



TED (10) – 3060

Reg. No. ....

(REVISION — 2010)

Signature .....

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018**

**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 format specifiers used with 'scanf()' and their use.
2. Define a constant and give an example how it is defined.
3. With a simple example demonstrate the use of conditional operator.
4. Write the syntax of declaring a 2-dimensional array.
5. Define file.

(5×2 = 10)

**PART — B**

(Maximum marks : 30)

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

1. List the arithmetic operators and their use with simple example.
2. Write a program to read three sides of a triangle and output its perimeter and area.
3. Differentiate between do ... while and while .. do loops.
4. Write a program to print first 20 integers.
5. With example explain any 3 file handling functions.
6. With example show how does a string is declared and initialized.
7. Explain the different ways a file can be opened and purpose of each mode.

(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) Explain data types in C. 8
- (b) Write a program to find the real roots of a quadratic equation in the form  $ax^2 + bx + c = 0$ . 7

OR

- IV (a) Explain relational and logical operators in C. 8
- (b) Write a program to calculate total marks and percentage obtained by a student in five subject. Maximum marks in each subject is 100. 7

UNIT — II

- V (a) Explain switch statement with syntax and simple example. 8
- (b) Write a program to input a number and output its sum of digits. 7

OR

- VI (a) Explain the terms function declaration, function definition and function call with simple examples. 10
- (b) Write the syntax of for loop. Write a simple example. 5

UNIT — III

- VII (a) Explain any two string handling functions with examples. 4
- (b) Write a program to read two matrices and output their sum matrix. 11

OR

- VIII (a) Write a program to arrange group of numbers in ascending order. 10
- (b) Write an appropriate C declaration to assign the following values in a 2-dimensional array: 1,2,3,4,5,6,7,8,9 5

UNIT — IV

- IX (a) Explain how a structure is defined, how structure variables are declared and how structure members are accessed with simple examples ? 10
- (b) Differentiate between a pointer variable and an ordinary variable. 5

OR

- X (a) Differentiate between structure and union. 5
- (b) Write a program to copy data from one file to another file. 10