

24032

**B. Tech. 3rd Semester (IT) F- Scheme
Examination, December – 2016
DATASTRUCTURE USING 'C'
Paper–CSE-201-F**

Time allowed : 3 hours] [Maximum marks : 100

Note : The candidate have to attempt first compulsory question and one question from each of the four sections.

1. Explain the following :
 - (i) Complexity of Algorithms
 - (ii) Dynamic Allocation
 - (iii) Tree
 - (iv) File Concept. 20

Section–I

2. Define Data Structure. Explain the choice of right data structure. Also explain in detail about the types of data structure. 20
3. Describe the following :
 - (i) Shell Sort
 - (ii) Bubble Sort
 - (iii) Quick Sort 20

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Section-II

4. Explain the following :
- (i) Array of Pointer
 - (ii) Pointer Variables
 - (iii) Dynamic Allocation. 20
5. What is Linked List. Explain in detail about doubly linked list and operations on linked lists. 20

Section-III

6. What is Binary Tree. Explain its types and operations on Binary Trees. Also explain about threaded binary tree. 20
7. Give a complete discription about graphs. 20

Section-IV

8. What is File ? Explain in detail about file handling and file organization. 20
9. Describe the following :
- (i) AVL Tree
 - (ii) Skip List. 20