FJ II 21CSS101J set C - pps ct 2 paper

Programming For Problem Solving (SRM Institute of Science and Technology)

SRM Institute of Science and Technology
College of Engineering and Technology
DEPARTMENT OF ECE
SRM Nagar, Kattankulathur – 603203, Chengalpattu District, TamilNadu

BATCH 2

SET C

Academic Year: 2023-2024 (EVEN)

Test:CLA T2   **Date:** 01-04-2024
Course Code & Title:21CSS101J – Programming for Problem Solving   **Duration:**12.30 pm – 2.00 pm
**Year & Sem:**1st Year / 2nd Sem   **Max. Marks:**40

Course Articulation Matrix:

21CSS101J – Programming for Problem Solving		Program Outcomes (POs)											
		Graduate Attributes											
COs	At the end of this course, learners will be able to:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
CO-1:	Solve problems through computer programming. Express the basic data types and variables in C	2	3	-	-	-	-	-	-	-	-	-	2
CO-2:	Use appropriate data types in simple data processing applications. To create programs using the concept of arrays.	2	3	-	-	-	-	-	-	-	-	-	2
CO-3:	Create string processing applications with single and multi-dimensional arrays.	2	3	-	-	-	-	-	-	-	-	-	2
CO-4:	Create user defined functions with required operations. To implement pointers in applications with dynamic memory requirements.	2	3	-	-	-	-	-	-	-	-	-	2
CO-5:	Create programs using the python data types, loops, control statements for problem solving	2	3	-	-	-	-	-	-	-	-	-	2

		Part – A (4 x 2 = 8 Marks) Instructions: Answer ALL the Questions				
Q. No		**Question**	**Marks**	**BL**	**CO**	**PO**
1		List down the Advantages and limitations of multi-dimensional array initialization	2	1	2	1
2		Predict output of the following program int main() { int a[][]={{1,2},(3,4)}; int i,j; for i=0; i<2; i++ for j=0; j<2; j++ printf("%d",a[i][j]); return 0; }	2	4	2	2
3		Discuss call by value and call by reference with an example	2	1	3	1
4		Write a C program to find the length of a string	2	2	3	2
		Part – B (4 x 8 = 16 Marks) Instructions: Answer ANY 4 Questions (Q no. 5 is compulsory)				
5(a)		Explain in detail about the declaration of two-dimensional arrays, its initialization with suitable examples	8	1	2	1
		OR				
5(b)		Write a program to illustrate the use of indirection operator '*' to access the value pointed to by a pointer.	8	3	2	12
6		Explain in details about string functions: gets(), puts(), getchar(), putchar(), printf(), with an example programs	8	3	3	1
7		Design a program to copy one string into another and count the number of characters copied. (i) using string function (ii) without using string function	8	4	3	2
8		Explain function with and without Arguments and having a Return Value with suitable examples.	8	3	3	2
9		Using a C program function sort an array of integers.	8	3	3	2

Course Outcome (CO) and Bloom's level (BL) Coverage in Questions
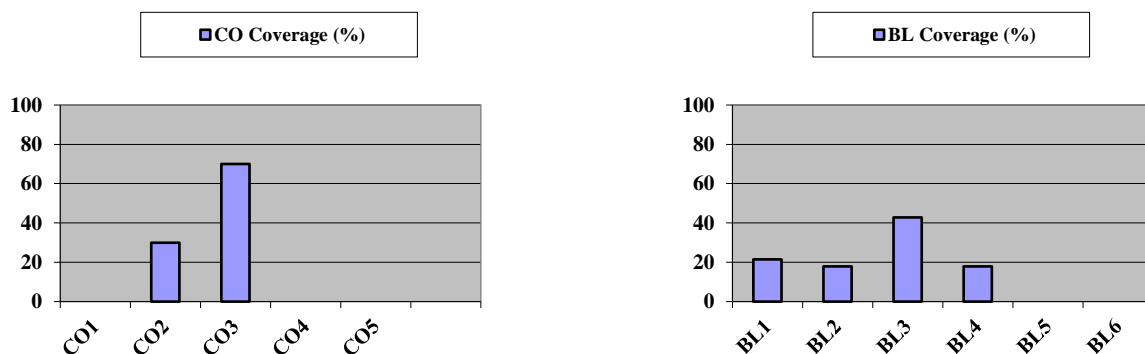
Evaluation Sheet

Name of the Student: Register No.:

Q. No	CO	PO	Maximum Marks	Marks Obtained	Total
Part- A (4 x 2= 8 Marks)					
1	CO2	PO1	2		
2	CO2	PO2	2		
3	CO3	PO1	2		
4	CO3	PO2	2		
Part- B (4 x 8= 32 Marks)					
5(a)	CO2	PO1	8		
5(b)	CO2	PO12	8		
6	CO3	PO1	8		
7	CO3	PO2	8		
8	CO3	PO2	8		
9	CO3	PO2	8		

Consolidated Marks:

CO	Maximum Marks	Marks Obtained
2	12	
3	28	
Total	40	

PO	Maximum Marks	Marks Obtained
1	20	
2	28	
12	8	
Total	56	

Signature of the Course Teacher