Roll No. .....

24032

B. Tech. 3rd Sem. (Elec. & Comm. Engg.)

Examination – December, 2012

DATA STRUCTURE USING 'C'

Paper : CSE-201-F

Time : Three hours] *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.

Note : Attempt any *five* questions by selecting at least *one* question from each Unit and *Q. No. 1 is compulsory*. All questions carry equal marks.

1. Write Short Notes on : 20

   (a) Priority Queues

   (b) Dynamic Allocation

   (c) Tree Reversal

   (d) File organization

UNIT – I

2. (a) Write Reverse algorithm for binary search. 10

(b) What do you mean by Data Structure ? Describe different types of Data Structure ? 10

3. What is "stack". How s stack can be represented in memory ? Also describe various application of stack. 20

UNIT – II

4. Write an algorithm to insert and delete an element from double linked list. 20

5. Give linked implementation of queues. 20

UNIT – III

6. (a) Explain threaded binary trees in detail. 10

(b) Explain the concept of B Trees in detail. 10

7. What is Graph ? Give Set, Linked and matrix representation of graphs. 20

UNIT – IV

8. How file can be managed in C ? Explain with example. 20

9. Write short notes on : 20

(a) AVL Trees

(b) Skip Lists