

MAY 2017

ID 6609/GSG

Time : Three hours

Maximum : 75 marks

PART A — ($5 \times 6 = 30$ marks)

Answer any FIVE questions.

1. Define Asymptotic Notations, Complexity Analysis.
2. What is an Array and its types? Explain any one operation.
3. Explain the applications of stack structure.
4. What is Binary tree with an example?
5. Explain about the operation of singly linked list.
6. Discuss on the types of graphs.
7. Describe about the preorder traversal with algorithm.
8. Explain the AVL Trees.

PART B — ($3 \times 15 = 45$ marks)

Answer any THREE questions.

9. What is data structure? Explain about primitive and composite data type.
10. Discuss on different types of Tree traversals.

11. Describe insertion sort algorithm with the suitable example.
 12. (a) What are the advantages and types of linked list?
(b) Write an algorithm to perform polynomial addition.
 13. Discuss in detail, binary trees and binary tree traversals.
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