

MCA-103

**MCA-03/
PGDCA-02**

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

First Year

DATA STRUCTURES THROUGH C

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What are the primitive data types in C?
2. List any four Input and Output functions in C.
3. Difference between structures and unions.
4. Explain call by value and call by reference.
5. Compare and contrast linked list and queue.
6. What are the two types of traversals in a graph?
7. Explain the types of file organizations in C.

PART B — ($5 \times 10 = 50$ marks)

Answer any FIVE questions.

8. Write short notes on control structures in C.
 9. Write about function definition and declaration.
 10. Explain passing pointers and arrays to function with suitable examples.
 11. Write short notes on text files and binary files.
 12. Explain the queue operations.
 13. Explain AVL trees and B-Tree.
 14. Describe the sorting techniques.
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