TED (15/19) – 4044
(Revision – 2015/19)

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Reg.No……..
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER – 2023

PROGRAMMING IN C

[Maximum Marks : 100] [Time : 3 hours]

PART – A
(Maximum Marks : 10)

Marks

I. Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Define variables in C.
2. State sentinel-controlled loop.
3. State any limitations of using scanf for reading strings.
4. State function prototype.
5. Define user defined function. (5x2=10)

PART – B
(Maximum Marks : 30)

II. Answer any **five** of the following questions. Each question carries 6 marks.

1. Describe the four basic data types in c.
2. Write a program to output multiplication table of any number.
3. Illustrate counter controlled loop with example.
4. Write a c program using while loop to i/p a number and o/p its sum of digits.
5. Write Six features of pointers.
6. Describe how to declaring and initializing string variables.
7. Differentiate call by value and call by reference.

(5x6=30)

PART – C

(Maximum Marks : 60)

(Answer **one full** question from each unit. Each full question carries 15 marks)

UNIT – I

III. (a) Explain different operators in C. (12)

(b) State precedence of arithmetic operators. (3)

OR

IV. (a) Write a programme using switch case. (8)

(b) Describe if and if-else statement. (7)

UNIT – II

V. (a) Write a C programme to find smallest in an array. (8)

(b) Write a C programme to print a matrix using two dimensional array. (7)

OR

VI. (a) Describe while and do while loop. (8)

(b) Explain how one dimensional array can be created. (7)

UNIT –III

VII. (a) Explain pointers and pointer arithmetic. (7)

(b) Explain any four string manipulation functions. (8)

OR

VIII. (a) Write a programme to print the address of a variable along with its value. (7)

(b) Write a C program that reads a string and print if it is a palindrome or not. (8)

UNIT – IV

IX. (a) Write a C program to illustrate the use of user defined functions. (8)

(b) Illustrate array operations using functions. (7)

OR

X. (a) Describe Recursion and write a C program using Recursion. (9)

(b) Illustrate array operations using pointers. (6)

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