



TED (15) – 4044

Reg. No.

(REVISION — 2015)

Signature

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2019

PROGRAMMING IN C

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. List any two relational operators with example.
2. Define entry controlled loop.
3. Write the syntax to declare a one dimensional array.
4. List any four library functions used for string manipulation.
5. Define function in C.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Write a C program to print average of 3 numbers.
2. Demonstrate input and output functions for a simple application.
3. Illustrate the syntax of do-while and while loop.
4. List the pointer arithmetic operations and illustrate any two with suitable examples.
5. Write a C program to concatenate two strings using string functions.
6. Compare local and global variables in C.
7. Explain Recursion with suitable examples.

(5×6 = 30)

PART -- C

(Maximum marks : 60)

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

UNIT -- I

- III (a) List and explain any 6 arithmetic operators in C with example. 6
- (b) Write a C program to read the day number (between 1 and 7) and display the corresponding day name (1 -Mon, 2-Tue, 7-Sun) using switch statement. 9

OR

- IV (a) Explain two way and multi way selection structure in C with neat diagram. 8
- (b) Write a C program to find the perimeter and area of a rectangle. 7

UNIT -- II

- V (a) Write C program to find the sum of first N natural numbers using for loop. 8
- (b) Write C program to find transpose of a matrix. 7

OR

- VI (a) Explain counter controlled loop with appropriate examples. 6
- (b) Write a C program to find the largest element of an array. 9

UNIT -- III

- VII (a) Define Pointers and state how to use Pointers. 6
- (b) Write a C program to compare two strings without using string functions. 9

OR

- VIII (a) State the steps in declaration and initialization of strings. 6
- (b) Write a C program to exchange values of two variables using pointers. 9

UNIT -- IV

- IX (a) Write a C program to find the factorial of a number send into a user defined function. 9
- (b) Compare call by value and call by reference. 6

OR

- X (a) Write a C function to determine whether a year entered by user is a leap year or not. 7
- (b) Explain how to pass a one dimensional array to a called function with example. 8