TIME-3HOUR
MARKS-100

ANSWER ALL QUESTIONS

SECTION A [8*5=40]

1.a) Differentiate b/w selection & bubble sorting techniques.

b) Explain different hashing functions.

c) Differentiate b/w singly linked list& doubly linked list.

d) Explain the procedure for the conversion of infix expressions to postfix expression.

e) What are significance of expression trees?

f) How trees are represented using linked lists?

g) Explain prims algorithm for the construction of minimum spanning tree.

h) What are adjacency matrices? What is its role in graph representation?

SECTION B [4*15=60]

2. Discuss the various searching algorithms & explain how complexity can be determined.
                    OR
3. With a suitable eg show how quick sort & heap sort take place.

4. a) Differentiate b/w queues dequeues.

b) Explain how priority queues are being implemented.
                    OR
5. Briefly explain the procedure for the evaluation of post fix expression.

6. Briefly discuss about the various binary tree traversal techniques
                    OR
7. What are AVL trees? Explain how it is being represented in memory?

8. What is meant by 'minimum spanning tree'? Explain any technique for the implementation of minimum spanning tree.
                    OR
9. a) Discuss the various graph transversal techniques.

b) Explain Dijkstras algorithm.