

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2024**

PROGRAMMING IN C

(Maximum Marks:100)

(Time: 3 Hours)

PART - A

(Maximum Marks : 10)

Marks

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

1. Define local variable in C language.
2. Name any two multi way selection structure in C.
3. Define one dimensional array in C.
4. Define pointer in C language.
5. Define formal parameters in C language.

(5 x 2 = 10)

PART - B

(Maximum Marks: 30)

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

1. Explain relational and logical operators in C language.
2. Write a C program to find largest of two numbers.
3. Explain counter controlled looping in C language.
4. Write the syntax of while, do-while loop in C.
5. Briefly explain any three string function in C language.
6. Explain the structure of user defined function with example.
7. Differentiate call by value and call by reference.

(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.

(8)

(b) Write a C program to find area of rectangle (area=length * width). (7)

OR

IV (a) Explain data types in C programming language. (8)

(b) Write a program using switch statement in C. (7)

UNIT – II

V (a) Explain for loop nested looping in C language with example. (8)

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

OR

VI (a) Write a C program to find transpose of a matrix. (8)

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

UNIT – III

VII (a) Explain pointer arithmetic in C language. (8)

(b) Write a C program to find reverse of a string without using string function. (7)

OR

VIII (a) Explain the use of pointer in C programming language. (8)

(b) Write a C program to find length of a string without using string function. (7)

UNIT – IV

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

(b) Explain array operations using pointers. (7)

OR

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

(b) Explain recursion with the help of an example. (7)
