

Reg. No.:

Name :



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TERM END EXAMINATIONS (TEE) – December 2021- January 2022

Programme	: B.Tech.-CSE	Semester	: Fall 2021-22
Course Name	: Introduction to Problem Solving and Programming	Course Code	: CSE1021
Faculty Name	: Divya Thakur	Slot / Class No	: D11+D12+D13/0096
Time	: 1½ hours	Max. Marks	: 50

Answer ALL the Questions

Q. No.	Question Description	Marks
PART - A (30 Marks)		
1	(a) Write the algorithm, pseudocode and draw the flowchart for the following: a. To convert temperature from Fahrenheit to Celsius b. To solve the quadratic equation. OR (b) Explain operators and its type with example also define operator precedence in detail.	10
2	(a) Differentiate between lists, tuples and dictionaries. Give an example for their usage. OR (b) Explain the purpose of loop structure in a programming language. Describe the syntax and semantics of any two loop structures provided by Python.	10
3	(a) Program to multiply two matrices using nested loops. s (b) To find factorial of a given number	7 3

OR

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|-----|---|---|
| (a) | What do you understand by time trade off? Explain with all its type. | 5 |
| (b) | Explain all the methods for Generating Pseudo-random numbers with syntax and appropriate example. | 5 |

PART - B (20 Marks)

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| 4 | What do you understand by function?
Write program using function to tell user if he/she is able to vote or not.
(Consider minimum age of voting to be 18.) | 10 |
| 5 | Write the following python programs.
a. To find whether a given number is Armstrong number or Not.
b. Finding the K th smallest element in array | 10 |

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