CODING

Professional Course Examination (Odd), 2023

Semester **: 3**

Subject Code **: BCA/3/CC/18**

Subject **: Bachelor of Computer Applications**

Name of the Paper **: Data Structure using C Lab (Practical)**

Date of Examination **: 14-11-2023**

No. of Answer Sheet(s) Used : _____

Full Marks : 75 **Time : 3 Hours**

INSTRUCTIONS TO CANDIDATES

Please read the instructions carefully before you start writing your answers.

1. Questions should be attempted as per instructions.
2. Candidate should clearly indicate the Question Nos. and the Page No. for each sheet.
3. Please write your Roll No. and Registration No. clearly and correctly in the space provided.
4. Do not write your name or the name of your college/institution anywhere or anything else, which is not part of your answer.
5. Candidate should make sure that the answer sheets scanned should be legible.
6. The Invigilator on duty should confirm that the correct script is received, compiled and attached to the correct Cover Page.
7. Multiple Choice Answer should indicate the Question No., Sub. No., (if any) and the correct answer. For example—

   1. *Name the state capital of Mizoram.*
   (a) Lunglei
   (b) Champhai
   (c) Aizawl
   (d) Mamit

   Candidate should provide answer as **1 (c) Aizawl**

   [Candidate should avoid writing only (c)]

Question Nos.	Marks
Total	

CODING

To be filled in by the Candidate

Date of Examination
14-11-2023

Semester **: 3**

Subject Code
BCA/3/CC/18

Subject
Bachelor of Computer Applications
(Practical)

Roll No. _____

Regn. No. _____

No. of Additional Sheet(s) :

_____

Scrutinizer's Signature *Examiner's Signature* *Invigilator's Signature*

DO NOT WRITE HERE

Professional Course Examination (Odd), 2023

(3rd Semester)

BACHELOR OF COMPUTER APPLICATIONS

Course No. : BCA/3/CC/18

(Data Structure using C Lab)

(Practical)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

SECTION—A

(*Marks* : 30)

I. Answer any *two* from the following : 15×2=30

1. Search an element on a given list of integers using tower of Hanoi using recursive function.

2. Write a C program to implement binary search.

3. Write a C program using selection sort.

4. Write a C program using bubble sort.

SECTION—B

(*Marks* : 20)

II. Answer any *one* from the following : 20

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

   (a) Insert

   (b) Delete

   (c) Display

2. Write a C program using dynamic variables and pointers to construct a stack of integer using linked list and to perform the following operations :

   (a) Push

   (b) Pop

   (c) Display

   The program should print appropriate messages for stack overflow, stack underflow and stack empty.

3. Write a C program to construct circular linked list :

   (a) Insert

   (b) Delete

   (c) Display

SECTION—C

(*Marks* : 25)

III. Viva voce. 15

IV. Practical record book. 10

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