

**M.C.A. DEGREE EXAMINATION –
DECEMBER, 2018.**

Second Year

DESIGN AND ANALYSIS ALGORITHMS

Time : 3 hours

Maximum marks : 75

PART A — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

1. How to design an algorithm?
2. Write note on Correctness of Algorithm.
3. Write down the Linked List Representation with neat sketch.
4. Explain about the Top-Down Structured Program.
5. Write a Recursion algorithm for Fibonacci series.
6. Discuss about the basic problem solving methods in DAA.
7. Write an algorithm for Quick Sort.

PART B — ($5 \times 10 = 50$ marks)

Answer any FIVE questions.

8. Briefly explain about the steps to develop an algorithm.
 9. Explain about development of a model.
 10. Explain briefly about algorithm in trees with neat sketch.
 11. Describe about the performance analysis of heap sort.
 12. Explain about traveling sales man problem with an example.
 13. Write an algorithm for back track problem in detail.
 14. What are the sorting techniques? Explain in detail.
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