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TED (15) – 4044

(REVISION — 2015)

Reg. No.....

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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)

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