

**MCA-948**

**MCA-03/  
PGDCA-02**

**M.C.A. DEGREE/P.G.D.C.A. EXAMINATION –  
JANUARY, 2015.**

**First Year**

**DATA STRUCTURES THROUGH 'C'**

**Time : 3 hours**

**Maximum marks : 75**

**PART A — (5 × 5 = 25 marks)**

**Answer any FIVE questions.**

1. Bring out the structure of C program. Give example.
2. Explain pointer with example.
3. Distinguish between structure and union.
4. Write a program for C language to find factorial for the given number.
5. Write short notes on circular linked list.
6. Explain the operations on stack.
7. Discuss about linear search.

PART B — ( $5 \times 10 = 50$  marks)

Answer any FIVE questions.

8. Write a program in C to find sum and average of given n values.
  9. Explain while and do-loop in C with example.
  10. Discuss about arrays and its types.
  11. Explain about function and passing function to function with example.
  12. Explain the concept of queue and its operations.
  13. Briefly discuss about depth first search. Explain with example.
  14. Explain various types of tree traversals with example.
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