TED (15) – 4044

(REVISION — 2015)

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# DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 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. Differentiate the postfix and prefix increment operator.

2. Write a C statement to read elements of a mxn matrix..

3. Write the syntax to concatenate two strings.

4. How two dimensional array is declared ?

5. Give the general syntax of function call. And which is the keyword used to transfer control from a function back to the calling function ?          (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 multiplication table of an entered number.

2. With syntax and example explain input and output functions.

3. Explain the syntax of switch-case statement.

4. Explain the working of for loop.

5. Write a program to check string palindrome using string library function.

6. What is a pointer and how a pointer can be declared ?

7. Explain how arguments are passed to function.          (5×6 = 30)

[79]

[P.T.O.

Marks

## PART — C

(Maximum marks : 60)

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

### UNIT — I

III  (a)  Write a C program to check whether the entered year is leap year or not.     5

    (b)  Explain different operators in C.     10

OR

IV  (a)  Write a C program to check whether the integer is even or odd.     5

    (b)  With syntax and example explain (i) two way selection (ii) multi-way selection.     10

### UNIT — II

V  (a)  Write a program to print the reverse of a given number n.     5

    (b)  Compare entry controlled and exit controlled loop.     10

OR

VI  (a)  Write a program to print the transverse of a 3×3 matrix.     5

    (b)  Explain how a one dimensional array can be created.  Illustrate with an example.     10

### UNIT — III

VII  (a)  Write a C program using pointers to compute the sum of all elements stored in an array.     8

    (b)  Explain how string is declared and initialized.     7

OR

VIII  (a)  With an example explain : (i) strcpy( )      (ii) strlen( )     8

    (b)  What is a pointer variable ?  How is it declared for a single variable and for a one dimensional array ?     7

### UNIT — IV

IX  (a)  What are actual and formal parameters ?  Explain with an example.     8

    (b)  Explain a recursive function with syntax.     7

OR

X  (a)  Categorize function based on arguments and return value.     8

    (b)  Write a C program to find out sum of two numbers using function.     7