

A-1291

Total Pages : 3

Roll No.

MCS-401/DCA-101

Introduction to Programming Using C

Examination February, 2026

Time : 2:00 Hrs.

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. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section–A

(Long Answer Type Questions) (2×19=38)

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.

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(1)

P.T.O.

1. What is an operator ? Explain the arithmetic, relational, logical, and assignment operators in C language
2. Explain the different types of loops in C with syntax and example.
3. Explain array of structures and structure within a structure with examples.
4. What is a pointer ? Explain how the pointer variable declared and initialized.
5. (a) What is the difference between the functions getch(), getchar() and getche() ?
(b) Give the difference between 'while loop' and 'do while loop' with example.

Section–B

(Short Answer Type Questions) (4×8=32)

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.

1. Write a program to check whether given number is Armstrong number or not.

2. Differentiate between pass by value and pass by reference.
3. What does a storage class mean ? Explain different storage classes available in C.
4. Explain the basic data types in 'C'.
5. Write a program using recursive function to find factorial of given number.
6. What is an array ? Explain the declaration and initialization of one and two dimensional arrays with example.
7. Write short notes on the following :
 - (i) Pointer to function
 - (ii) Function Prototype
8. What is Dynamic Memory allocation ? Explain the functions of Dynamic Memory allocation.
