

**G-1/606/22**

Roll No. ....

**I Semester Examination, January 2022**

**PGDCA**

**Paper III**

(Programming in “C”)

Time : 3 Hours ]

[ Max. Marks : 80

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

**Unit-I**

1. (a) What do you understand by constant, variables and format specifiers for scanf( ) explain both with example.
- (b) List out header files which can be include in C program ? Why are they included ? What are header file ?
- (c) Write a C language program to convert binary number to a decimal number.

**Unit-II**

2. (a) Explain the concept of function in detail. Write a C program to swapping of two integer number using function.

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- (b) Explain difference between while and do-while loop with example.
- (c) What is if-statement and if-else statement ?  
Write a C program to find largest three number using if-else statement.

### Unit-III

- 3. (a) What is Array ? What is multidimensional array ? Write a C program to add the elements of array.
- (b) Write short notes on the following :
  - (i) Pointer,
  - (ii) Referencing pointer,
  - (iii) Pointer to pointer,
  - (iv) Pointer constants.
- (c) Write a C program to count the number of Vowels in string using pointer.

### Unit-IV

- 4. (a) What is Union ? Write a C program to illustrate the use of Union.
- (b) Explain array of structure with suitable example.

- (c) Write a C program that demonstrate passing structure to function.

### Unit-V

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

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