

**PRAGATI ENGINEERING COLLEGE: SURAMPALEM**  
**(AUTONOMOUS)**  
**I B.Tech I Semester Supplementary Examinations, July -2024**

**COMPUTER PROGRAMMING USING C**  
(Common to CIVIL, EEE, ME, CSE and IT)

Time: 3 hours

Max. Marks: 60

Question Paper Consists of **Part-A** and **Part-B**  
Answer **ALL** questions from **Part-A**,  
Answer any **FOUR** Questions from **Part-B**

Q.No.	Question	BTL	CO	Marks
<b>PART-A</b>				
<b>[6X2=12]</b>				
1	a) What is an Algorithm? Write an algorithm to display sum of first N natural numbers	K2	CO1	[2M]
	b) Write the basic structure of C program and explain each and every step	K2	CO2	[2M]
	c) Differentiate the while and do while loop with an example.	K2	CO3	[2M]
	d) Define Recursion with an example.	K1	CO4	[2M]
	e) Apply nested loops and write a code snippet to find the sum of all elements of a two-dimensional array of size n x m.	K2	CO5	[2M]
	f) State the disadvantages of pointers.	K1	CO6	[2M]
<b>PART-B</b>				
<b>[4x12=48M]</b>				
2	a) Explain major components of a computer with neat sketch.	K2	CO1	[6M]
	b) Draw a flow chart to find the largest of three numbers.	K2	CO1	[6M]
3	a) Explain operator precedence and associativity with two examples.	K2	CO2	[6M]
	b) Explain Implicit and Explicit Type conversions with an example.	K2	CO2	[6M]
4	a) Write a C program to find the sum of individual digits of a given integer number.	K3	CO3	[6M]
	b) Explain if-else and nested if-else with examples	K2	CO3	[6M]
5	a) Explain call by value and call by reference with an example.	K3	CO4	[6M]
	b) Explain the various Storage classes with an example.	K2	CO4	[6M]
6	a) Write a C program to implement string concatenation of two strings str1 and str2, store the result in str3 without using String handling functions.	K3	CO5	[6M]
	b) Write a C program to implement Matrix Multiplication of Two arrays by using n x n matrix.	K3	CO5	[6M]
7	a) Differentiate structures and unions.	K2	CO6	[6M]
	b) Write a C program to copy the contents from one file1 to another file2.	K3	CO6	[6M]