(i) Printed Pages : 2 Roll No. .....

(ii) Questions : 9 Sub. Code : 0 3 8 9

Exam. Code : 0 0 0 4

B.A./B.Sc. (General) 4th Semester

1048

COMPUTER APPLICATIONS

Paper–CA-07 : Data Structure

Time Allowed : Three Hours] **[Maximum Marks : 30**

Note :— (1) Attempt **one** question each from Sections A, B, C and D. Section E is compulsory.

(2) All questions carry equal marks.

SECTION—A

1. Define data structure along with its basic operations. 6

2. Explain the various operations performed on Arrays. 6

SECTION—B

3. What is linked list ? Draw difference between simple linked list and header linked list. 6

4. Explain different operations performed on stacks. 6

SECTION—C

5. What is Binary Tree ? Explain various operations on it. 6

6. Draw the difference between Queues and Trees. 6

SECTION—D

7. Compare two searching techniques in detail. 6

8. What do you mean by sequential and linked representation of graph ? 6

SECTION—E

9. Explain the following terms :

   (a) Big O notation

   (b) Searching and sorting

   (c) Doubly linked list. 3×2=6