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++.

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2 What is inheritance ? How multiple inheritance is implemented in C++ ? Explain with suitable example and write a program code for this in C++

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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.

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[Contd...

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

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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.

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

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OR

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

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

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OR

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

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