

## DATA STRUCTURE

Max. Marks: 60  
Internal Assessment: 20  
Time: 3 Hours

**Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 10 marks each.**

Data structure: linear and least structures: array definition, type, address calculation, stack: push/pop algorithms, applications.

Queue: INS/DEL algorithm, double and circular queue concept only.

List: single linked list, algorithm and double linked list and circular linked list concepts; B-Tree concept.

Files: serial, sequential, indexed, direct, multi-list.

**Practical: Implementation of Data Structure Using C Language**

### REFERENCES

- S. K. Srivastava and Deepali Srivastava, Data Structures Through C in Depth, BPB Publisher
- A. Tanenbaum, T. Langsam and A.S. Augenstein Data Structures Using C, Prentice Hall of India.
- Seymour Lipschultz, Theory and Practical of Data Structure, McGraw Hill.