

4E 2090**4E 2090****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)