QP PPS CT1 SET 2

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

REG. NO.															

SRM Institute of Science and Technology
College of Engineering and Technology
School of Computing

SET 2

CYCLE TEST – I
Academic Year: 2023-2024 (ODD Semester)

INSTRUCTIONS (Please READ) :

- **MOBILE PHONES ARE STRICTLY NOT PERMITTED**
- **Please DO NOT WRITE anything in the Question Paper (Except Reg. No.)**
- **Rough Work is NOT PERMITTED to do in Question Paper. You can use last page of your answer Booklet for doing Rough Work.**
- **Marking like .(dot), Tick mark (√) etc. is NOT PERMITTED in Question Paper. This will lead to Malpractice.**
- **Discussion with Neighbors leads to MALPRACTICE, which results in '0' Mark.**
- **DO NOT BORROW anything (Like Calculator, Pen, Pencil, Eraser etc.) from others.**
- **Follow Dress Code**
- **Question Paper should be submitted along with Answer Booklet.**

Class: I Yr/ I Sem/B.Tech (SoC - All Branches) **Max. Marks: 25**
Date: 05/10/2023 **Duration: 50 minutes**

Course Code and Title: 21CSS101J: Programming for Problem Solving

Course Learning Rationale (CLR):

CLR-1: Think and evolve with a logic to construct an algorithm and pseudocode that can be converted into a program.

CLR-2: Utilize the appropriate operators and control statements to solve engineering problems

Course Learning Outcomes (CLO/CO):

CLO-1: To solve problems through computer programming. Express the basic data types and variables in C

CLO-2: Use appropriate data types in simple data processing applications.

COURSE ARTICULATION MATRIX (CAM)

	PO1	PO2	PO 3	PO4	PO5	PO6	PO 7	PO8	PO9	PO1 0	PO11	PO12
CLO1/CO1	2	3										
CLO1/CO2	2	3										

Part A (3*5=15 Marks) [Answer ANY 3 questions]

Q.No	Question	Marks	CO		PO	BL	PI Code
1	Write a program to illustrate the difference between arithmetic and relational operators in C.	5	1		2	3	2.6.3
2	Write the output of the program and justify the answer *#include<stdio.h>* *int main()*	5	1		2	3	2.6.3

	{ int n=7,p; p=n++; *printf("p=%d n=%d\n",p,n);* *p=++n;* *printf("p=%d n=%d\n",p,n);* *printf("%d %d %d\n",n++,n++,n++);* *printf("%d %d %d\n",++p,++p,++p);* *return (0);}*						
3	Define an identifier. Mention the rules to create an identifier in C with relevant examples.	5	1		1	2	2.5.2
4	A drawing competition is organized during Diwali festival by an NGO. There are THREE groups (A, B & C) of participants. Amrita is interested in joining B group but confused about her eligibility criteria. Her age is 12. Can you clarify her doubt using a C program? Condition for eligibility Eligible for C group - if age >18 Eligible for B group - if age >=12 and <=18 Eligible for A group - if age <12.	5	2		2	3	2.6.3

Part B (1*10=10 Marks) [Either OR]

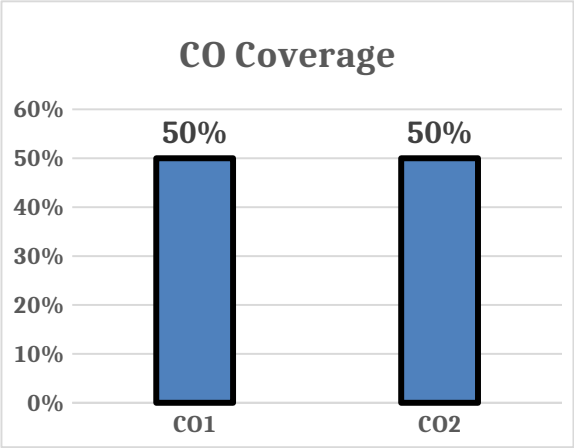
Q.No	Question	Marks	CO	PO	BL	PI Code
5	Outline the general structure of a 'C' program and explain with an example.	10	1	2	2	2.5.2
	(OR)					
6	In an interview a task is given to the candidates to compute addition, subtraction, multiplication, division and remainder. The two given integer values are 17 and 13. Condition given: int testnum1, testnum2; float div; Write a C program to solve this problem.	10	2	2	3	2.6.3

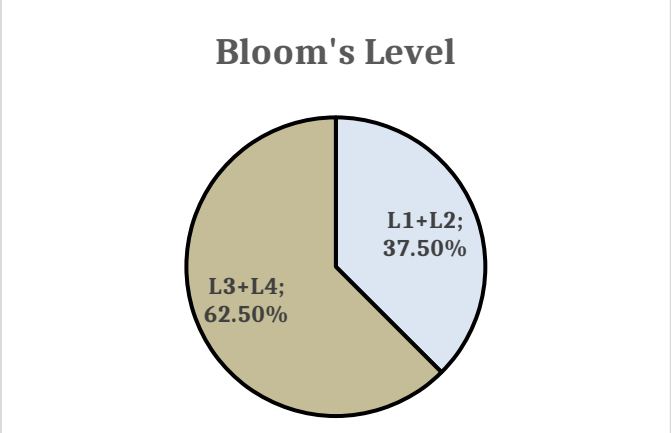
Quality Alignment Matrix (QAM)

Qn. No.	L1	L2	L3	L4
1			5	
2			5	
3		5		
4			5	
5		10		
6			10	
Total	0	15	25	0

L1+L2 = 15 Marks, 15/40 = 37.5%
L3+L4 = 25 Marks, 25/40 = 62.5%

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





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