Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem.–1)
PROBLEM SOLVING USING C
Subject Code : UGCA-1903
M.Code : 76963
Date of Examination : 08-06-2024

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

SECTION-A

1. **Write briefly:**

   a) What is pseudo code? Give an example of it.

   b) How do you skip the current iteration and continue to the next one?

   c) What are symbolic constants?

   d) Define uniary operator with an example.

   e) How do you print integers with leading zeros using printf()?

   f) What is the purpose of a loop's condition?

   g) Define recursion.

   h) What is a address of a variable?

   i) Define static variable.

   j) What is union?

SECTION-B

2.   Name and describe the five basic data types in C along with their memory requirements and range.

3.   Write a program in C language to find the smallest number among three numbers. Also, draw its flowchart.

4.   Write a program to print the following structure using for loop.

```
        *

        *       *

        *       *       *

        *       *       *       *
```

5.   Write a program in C language to subtract two matrixes of size [3×3].

6.   What is structure in C language? Create a structure for storing and accessing information [name, roll marks] of students.

7.   Explain the storage classes available in C language.