Seat No.: _____ Enrolment No._____

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: 1. Explain Inline function. 2. Explain function overloading.	**07**
Q.2	**(a)**	Explain constructor and destructor with examples.	**07**
	(b)	Explain function modeling with example.	**07**
		OR	
	(b)	Answer following : 1. Aggregation v/s Generalization. 2. Draw functional model for ATM.	**07**
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**

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