

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – WINTER • 2014****Subject Code: 152004****Date: 01-12-2014****Subject Name: Object Oriented Programming in C++****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 key features of Object Oriented Programming. **07**
(b) Explain all types of Inheritance in detail with example. **07**
- Q.2** (a) Define Constructor. Explain types of constructor with its calling method. **07**
(b) Explain function overloading with example. **07**
- OR**
- (b) Explain Destructor with example. **07**
- Q.3** (a) List the operators that cannot be overloaded. **07**
List the operators where a friend cannot be used.
(b) Explain Ambiguity resolution in multiple inheritance with solution. **07**
- OR**
- Q.3** (a) Explain Virtual base class with example. **07**
(b) Explain “this” pointer with example. **07**
- Q.4** (a) Explain stream classes for console operations. **07**
(b) Explain ios format functions. **07**
- OR**
- Q.4** (a) Explain file stream classes. **07**
(b) Explain try, catch and throw blocks. Is it possible to have more than one catch block? If yes then justify. **07**
- Q.5** (a) What is container? Explain major categories of container in detail. **07**
(b) Explain all the functions to access characters in strings. **07**
- OR**
- Q.5** (a) Write a C++ program that creates two files called ODD and EVEN using command line arguments. Set of numbers stored in an array are written to these files. Note that the odd numbers are written to the file ODD and even numbers are written to the file EVEN. **07**
(b) Write a C++ Program to check whether the string is palindrome or not. **07**
