DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 2025

PROGRAMMING IN C

[Maximum Marks: **100**]   [Time: **3** Hours]

PART-A
[Maximum Marks: **10**]

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

  1. Define constants in C language.

  2. Give the syntax of switch selection structure in C language.

  3. Write the example for nested looping by using for loop.

  4. How to read strings from a variable in C language.

  5. List different methods of passing arguments to a function.   (5 x 2 = 10)

PART-B
[Maximum Marks: **30**]

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

  1. Explain any three data types in C language.

  2. Explain any input and output function in C language.

  3. Compare entry controlled and exit controlled loops in C language.

  4. Write a C program to read M x N matrix.

  5. Define String. Explain declaration of string in C language.

  6. Write a C program to find largest of two numbers using user defined function..

  7. Explain recursive function in C language with any example.   (5 x 6 = 30)

PART-C
[Maximum Marks: **60**]
(Answer *one* full question from each Unit. Each full question carries **15** marks)

UNIT – I

III.   a. Explain the structure of C programming   with an example.   (8)

         b. Write a C program to find sum of three numbers, by reading data from keyboard.   (7)

OR

IV.   a. Explain different types of operators in C language.   (8)

         b. Write a program using if-else statement in C.   (7)

UNIT – II

V.   a. Explain the counter-controlled loop in C with an example. (8)

b. Write a C program to find largest element in an array. (7)

OR

VI.   a. Write a C program to find average of N numbers in an array. (8)

b. Explain the one-dimensional array declaration and initialization. (7)

UNIT- III

VII.   a. Explain any four string functions in C language. (8)

b. Explain the use of pointer in C programming language. (7)

OR

VIII.   a. Write a C program to check the given string is palindrome or not. (8)

b. Explain any two pointer arithmetic in C language. (7)

UNIT - IV

IX.   a. Write a C program to find the sum of three numbers using user defined function. (8)

b. Explain the structure of user defined function. (7)

OR

X.   a. Write a C program to find the smallest elements in an array using a user defined function. Use pointer to pass the array into the function. (8)

b. Explain actual and formal parameters in C language. (7)

****