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TED (15/19) -2131  
(Revision- 2015/19)

**A21-03294**

Reg.No.....  
Signature. ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE – APRIL -2021.

**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. What are keywords?
2. Write the syntax of Switch statement.
3. Define a function.
4. Write a statement to declare an array to store 10 integer numbers.
5. Define a string.

(3x2=6)

**PART - B**

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

1. Explain the syntax of for loop with example.
2. Explain the features of C Preprocessor.
3. Describe recursion with example.
4. Write a C program to find the sum of N numbers in an array.
5. Describe pointer to an array with an example.
6. Describe how to initialize a string and write any two methods to read a string..
7. Describe syntax with example of a structure and also describe how to refer its members in a program.

[4x6 =24]



**PART - C**

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

**UNIT I**

- III** (a) Explain the different types of operators in C with suitable Examples. (9)  
(b) Distinguish between Break and Continue statements in C. (6)

**OR**

- IV** (a) Explain various forms of if statement with examples. (9)  
(b) Write a C program to find the sum of odd numbers from 1 to N. (6)

**UNIT- II**

- V** (a) Differentiate between macro and a function. (8)  
(b) Explain about the Storage classes in C. (7)

**OR**

- VI** (a) Distinguish between call by value and call by reference. (7)  
(b) Describe the different data types in C. (8)

**UNIT- III**

- VII** (a) Explain how an integer array is declared and initialized. (6)  
(b) Write a C program to add two MXN matrices. (9)

**OR**

- VIII** (a) Write a function to find the average of an array of N elements. Also  
Write the main program to call the function. (7)  
(b) Write a C program to read members into an array, assign the array to  
a pointer and print the largest element in the array using pointer. (9)

**UNIT – IV**

- IX** Explain the string functions with suitable examples strlen(), strcpy (),  
strcat(),strcmp(). (15)

**OR**

- X** (a) Write a program using an array of structures to read Reg.number, Name,  
Mark1 Mark2 and Mark3 of M students in a class and print the  
Reg.number,Name,Mark1,Mark2,Mark3 and total mark of each student. (10)  
(b) Explain how to declare array of structures. (5)