Total No. of Questions – [2]

Total No. of Printed Pages: 2

G.R. No.	

PAPER CODE	0124 – 343 CSE-AI

March 2024 (INSEM) EXAM

F.Y. B. TECH. COMP. SCIENCE & ENGG. (AI)

(SEMESTER – II)

COURSE NAME: PROBLEM SOLVING & PYTHON PROGRAMMING

COURSE CODE: CA12233

(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) Explain the crucial points, leads to distinguish between algorithm and program. Also discuss about the algorithms designed to perform a single task and multiple tasks; for example, addition as a single task and arithmetic operations as multiple tasks.	[5]	1	Understand
	b) Elaborate about problem solving approaches used in designing the programs? Discuss effective utilization of problem solving by analogy method with an example.	[5]	1	Understand
	c) Explain the Divide and Conquer approach used in solving the computational problems. Give one example with pseudo code showing divide and conquer strategy.	[5]	1	Understand
Q2	a) Examine the merits of dividing a program into functions with example programs in python pseudo code to solve the same problem with functions and without functions.	[5]	2	Analyze
	b) Explore different types of operators supported in python and illustrate each one with segment of python code.	[5]	2	Analyze

	c) Classify the utilization of if else statement and elif statement with suitable python pseudo code example and do the analysis in terms of effective and appropriate incorporation of these statements.	[5]	2	Analyze