

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE – SEMESTER V • EXAMINATION – WINTER - 2012****Subject code: 152004****Date: 16-01-2013****Subject Name: Object-Oriented Programming in C++****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.

- Q.1** (a) Define Object-oriented programming and Explain feature of Object-oriented programming **07**  
(b) Explain constructor and destructor in C++ with example. **07**
- Q.2** (a) Explain Operator overloading with example. **07**  
(b) What is typecasting? What are explicit and implicit type conversions? **07**  
**OR**  
(b) Compare object and classes. **07**
- Q.3** (a) Define polymorphism and Explain Virtual functions with example. **07**  
(b) Explain use of pointer in C++. **07**  
**OR**
- Q.3** (a) Explain Inheritance in C++ with example. **07**  
(b) What is a friend function?. What are the merits and demerits of using the friend function?. **07**
- Q.4** (a) Explain Generic functions and Generic class. **07**  
(b) What is a Dynamic cast and a Constant cast?. **07**  
**OR**
- Q.4** (a) Explain Reinterpret cast and static cast. **07**  
(b) Illustrate with an example, how endl and setw manipulator works. **07**
- Q.5** (a) Write a program in C++ to check whether the given no is prime or not. **07**  
(b) Write a program in C++ that display entered string into reverse order. **07**  
**OR**
- Q.5** (a) Write a program in C++ that check whether the given string is palindrome or not. **07**  
(b) Write a program in C++ that print the sum of digit of a given number. **07**

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