Bachelor of Computer Application (BCA) 4th Semester
(Batch 2023-26) (CBGS)
DATA STRUCTURE AND FILE PROCESSING
Paper : BCA04001T

Time Allowed—3 Hours]   [Maximum Marks—100

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Briefly discuss complexity of algorithm.

2. Write short notes on :

   (a) Stacks

   (b) Arrays.

SECTION—B

3. What is binary search tree ? How it is represented in memory ?

4. Discuss breadth first search algorithm for traversing a graph.

SECTION—C

5. Write an algorithm for Bubble Sort. Discuss with an example.

6 Write short notes on :

(a) Insertion sort.

(b) Selection sort.

SECTION—D

7. Briefly explain the following :

(a) Sequential file organization

(b) Indexed sequential file organization.

8. Discuss the concept of master and transaction files.