

**3E1482**

Roll No. : \_\_\_\_\_

Total Printed Pages : **2****3E1482**

**B. Tech. (Sem. III) (Main & Back) Examination, January - 2013**  
**Electrical Engineering**  
**3EE2 Computer Programming - I**

Time : **3 Hours**][Total Marks : **80**  
[Min. Passing Marks : **24**

*Attempt five questions in all. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.*

Use of following supporting material is permitted during examination.  
(Mentioned in form No. 205)

1. \_\_\_\_\_ Nil \_\_\_\_\_

2. \_\_\_\_\_ Nil \_\_\_\_\_

- 1 Explain the following terms with suitable program code example.
- (a) Class
  - (b) Inheritance
  - (c) Abstraction
  - (d) Polymorphism.

4+4+4+4

**OR**

- 1 What are main features of object oriented programming ? Explain with examples. Write a program to implement inheritance in C++. Also write some pre-defined data types in C++.
- 2 What is inheritance ? How multiple inheritance is implemented in C++ ? Explain with suitable example and write a program code for this in C++

16

16

**OR**

- 2 Write a program to demonstrate how to access public, private and protected members of a class. Also differentiate between object and a class.

16



3 What is a constructor ? Explain copy constructor with the help of a program. 16

OR

3 What is in-line function ? What are advantages of in-line function ? Write a program to show how in-line function is implemented. 16

4 What is a friend function ? Write a program that implements friend function and operator overloading. rtuonline.com 16

OR

4 What is virtual function ? Write a program to show how virtual functions are used. 16

5 What is I/O stream in C++ ? Write a program to insert and delete records from a file using file handling in C++. 16

OR

5 What is template class ? What is template function ? Write a program code that uses template function. 16

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