

Total No. of Questions – [2]

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PAPER CODE	U124 - 313
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**March 2024 (INSEM) EXAM**  
**F.Y.B. TECH. (AI and DS) (SEMESTER - II)**  
**COURSE NAME: Problem Solving and Programming**  
**COURSE CODE: ADUA12234**  
**(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) Define the concept of problem solving steps using computer?	[5]	CO1	Understand
	b) Write down the algorithm and draw the flowchart to convert Celsius to Fahrenheit temperature?	[5]	CO1	Apply
	c) Write the difference between linear search and binary search with time complexity?	[5]	CO1	Understand
Q2	a) What will be the output of the following Python code? string1= "ABCDEFGHJKLMNOP" print(string1[1:7:2]) print(string1[-1:-10]) print(string1[7:-15:-1]) print(string1[-5:-16:-2]) print(string1[-1:-10:-3])	[5]	CO2	Apply
	b) State Membership, Identity ,bitwise AND and bitwise OR operator with example and its respective output	[5]	CO2	Understand
	c) str1="Problem Solving and Programming" write down the code to display following output Pol gnimmargorP dna gnivloS melborP ng and Progra Pbmoi d PlSia	[5]	CO2	Apply

