

Roll No.

BCA(N)-101

1st Semester Examination, 2023 (Dec.)

Programming Using C

Time : 2 Hours]

[Max. Marks : 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION—A

(Long Answer Type Questions)

Note: Section 'A' contains Five (05) long answer type questions of nineteen (19) marks each. Learners are required to answer any two (02) questions only.

2×19 = 38

1. Explain the different types of loops in C with syntax.
2. What is function ? Explain different classification of user defined functions based on parameter passing and return type with examples.

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(1)

[P.T.O.]

3. What is a pointer? Explain how the pointer variable declared and initialized.
4. Explain different categories of pre-processor directives used in C.
5. What is array? Explain the declaration and initialization of one dimensional and two dimensional array with an example.

SECTION—B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

$$4 \times 8 = 32$$

1. Write a C program in C to find the area and perimeter of a circle.
2. Explain the basic structure of a C program with an example.
3. Write a C program to find the largest element in an array.

4. Define string. How string is declared and initialized?
Explain string input/output functions with an example.
5. Explain the difference between user defined and library functions.
6. Differentiate between call by value and call by reference with examples.
7. Write a C program to calculate the Fibonacci sequence using recursion functions.
8. What is the difference between Structure and Union in C? Explain with example.
