



QP PPS CT1 SET 1

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



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

SET 1

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

Class: I Yr/ I Sem/B.Tech (SoC - All Branches)
Date: 05/10/2023

Max. Marks: 25
Duration: 50 minutes

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

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.

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)

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Part A (3*5=15 Marks)

[Answer ANY 3 questions]

Q.No	Question	Marks	CO	PO	BL	PI Code
1	Write a C program to read a character in uppercase and print the same in lower case.	5	1	2	3	2.6.3
2	On one beautiful Sunday Sheela went to Manavi's house for exam preparation. They have decided to study Mathematics because they have exam on coming Monday. Manavi is a master in Mathematics but Sheela is not so good in Mathematics. After teaching some problems to Sheela, Manavi has given some tasks to Sheela to solve. The problem is to convert input float into a double. Can you help Sheela in finding the solution?	5	1	2	3	2.6.3
3	Differentiate between ' <i>break</i> ' and ' <i>continue</i> ' statements.	5	2	2	2	2.5.2

4	Punith is interested in patterns. He went to his teacher to learn more about patterns. His teacher taught him the basic ideas to identify and build patterns. The teacher gave him a problem to build the pattern: 1 2 2 3 3 3 4 4 4 4 Can you help Punith to write a code and solve the problem?	5	2	2	3	2.6.3
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Part B (1*10=10 Marks) [Either Or]

Q.No	Question	Marks	CO	PO	BL	PI Code
5	Write an algorithm, flowchart and C program that prints the Fibonacci Series for the given number of elements (Ex: Input 5, Output 0,1,1,2,3).	10	1	2	2	2.5.2
	(OR)					
6	Write a program that determines a student's grade. The program will read three types of scores (quiz, mid-term, and final scores) and determine the grade based on the following rules: if the average score $\geq 90\%$; print grade=A if the average score $\geq 70\%$ and $< 90\%$; print grade=B if the average score $\geq 50\%$ and $< 70\%$; print grade=C if the average score $< 50\%$; print grade=F Use a switch case to solve the 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


