



N19-00554

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

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|-----|-----|---|---|
| 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

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|----|-----|---|---|
| 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

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| 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

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| 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

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| 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

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| 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

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|----|-----|--|---|
| 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

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|---|-----|---|---|
| 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 |
