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TED (15) – 4044
(REVISION — 2015)

Reg. No	
Signature	

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

#### PROGRAMMING IN C

Time		3	hours
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(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?  $(5 \times 2 = 10)$

#### 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.

 $(5 \times 6 = 30)$ 

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VI

VII

in an array.

## Marks PART — C (Maximum marks: 60) (Answer one full question from each unit. Each full question carries 15 marks.) Unit — I (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 (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 (a) Write a program to print the reverse of a given number n. 5 (b) Compare entry controlled and exit controlled loop. 10 OR (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 (a) Write a C program using pointers to compute the sum of all elements stored 8 (b) Explain how string is declared and initialized. 7

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

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

### Unit -- IV

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

(b) Explain a recursive function with syntax.

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

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