

Roll No.

E-1890

**P. G. Diploma in Computer Application
(First Semester)**

EXAMINATION, Dec.-Jan., 2020-21

(New Course)

PROGRAMMING IN C

(PGDCA—103)

Time : Three Hours]

[Maximum Marks : 100

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

Unit—I

1. (a) Write short notes on the following :
 - (i) Identifiers
 - (ii) Keywords
 - (iii) Constant
 - (iv) Variables
 - (v) Character Set
- (b) What are various operators used in C ? Explain in detail with example.
- (c) Write short notes on the following :
 - (i) Basic input-output functions in C
 - (ii) Various format specifiers for scanf.

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Unit—II

2. (a) What is if statement and if-else statement ? Write a C program to find largest among three numbers using if-else statement.
- (b) Explain difference between while and do-while loop with example.
- (c) Explain the concept of function in detail. Write a C program to swapping of two integer numbers using function.

Unit—III

3. (a) What is array ? Write a C program to add the elements of array.
- (b) What is pointer ? Explain the use of pointer, address operator, pointer variable and referencing pointer with example.
- (c) Write short notes on the following :
 - (i) Pointer arithmetic with example
 - (ii) Passing array to function with example

Unit—IV

4. (a) What do you understand by structure in C ? Explain how to declare and initialize structure, with suitable example.
- (b) Write short notes on the following :
 - (i) Structure within structure
 - (ii) Union
- (c) Explain the concept of array of structure and array within structure.

[3]

Unit—V

5. (a) What are various dynamic memory allocation functions ? Explain.
- (b) What are various file handling functions used in C ? Explain.
- (c) Write short notes on the following :
- (i) Dynamic multi-dimensional array
 - (ii) Error handling.