

MAY 2015

P/ID 17516/PCASS

Time : Three hours

Maximum : 100 marks

PART A — ($6 \times 5 = 30$ marks)

Answer any SIX questions.

1. Discuss on Recursive algorithm.
2. Write notes on primality testing.
3. Write the control abstraction for Greedy method.
4. Discuss on connected components and spanning trees.
5. Write notes on biconnected components.
6. Explain the concept of sum of subsets problem.
7. Write notes on Branch – and – Bound method.
8. Write the algorithm for non-deterministic sorting.

PART B — ($7 \times 10 = 70$ marks)

Answer any SEVEN questions.

9. Write an algorithm to find the maximum and minimum values from a set of n elements.
10. Write notes on Divide and Conquer method.

11. Give detailed note on job sequencing with dead lines.
 12. Discuss on optimal storage on tapes.
 13. Describe the multistage graph problem. Also develop an algorithm for the same using backward approach.
 14. Explain single source shortest paths.
 15. Write notes on least cost search.
 16. Explain traveling salesperson problem using branch and bound method.
 17. Describe the oracles and adversary arguments.
 18. Discuss on lower bounds through reductions.
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