04/07/2016

4E2090

Roll No. _____ Total No of Pages: 3

4E2090

B.Tech. IV-Sem (Main & Back) Exam; June-July 2016
Applied Electronics & Inst. Engineering
4AI6.1 Object Oriented Programming
BM, AI, EC, EI

Time: 3 Hours **Maximum Marks: 80**

Min. Passing Marks (Main & Back): 26

Min. Passing Marks (Old Back): 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 suitably be assumed and stated clearly.*

Units of quantities used/ calculated must be stated clearly.

Use of following supporting material is permitted during examination.

(Mentioned in form No.205)

1._____ 2._____

UNIT-I

Q.1 Explain the various important paradigm of object oriented programming with a programming example. [16]

OR

Q.1 (a) Explain the use of public, private & protected data members in class. [8]

(b) What is a class? How class and the instance of the class are created? [8]

UNIT-II

Q.2 What is constructor? How many types of constructors are in C++? Describe with the help of a suitable example. [16]

OR

Q.2 (a) What is friend function? Write a program to swap private data of two classes. [8]

(b) What is inheritance? Explain the types of inheritance in detail. [8]

UNIT-III

Q.3 (a) Explain the concept of Byte code in JAVA. [8]

(b) Give reason why JAVA is considered to be fully object oriented programming language. [8]

OR

Q.3 (a) What is applet? Explain life cycle of applet. [8]

(b) Explain different types of variable in JAVA and also JVM. [8]

UNIT-IV

Q.4 (a) Write a JAVA program to check the number even or odd. [8]

(b) Explain the following operators:

(i) Relational operators [4]

(ii) Boolean logic operators [4]

OR

Q.4 (a) Explain operator precedence with suitable example. [8]

(b) Write a program to sort an integer array in descending order. [8]

UNIT-V

Q.5 What is interface? How you will create an interface. Write all steps to create and implement an interface. How it is different with class? [16]

OR

Q.5 (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]
