

MAY 2015

**P/ID 17461/RCL/
PCAL**

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write short notes on Divide and conquer methods.

Or

- (b) Write short notes on performance measurement.

2. (a) Explain Tree vertex splitting.

Or

- (b) What is meant by single source shortest path?

3. (a) Write notes on sum of subsets.

Or

- (b) Discuss on Depth first search and traversal.

4. (a) Discuss on FIFO branch and Bound.

Or

- (b) Write short notes on 0/1 Knapsack problem.

5. (a) What is meant by merging?

Or

(b) Write short notes on disjoint sets problem.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Write an algorithm to find maximum and minimum values in a given set of 'n' elements.

7. Discuss on strassen's matrix multiplication.

8. Explain string editing.

9. Discuss on travelling salesman problem.

10. Discuss on Graph coloring.

11. Explain Algebraic manipulation.

12. Explain the clauses of NP-hard and NP – complete.

13. Discuss on cook's theorem.
