

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – WINTER • 2014****Subject Code: 140704****Date: 02-01-2015****Subject Name: Object Oriented Concept and Programming****Time: 02:30 pm - 05:00 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) Differentiate between Procedure oriented programming and Object oriented programming. **07**
 (b) Explain the following term. **07**
 1) Link 2) Object 3) Association 4) Metadata 5) Class 6) Event 7) Action
- Q.2** (a) Explain dynamic modeling with example. **07**
 (b) Draw data flow diagram of Hospital Management System. **07**
- OR**
- (b) Explain function modeling with example. **07**
- Q.3** (a) Explain call by value, call by reference and call by address with example. **07**
 (b) Explain Aggregation and Generalization with example. **07**
- OR**
- Q.3** (a) 1) Explain Inline function with example. **04**
 2) Explain Default argument in function with example. **03**
 (b) Explain Friend function with example. **07**
- Q.4** (a) What is Operator overloading? What are the rules for operator overloading? **07**
 (b) What is Constructor? Explain constructor overloading with example. **07**
- OR**
- Q.4** (a) What is Inheritance? Explain different types of Inheritance. **07**
 (b) What is type conversion? Explain type conversion from basic data type to class data type with example. **07**
- Q.5** (a) Explain the following with example. **07**
 1) Abstract Class
 2) Virtual function
 3) Virtual base class
 (b) List out the operators which can not be overloaded? Write a program in C++ to Overload unary plus(++) operator. **07**
- OR**
- Q.5** (a) Explain copy constructor with example. **07**
 (b) Write a program in C++ to overload binary plus (+) operator **07**
