

**SHIVAJI COLLEGE, UNIVERSITY OF DELHI**

**DEPARTMENT OF CHEMISTRY**

**INTERNAL TEST (Academic Year 2023-24)**

Name of the Course: B.Sc. (H) Chemistry

Semester: VI

Name of the Paper: Applications of Computers in Chemistry

Faculty Name: Dr. Richa Arora

Duration: 01 Hour

Maximum Marks: 10

Date of Test: 16.04.2024

**Attempt all questions**

Q1. Write a program in BASIC for finding the roots of the following equation using Iterative Method:

$$ax^3 + bx^2 + cx - d = 0$$

where a = first digit of your roll no., b = last digit of your roll no., c = (first digit of your roll no.)/2, d = (last digit of your roll no.)/2

For example, if your roll no. is 18/10053, first digit of your roll no. = 5 and last digit of your roll no. = 3 (4)

Q2. Write the output of the following:

DEF FNF(X) = 3\*X + 1

DEF FNG(X,Y) = X^2 + Y^2

Z = N

PRINT FNF(Z); FNG(Z + 1, Z-1)

PRINT FNG(N + 1, N-1)

In this question, N = last digit of your roll no.

(3)

Q3. Find out and rectify the errors in the following statements, if any (Attempt any three):

(i) AAAAA1=15

(ii) IF B=60 and C=20 THEN GOTO 80 AND 90

(iii) FOR I = 1 to 20 STEP 1

