

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014****Subject Code: 140704****Date: 25-06-2014****Subject Name: Object Oriented Concepts and 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) Explain the basic characteristics of object oriented programming. **07**
(b) Answer Following: **07**
1. Explain Inline function.
2. Explain function overloading.
- Q.2** (a) Explain constructor and destructor with examples. **07**
(b) Explain function modeling with example. **07**
OR
(b) Answer following : **07**
1. Aggregation v/s Generalization.
2. Draw functional model for ATM.
- Q.3** (a) Explain Dynamic modeling with Example. **07**
(b) What is pure virtual function? And explain abstract class with Example. **07**
OR
- Q.3** (a) Explain link and association and multiplicity with example. **07**
(b) Explain friend function with example. **07**
- Q.4** (a) What is type conversion? Explain the type conversion from basic type to class type and from class type to basic type with examples. **07**
(b) Write a program to overload binary operators + (plus), - (minus). **07**
OR
- Q.4** (a) Define Inheritance. Explain different types of Inheritance. **07**
(b) Write a program to overload unary operators ++ (increment), -- (decrement) , **07**
- Q.5** (a) Define class and draw class model of windowing system. **07**
(b) Write a program to swap two integers by creating swap function using call by reference. **07**
OR
- Q.5** (a) Draw data flow diagram for library management system. **07**
(b) Write a program to add private members variables of two classes using friend function. **07**
