Seat No.: _____ Enrolment No._____

# GUJARAT TECHNOLOGICAL UNIVERSITY

**BE - SEMESTER–IV EXAMINATION – SUMMER 2016**

**Subject Code:140705** **Date:08/06/2016**

**Subject Name:Object Oriented And Programming with C++**

**Time:10:30 AM to 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)** | Give difference between procedural and object oriented programming.<br>Explain benefits and applications of OOP | **07** |
| | **(b)** | Explain different types of constructor with example | **07** |
| **Q.2** | **(a)** | Explain following terms with example<br>1) inline function<br>2) operator overloading | **07** |
| | **(b)** | Explain friend function and virtual function with example | **07** |
| | | **OR** | |
| | **(b)** | Explain inheritance and polymorphism with example | **07** |
| **Q.3** | **(a)** | Explain any two file management functions with example | **07** |
| | **(b)** | Explain static data member and static member function with suitable example | **07** |
| | | **OR** | |
| **Q.3** | **(a)** | Explain type conversion from basic type to class type and class type to basic type with example | **07** |
| | **(b)** | Explain new, delete and scope resolution operator with example | **07** |
| **Q.4** | **(a)** | Explain try, catch and throw with suitable example | **07** |
| | **(b)** | Explain pointer to objects in C++.<br>Write a program to demonstrate use of this pointer | **07** |
| | | **OR** | |
| **Q.4** | **(a)** | Write a C++ program which copy content of one file to another | **07** |
| | **(b)** | Explain user defined and derived data types in C++ | **07** |
| **Q.5** | **(a)** | Write a C++ program for bubble sort using template functions | **07** |
| | **(b)** | Explain functions for manipulation of file pointers | **07** |
| | | **OR** | |
| **Q.5** | **(a)** | Explain Standard Template Library<br>Destructor cannot be overloaded. True or False? Justify your answer | **07** |
| | **(b)** | Explain following functions with example<br>put()<br>get()<br>getline()<br>write() | **07** |

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