Register Number :

Name of the Candidate :

6 6 9 7

B.C.A. DEGREE EXAMINATION, 2008

(SECOND YEAR)

(PART - III)

(PAPER - IX)

230. DATA STRUCTURES AND ALGORITHMS

(Revised Regulations)

(Including Lateral Entry)

December]   [Time : 3 Hours

Maximum : 100 Marks

PART - A $(8 \times 5 = 40)$

Answer any EIGHT   questions.
All questions carry equal marks.

1. What is meant by data type ? Write short notes on its various types.

Turn over

2. What is a queue ? Write a short note on priority queue.

3. Explain the deletion of a node from the singly linked list with the procedure.

4. Explain the operations on the circular queue.

5. Write a brief note on the threaded representation of the binary tree.

6. Write a short note on the properties of a binary search tree.

7. Explain the procedure of insertion sort with an example.

8. Explain merge sort with the procedure.

9. Write a brief note on folding method in hashing technique.

10. Explain binary search method with an example.

PART - B   (3 × 20 = 60)

Answer any THREE questions.
All questions carry equal marks.

11. Describe the applications of stack.

12. Write the procedures for adding two polynomials.

13. Explain in detail, about the binary tree traversal methods.

14. Describe tree sorting method.

15. Describe general search trees.