Reg. No.:

Name   :

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Mid-Term Examinations – April 2023

Programme	:	B.Tech	Semester	:	Summer 2022-23
Course Title/ Course Code	:	Introduction to Problem Solving and Programming	Slot/ Class No.	:	A11-A17
Time	:	1 ½ hours	Max. Marks	:	50

Answer all the Questions

Q.No.	.	Question Description	Marks

1   Prepare an algorithm to count occurrence of vowels and consonants from the string. Use appropriate variables and naming with justifications.   **10**

2   Draw the flowchart for the below given algorithm.

Step 1: Start
Step 2: Declare variables first_term, second_term and temp.
Step 3: Initialize variables first_term←0 second_term←1
Step 4: Display first term and second term
Step 5: Repeat the steps until second_term≤1000
    5.1: temp ←second_term
    5.2: second_term ←second_term+first term
    5.3: first_term←temp
    5.4: Display second_term
Step 6: Stop

10

3   Inspect the code and answer the questions.
```
for i in range (10):
    for j in range (10):
        for k in range (5):
            print ()
        print(i)
```
How many values of i will be printed?
How many times each value of i will be printed?
Modify the code to print j values from 1 to 5 & each value should be printed for 5 times.

10

4   How precedence of operators is playing a role in python programming. Explain with proper examples.   **10**

5   Provide any five situations where python strings could be useful with proper examples.   **10**

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