Total no. Of Questions – [2]

Total No. of Printed Pages: 1

G.R. No.	

PAPER CODE	U124-363

MARCH 2024 (INSEM) EXAM

F.Y.B. TECH. -CSE-DATA SCIENCE- (SEMESTER - II)

COURSE NAME: Problem Solving and Programming

COURSE CODE: CD12233

(PATTERN 2023)

Time: [40 min]

[Max. Marks: 20]

(*) Instructions to candidates:

1) **Figures to the right indicate full marks.**
2) **Use of scientific calculator is allowed**
3) **Use suitable data wherever required**
4) **Solve any two sub questions from Question 1 and 2**

Question No.	Question Description	Marks	CO mapped	Blooms Taxonomy Level
Q.1	a) Discuss any two distinguishing features of each: Algorithm, Pseudocode, and flowchart	[5]	CO1	Understand
	b) Draw a flowchart and write an algorithm and pseudocode to generate first n Fibonacci terms	[5]	CO1	Apply
	c) Draw a flowchart and write an algorithm and pseudocode to transpose a matrix	[5]	CO1	Apply
Q2	a) Develop a program to multiply two matrices: A = [[-2,3,5, -1], [0,3,10, -7], [11,0,0, -8]] and B = [[2,1], [-1,1], [0,4], [8,0]]	[5]	CO2	Apply
	b) Develop a python program to display the output as: ***** * * **** * * *****	[5]	CO2	Apply
	c) Develop a python function to transpose the below matrix. $A = \begin{bmatrix} 2 & 3 & 1 \\ 1 & -1 & 2 \\ 4 & 1 & 2 \end{bmatrix}$	[5]	CO2	Apply