

Professional Course (Odd) Examination, 2025

(3rd Semester)

BACHELOR OF COMPUTER APPLICATIONS

(Data Structure using C Lab)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

PART—A

A. Answer any *two* of the following questions : 10×2=20

1. Write a C program using bubble sort.
2. Write a recursive C program for solving the Tower of Hanoi problem.
3. Write a C program using insertion sort.

PART—B

B. Answer any *two* of the following questions : 15×2=30

1. Write a C program to construct singly linked list and perform the following operations :
 - (a) Insert (first, middle, last position)
 - (b) Delete (first, middle, last position)
 - (c) Display

2. Write a C program to simulate the working of a queue of integers using array. Provide the following operations :

(a) Insert

(b) Delete

(c) Display

3. Write a C program to construct circular linked list for the following operations :

(a) Insert

(b) Delete

(c) Display

C. Practical record book.

10

D. Viva voce.

15
