Roll No.

### G - 1809

# P.G. DIPLOMA IN COMPUTER APPLICATION

(First Semester)

Examination, Dec.- Jan., 2022-23

(New Course)

**PROGRAMMING IN C** 

(PGDCA-103)

Time: Three Hours]

[Maximum Marks: 80

Note: Attempt any two parts from each unit. All questions carry equal marks.

#### (Unit-I)

- (a) Define variable? How do you read and display variables? Explain with example.
  - (b) Describe format specifiers for scanf with example.
  - (c) Write a program in C to calculate the area of a rectangle.

Write the differences between structure and union

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#### (Unit-II)

- (a) Write a program in C to input three numbers and find the big one.
  - (b) Write a program in C to demonstrate switch statement.
  - (c) Define recursion? Write a program in C to find the factorial of any inputted number using recursion.

#### (Unit-III)

- (a) Write a program in C to sort the 10 names in ascending order.
  - (b) Write a C program to demonstrate pointer to pointer.
  - (c) Write a C program to demonstrate pointer and function.

## (Unit-IV)

- 4. (a) Explain structure within structure with suitable example.
  - (b) Write a C program to demonstrate array within structure.
  - (c) Write the differences between structure and union.

#### (Unit-V)

- (a) What is dynamic memory allocation? Explain the library functions for dynamic memory allocation.
  - (b) Describe the buffered and unbuffered file with example.
  - (c) How do you handle error in a file? Explain with example.

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