

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-V • EXAMINATION – SUMMER • 2014**

**Subject Code: 152004****Date: 17-06-2014****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) What is Object oriented programming? Explain features of Object oriented-programming. **07**  
(b) What is friend function? Explain it with example. **07**
- Q.2** (a) What is constructor? Explain the characteristics of constructor and constructor overloading with example. **07**  
(b) Differentiate Compile time and Run time Polymorphism with example **07**
- OR**
- (b) Explain Exception handling mechanism. Write a program where multiple catch statements are used to handle various types of exception. **07**
- Q.3** (a) What are virtual functions? Explain difference between static and dynamic binding? **07**  
(b) What is inheritance? Explain multilevel inheritance with example. **07**
- OR**
- Q.3** (a) Explain all the types of access specifiers with their visibility. **07**  
(b) List and explain various types function required for random access file operations? **07**
- Q.4** (a) Explain function overloading with suitable example. **07**  
(b) Write a program in C++ to check whether the given no is prime or not. **07**
- OR**
- Q.4** (a) Explain Abstract class and static keyword with example. **07**  
(b) Write a program in C++ to check that whether the given string is palindrome or not. **07**
- Q.5** (a) Describe the importance of Inline function with suitable example. **07**  
(b) Write a program in C++ that display entered string in to reverse order. **07**
- OR**
- Q.5** (a) Explain Generic Class and Generic function in detail. **07**  
(b) Write a program in C++ that prints the sum of digit of a given number. **07**

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