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CRM08	Rev 1.11	CSE	08-02-2022
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CONTINUOUS INTERNAL EVALUATION - 2

Dept: CSE	Sem / Div: 1 st D, E, F	Sub: Problem Solving through Programming	S Code: 21PSP13
Date: 17-02-2022	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 Write the syntax of two-way selection branching statements and explain their working.	8	L2	CO2																
	b Implement a C program to find greatest number among three numbers using if-else statement.	7	L3	CO2																
	c Implement a C program to display the grade on marks as follows.	5	L3	CO2																
	<table border="0"> <thead> <tr> <th><u>Marks</u></th> <th><u>Grade</u></th> </tr> </thead> <tbody> <tr> <td>0 – 39</td> <td>F</td> </tr> <tr> <td>40 – 49</td> <td>E</td> </tr> <tr> <td>50 – 59</td> <td>D</td> </tr> <tr> <td>60 – 69</td> <td>C</td> </tr> <tr> <td>70 – 79</td> <td>B</td> </tr> <tr> <td>80 – 89</td> <td>A</td> </tr> <tr> <td>90 – 100</td> <td>O</td> </tr> </tbody> </table>	<u>Marks</u>	<u>Grade</u>	0 – 39	F	40 – 49	E	50 – 59	D	60 – 69	C	70 – 79	B	80 – 89	A	90 – 100	O			
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OR																				
2	a Differentiate between while loop and do-while loop. Explain with syntax and example.	8	L2	CO2																

b	Develop a C program to get the triangle of numbers in the following format. 1 1 2 1 2 3 1 2 3 4	7	L3	CO2
c	Write a C program to plot Pascal's triangle	5	L3	CO2

PART B

3 a	What is an array? Write Syntax for 1D array and initialize the same with suitable example and elaborate.	8	L2	CO3
b	Develop a C program to find the value 25 in the given array using binary search technique. A[15]={ 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55} Provide appropriate messages in each stage.	7	L3	CO3
c	Implement a C program to find transpose of a matrix. Trace the program with a 2x2 matrix.	5	L3	CO3

OR

4 a	Define string. List out all string manipulation functions. Explain any two with examples.	8	L2	CO3
b	Develop a C program to sort the numbers in ascending order using Bubble Sort Technique.	7	L3	CO3
c	Implement a C program to find sum of N natural numbers.	5	L3	CO3

Prepared by: Prof. Pradeep Kumar KG

[Signature]
HOD