) Describe Text and Binary Streams and explain process steps to read and write from text and binary files. **07**

Q.4 (b) Answer following **07**
 What is namespace? What are needs of namespace?
 Can we use cout without using namespace std in our program?
 Can we have unnamed namespace?

Q.5 (a) Explain following string operations. **07**
 find, at, insert, append, replace, erase, swap

(b) Explain MultiMap container **07**

OR

Q.5 (a) Write a program which convert Kilometer object to Meter object and Meter object to Kilometer object **07**

(b) Explain Member Initialization List **07**
