TED (15) – 2131

(REVISION — 2015)

Reg. No. .....

Signature .....

SECOND SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY — OCTOBER, 2016

PROGRAMMING IN C

(Common to CT, CM and IF)

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. List any two keywords in C.
2. Give the syntax of simple **if** statement.
3. Define function.
4. Write the syntax of declaring one dimensional integer array.
5. Give one difference between array and structure. (5×2 = 10)

PART— B

(Maximum marks : 30)

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

1. Describe control instructions in C.
2. Explain hierarchy of operators.
3. Compare call by value and call by reference parameter passing mechanism.
4. Explain automatic and static storage classes in C.
5. Write a C program to find the largest element from an array.
6. Write a C program to find the transpose of a matrix.
7. Give the declaration of structure named student with the following elements.

   student name

   roll number

   integer array of 5 marks. (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) Explain the switch and case statements with example. 9

(b) Write a C program to print the multiplication table of a number. 6

Or

IV (a) Distinguish between while and do ..... while with example. 9

(b) Compare break and continue statements in C. 6

Unit – II

V (a) Explain recursion. Write a program to find the factorial of a number using recursion. 9

(b) List the primary data type and give example for each. 6

Or

VI (a) Write the features of C preprocessor. 9

(b) List the uses of functions in C. 6

Unit – III

VII (a) Write a C program to add two matrices. 9

(b) Write a program that passes an entire array to a function. 6

Or

VIII (a) Explain array of pointers. 9

(b) Describe the initialisation of two dimensional array. 6

Unit – IV

IX (a) Explain the string functions strlen(),strcpy(),strcat() and strcmp() with examples. 10

(b) Describe the use of structures. 5

Or

X (a) Describe array of structures. How can it be implemented in a program ? 10

(b) Explain about array of pointers to strings. 5

_____