

Exam. Code : 107204

Subject Code : 2128

Bachelor of Computer Application (BCA)

4th Semester

DATA STRUCTURES & FILE PROCESSING

Paper-I

Time Allowed—3 Hours]

[Maximum Marks—75

Note :— Attempt any **FIVE** questions. All questions carry equal marks.

1. (a) Discuss any three applications of stacks with suitable examples.
(b) Write down the relative advantages and disadvantages of arrays and linked lists.
2. Write algorithm for converting arithmetic expression from infix notation to polish notation.
3. Show with an example how can graphs be represented in computer memory ? Give relative merits and demerits of each representation scheme.
4. Explain how the following elements will be inserted in a binary search tree :

A,V,L,T,R,E

5. Explain the algorithm for Heap Sort.
6. Explain the algorithm for Binary Search.
7. Explain the concept of blocking and compaction in File Organization.
8. Explain the concept of indexed Sequential Technique in File organization for accessing data.