|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | **Reg. No.:** | |  | | | |
| **Name :** | |  | | | |
|  | | | | | | | | | | |
| **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** | |
| ⇔⇔⇔ | | | | | | | | | | |