4E 2090

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B.Tech. IV Semester (Main/Back) Examination - 2012

Electronics & Comm.

4EC6.1 Object Oriented Programming

Common for 4EC6.1, 4EC6.1, and 4BM6.1

Time : 3 Hours

Maximum Marks : 80

Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **Five questions** selecting **one question** from **each unit**. All questions carry **equal marks**. (Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly.) Units of quantities used/calculated must be stated clearly.*

Unit - I

1. a) What is object oriented technology. (2)

    b) Explain various features of object oriented programming language. (8)

    c) How many types of operator's are used in C++. Explain. (6)

OR

a) Define class and objects. (4)

b) Differentiate the Public and Private member's of the class with the methods of accessing them both. (12)

Unit - II

2. a) Explain the Enhancement in C++ over C. (4)

    b) Explain the term polymorphism with a suitable example. (6)

    c) What are inline function? Give an example of inline function. (6)

OR

a) Explain virtual functions with an example. (5)

b) Differentiate single, multiple and multilevel inheritance. (7)

c) How does a object of drive class access the member of base class. (4)

Unit - III

3. a) Explain the concept of Byte Code in JAVA. (4)

    b) Explain the key features of JAVA in detail. (7)

    c) Give reason why JAVA is considered to be fully object oriented programming language. (5)

OR

    a) What is Java Virtual Machine. (3)

    b) What is JDK? Explain its various tools. (6)

    c) Write a Java Program to Sort Ten numbers using. Merge sort methods. (7)

Unit - IV

4. a) Write a JAVA Program to check the number even or odd. (8)

    b) Explain operator precedence with suitable example. (8)

OR

    a) Write a JAVA Program to print the following Pattern, input is number of lines

    1

    2   3

    4   5   6

    7   8   9   10 (8)

    b) Explain the following operators.

    i) Relational operators. (4)

    ii) Boolean logic operators. (4)

Unit - V

5. a) Explain the procedure of using classes from Built in Packages with the help of suitable example. (10)

    b) How interface is different from abstract class. (6)

OR

    a) What is package and how can we create a package in JAVA. Explain. (8)

    b) Write short notes on :

    i) Access Protection. (4)

    ii) Interface. (4)