

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE – NOVEMBER -2020.

**PROGRAMMING IN C**

(Maximum Marks :75)

[Time : 2.15 hours]

**PART–A**

Marks

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

1. List any two bitwise operators in C.
2. Give the syntax of do-while loop.
3. Define a pointer variable.
4. Explain the syntax to compare two strings.
5. Define global variables.

(3x2=6)

**PART - B**

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

1. List the rules for defining variables.
2. Write a C program to find the larger of two numbers using conditional operator.
3. Write a C program to delete an element into an array.
4. Explain **for** loop with the help of an example.
5. Explain any three possible pointer arithmetic operations.
6. Describe the advantages of using user-defined functions.
7. Explain recursion with the help of an example.

[4x6 =24]

**PART - C**

(Answer **any of the three units** from the following. Each full question carries 15 marks)

**UNIT I**

- III** (a) Explain any four data types with example. (8)
- (b) Write a C program to check whether a given character is a vowel or not. (7)

**OR**

- IV** (a) Explain the structure of a C program with an example. (8)
- (b) Write a C program to perform addition, subtraction, multiplication or division on two integers based on the operator entered by the user using switch statement. (7)

**UNIT- II**

- V** (a) Compare entry controlled and exit controlled loop with example. (8)
- (b) Write a C program to find the transpose of a 3x3 matrix. (7)

**OR**

- VI** (a) Explain creation, initialization and accessing of one dimensional array with example. (8)
- (b) Write a C program to find the factorial of a number using while loop. (7)

**UNIT- III**

- VII** (a) Explain any four string handling functions with example. (8)
- (b) Write a C program to reverse a string using pointers. (7)

**OR**

- VIII** (a) Explain declaration, assigning and accessing of pointers with example. (8)
- (b) Write a C program to check whether the given string is palindrome or not. (7)

**UNIT – IV**

- IX** (a) Explain the different category of functions based on arguments and return value. (8)
- (b) Write a C program to find the sum of digits of the number using a function. (7)

**OR**

- X** (a) Differentiate call by value and call by reference. (8)
- (b) Write a C program to find the sum of array elements using a function. Pass array as arguments to the function. (7)

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