3E1654

B.Tech. (Sem.III) (Main/Back) Examination, 2015
Electrical Engineering
3EE4 Object Oriented Programming

Time : 3 Hours]

[Total Marks : 80
[Min. Passing Marks : 26

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.

UNIT-I

(a) What do you understand by self referential structures. Explain it's application with suitable example. (8)
(b) Explain flow Array of structures is coveted initialized and used with the help of suitable example. (8)

OR

(a) Create a structure for student data, fill the data by using a function by passing that structure instance to function. Write C/C++ code. (8)
(b) State the advantages of object oriented programming. (4)
(c) Explain pointer to structure with example. (4)

UNIT-II

2. (a) Why 'New' is better than 'malloc' for dynamic memory allocation. (6)
   (b) Discuss various use of :: operator in C ++. (5)
   (c) Discuss difference between Pointers & References in C++. (5)

OR

2. (a) What is the use of 'this' pointer. Explain with example. (8)
   (b) What is friend function and friend class. Discuss with suitable C++ code. (8)

UNIT-III

3. Overload 'New' operator without overriding it. Write workable code.

OR

3. Overload + operator so that it can be used to concatenate two character strings. Write workable code.

UNIT-IV

4. What happens to Private, Public & Protected data of class B. When a class D is derived from B.
   (a) Publically   (b) Protectedly   (c) Privately
   Explain with suitable example.

OR

4. Explain Run time polymorphism, it's advantages and how it is implemented in C++. Also discuss abstract class and its purpose.

UNIT-V

5. Write short notes on following :
   (a) Type of Inheritance
   (b) Exception Handling

OR

5. Write short notes on following :
   (a) Standard Template Libraries
   (b) iostream.h