

(2)

- (g) What is binary tree ?
 - (h) What is external sorting ? Write the name of external sorting algorithm.
 - (i) What is heap ?
 - (j) What is algorithm ? Write the major factor in analysis of algorithm.
2. Write an algorithm to delete a given element from the one-dimensional array. 15

OR

What is array ? Explain its types with suitable example.

3. Write an algorithm to find the location of the given element in the circular linked list. 15

OR

Write an algorithm to insert an element at any position in the doubly linked list.

4. Evaluate the following postfix expression using stack. 15

$AB + C * DE - FG + * \dots$

OR

(3)

What is DFS ? Write an algorithm of DFS with example.

5. What is heap sort ? Explain heap sort algorithm with example of at least 8 elements. 15

OR

What is Binary Search Tree ? Explain binary algorithm with example.

6. Explain the best case, average case and worst case time complexity of the quick-sort algorithm. 15

OR

Explain the best case, average case and worst case time complexity of the insertion sort algorithm.
