TED (21) 3132
(Revision-2021)

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER - 2025

PROGRAMMING IN C

[Maximum marks: 75] [Time: 3 Hours]

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	Write the syntax of **for** loop.	M1.01	R
2	Give any two pre-processor directives.	M1.02	R
3	…… is the unique character used to terminating string.	M2.05	R
4	Write the syntax for initialization of one-dimensional array.	M2.06	R
5	Write the syntax of declaring a pointer variable.	M3.01	R
6	Write the syntax of free () function.	M3.03	R
7	…… is a mode used to open a text file for append.	M3.03	R
8	Define structure.	M4.01	R
9	List different types of files.	M4.07	R

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Compare while and do…… while loop.	M1.01	U
2	Write short note on external storage class.	M1.05	R
3	Write short note on two-dimensional array.	M2.01	R

4	#include <stdio.h>
	int main () {
	int *ptr = NULL;
	printf(“The result is = : %x\n”, ptr);
	return 0;
	}
	Write the output of above program.
		M3.01	U

5	List any three advantages of pointers.	M3.02	R
6	Write a function to print the values of an array using array of pointers.	M3.04	A
7	Compare structure and array.	M4.01	U
8	Describe enumerated data type with example.	M4.06	R
9	Write short note on different file opening modes.	M4.07	R
10	Write a brief note on command line arguments.	M4.08	R

PART C

Answer all questions. Each question carries seven marks

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level

III	a) Write the output of following two programs
	#include<stdio.h>
	main()
	{
	int i;
	for (i=1; i<=7; i++)
	{
	printf ("%d\t", i);
	if (i= =5)
	break;
	}
	} (3 marks)
	b) Write a C program to find the sum and average of two numbers using function. (4 marks)
		M1.01
		
		M1.01
			U
			
			U

	OR		
IV	Differentiate different storage classes in C.	M1.05	U
V	Define function. Explain function prototype, function definition and function call with example.	M1.03	U
	OR		
VI	Write a C function for calculate power of a number (x^y) using, • Recursion method. • Iterative method.	M1.08	A
VII	Write a C program to find the sum of diagonal element of a matrix, only if the given matrix is square matrix.	M2.02	A
	OR		
VIII	Develop a C program to implement selection sort.	M2.04	A
IX	List and explain different string manipulation function.	M2.05	U
	OR		
X	Write a C program to find the count of uppercase and lowercase characters in a given string.	M2.06	A
XI	Describe the syntax and use of malloc(), calloc(), and realloc() functions.	M3.03	U
	OR		
XII	Write a C program to find the sum of natural numbers using pointers.	M3.05	A
XIII	Define a structure **employee** with employee name, age, designation, and salary as member variable. Write a C program to read and print N employee's details.	M4.02	U
	OR		
XIV	Define file. List and explain any 5 file handling functions.	M4.07	U

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