

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**
