

MAY 2014

**P/ID 17507/PCASG**

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Time : Three hours

Maximum : 100 marks

PART A — ( $6 \times 5 = 30$  marks)

Answer any SIX questions.

1. Write notes on Abstract data types.
2. Write a procedure to insert an element into a single linked list.
3. Discuss on linked stack.
4. Write down the properties of a binary tree.
5. Write notes on graph.
6. Explain insertion sort.
7. How to insert a new node in a Binary tree?
8. Write notes on AVL trees.

PART B — ( $7 \times 10 = 70$  marks)

Answer any SEVEN questions.

9. Give a detailed note on Asymptotic Notation.
10. Explain the various representation of arrays.

11. Write brief notes on Queue.
  12. Explain the representation of doubly linked list.
  13. Explain Binary tree traversal.
  14. Describe Kruskal's algorithm.
  15. Explain 2-way merge sort.
  16. Write notes on sorting with disks.
  17. Discuss on Hash functions in detail.
  18. Write brief note on B-trees.
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