

Total No. of Pages : 1

Register Number :

5908

Name of the Candidate :

B.C.A. DEGREE EXAMINATION DECEMBER 2013.

(SECOND YEAR)

(PART – III)

230 — DATA STRUCTURES AND ALGORITHMS

Time : Three hours

Maximum : 100 marks

PART A

Answer any EIGHT questions.

(8 × 5 = 40)

All questions carry equal marks.

1. Define Data Structures.
2. List out the basic operations that can be performed on a stack.
3. Mention the different types of Linked list.
4. State the differences between stacks and linked lists.
5. Define a tree.
6. What is meant by binary tree traversal?
7. Differentiate between merge sort and quick sort.
8. What is Bucket Sort?
9. Define Hashing.
10. Define Binary search tree.

PART B

Answer any THREE questions.

(3 × 20 = 60)

All questions carry equal marks.

11. Explain in details about Stack and Queue operations.
 12. Elaborate the implementation of a Linked List.
 13. Explain about Huffman Algorithm in details.
 14. Describe the Merge and Quick Sort with suitable example.
 15. Discuss in details about Tree Searching.
-