Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-IV(OLD) • EXAMINATION - WINTER 2016

Subject Code:140704 Date:24/11/2016 **Subject Name:Object Oriented Concepts And Programming** Time: 02:30 PM to 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. 0.1 (a) Differentiate between Procedure oriented programming and Object oriented **07** programming. **(b)** Explain constructor and destructor with examples. 07 **Q.2** Explain Object Oriented Methodology with its five stages. 07 (b) What do you mean by function over loading? Why it required? Explain it with 07 example. OR (b) Explain call by value, call by reference and call by address with example. 07 0.3 Explain function modeling with example. 07 (a) Explain friend function with example. **(b)** 07 0.3 Explain dynamic modeling with example. 07 (a) What is pure virtual function? And explain abstract class with Example. **07 (b)** What is Inheritance? Explain different types of Inheritance. 07 0.4 (a) Write a program to overload unary operators ++ (increment), -- (decrement) 07 **(b)** What is type conversion? Explain type conversion from basic data type to class 0.4 (a) 07 data type with example. **(b)** Write a C++ program to check that the given integer number is prime or not. **07** Q.5 Explain static variable and static function. 07 (b) Write a program to add private members variables of two classes using friend 07 function. OR What is the purpose of operator overloading? List the C++ operators which **Q.5** 07 cannot be over ridden. Write a function to overload any binary operator and show that how it can be used. **(b)** Explain the conditional structures used in C++ program with example. **07** 

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