Roll No.

# **E-1884**

# Diploma in Computer Application (First Semester) EXAMINATION, Dec.-Jan., 2020-21

# (New Course)

PROGRAMMING IN 'C' LANGUAGE

#### (DCA-103)

Time : Three Hours ]

[ Maximum Marks : 100

[ Minimum Pass Marks : 33

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

#### Unit—I

- 1. What are various Input/Output functions used in C language ? Explain output formatting.
- 2. Explain the structure of C program with the help of proper example code blocks.
- 3. Write a program to find simple interest on basis of input given by user.

## Unit—II

- What do you mean by operator procedure and associativity ? Give proper examples.
- 5. Give the examples to explain what is the use of relational and logical operators.
- 6. Write a program to find sum of first and last digit of a four digit number given as input by user.

## Unit—III

- 7. Write a program to check a number entered by user is Armstrong number or not.
- 8. What are Arrays ? Explain its types, various declaration and memory representation.
- 9. Write difference between the following :
  - (i) if and switch
  - (ii) break and continue

# Unit—IV

- 10. Write a program to find factorial of a number using function blocks.
- 11. What are structures ? How do we declare structure ? Explain use and memory representation of structure.
- 12. What do you mean by Recursion ? Explain the basic conditions that must be satisfied for a proper recursion.

# Unit—V

13. Explain pointer arithmetic.

- 14. Write a program to show how we can pass array into functions with the help of pointers.
- 15. Explain any two of the following :
  - (i) Pointer to pointer
  - (ii) Array of pointer and pointer to array
  - (iii) Referencing and void pointers

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