Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi			
CRM08	Rev 1.11	CSE	02-04-2022

CONTINUOUS INTERNAL EVALUATION - 3

Dept: CSE	Sem / Div: 1st D, E, F	Sub: Problem Solving through Programming	S Code: 21PSP13
Date:07-04-2022	Time: 3:00-4:30pm	Max Marks: 40	Elective: N

Note: Answer any 2 full questions, choosing one full question from each part.

QN		Questions	Marks	RBT	CO's
		PART A			
1	a	What is a function? Explain types of function based on parameters/arguments	8	L2	CO4
	b	What are storage classes? Explain their scope, visibility, initial value and storage locations.	7	L3	CO4
	c	What is recursion? Develop a C program to calculate factorial of a number using recursion.	5	L3	CO4
		OR			
2	a	Explain two types of function calls with a program example for each.	8	L2	CO4
	b	What are Static variables? Explain with a sample program	7	L3	CO4
	c	What is Local Variable? Develop a program to find GCD of two numbers using recursion	5	L3	CO4
		PART B			
3	a	Implement structures to read, write, compute average marks and the students scoring above and below the average marks for a class of N students.	8	L3	CO4

	b	What are preprocessor directives? Explain types of preprocessor directives.	7	L2	CO4
	c	Explain how to use typedef in structure.	5	L2	CO4
		OR			
4	a	Develop a program using pointers to compute the sum, mean and standard deviation of all elements stored in an array of n real numbers.	8	L3	CO4
	b	Differentiate between arrays and structures	7	L2	CO4
	c	Explain compiler controlled directives #ifdef and #error with an example for each.	5	L2	CO4

Prepared by: Prof. Pradeep Kumar KG

4/4/22
HOD