

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**
