BCA/M-16
ADVANCED DATA STRICTURE
PAPER-BBA-241

Time Allowed: 3 Hours Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (i) Define Complete Binary Tree.
(ii) Define External and Internal path length.
(iii) What are the various Tree traversal algorithms?
(iv) What are the various Sorting algorithms?
(v) Define File and its attributes.
(vi) Define the various File operations.
(vii) What is the purpose of Dijkstra's algorithm?
(viii) What is Graph?

Unit-I

2. Write short notes on the following :
(a) Binary Search Tree.
(b) General Tree.

3. Explain Huffman's algorithm along with its implementation.

Unit-II

4. Explain various methods of representing graphs in memory.

5. Explain Warshall's algorithm for shortest path

Unit-III

6. Write short notes on the following :
(a) Merge sort.
(b) Radix sort

7. What do you mean by Sorting ? Explain Internal and External sorting, and compare various sorting and searching algorithms in terms of their complexity

Unit-IV

8. What do you mean by File organization ? Explain its various types.