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GIET UNIVERSITY, GUNUPUR - 765022
M. Sc. (First Semester) Regular Examinations, February - 2024
22MTPC105 - Programming in C
(Mathematics)

Time: 3 hrs

Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART - A**(2 x 10 = 20 Marks)**Q.1. Answer *ALL* questions

	CO #	Blooms Level
a. What is a token? What are different types of tokens available in C language?	CO1	K1
b. Define Algorithm. Write an C program to find the area and perimeter of a circle.	CO1	K2
c. Show how break and continue statements are used in a C-program, with example.	CO2	K1
d. Draw the flowchart and write a C program to compute simple interest	CO2	K1
e. What is the purpose of scanf() and printf() statement ?	CO1	K1
f. Differentiate between an array and a structure.	CO2	K4
g. Explain the difference between formal argument and actual argument.	CO3	K4
h. Differentiate between syntax vs logical error with an example.	CO1	K4
i. What are the pointer declarations used in C?	CO4	K1
j. Differentiate between syntax vs logical error with an example.	CO1	K4

PART - B**(10 x 5 = 50 Marks)**Answer *ANY FIVE* questions

	Marks	CO #	Blooms Level
2. a. Explain the general structure of C program with an example.	5	CO1	K2
b. List all the operators used in C with examples.	5	CO1	K1
3. Explain the different types of loops in C with syntax.	10	CO2	K2
4. What is an array? How a single dimension and two dimension arrays are declared and initialized?	10	CO2	K2
5.a. What is structure? Explain C syntax of structure declaration with an example.	5	CO4	K2
b. Write a c-program using structures to read, write, compute average - marks and display the students scoring above and below the average marks for a class of N students	5	CO4	K2
6. Explain the below string handling functions: (i) strcmp() (ii) strcat() (iii) strcpy() (iv) strlen(). Give relevant examples.	10	CO3	K2
7.a. Explain the concept of call by value and call by reference with an example.	10	CO3	K2
8. a. Explain the concept pointer's arithmetic operations.	5	CO4	K2
b. Write a program to read two integers X and Y and swap the contents of the variable x and Y using pointers.	5	CO4	K1