

**SHIVAJI COLLEGE, UNIVERSITY OF DELHI**

**DEPARTMENT OF CHEMISTRY**

**Internal Test**

**(Academic Year 2023-24)**

Name of the Course: B.Sc. (Prog) Life Science

Semester: VI

Name of the Paper: IT Skills for Chemists

Maximum Marks: 10

Faculty Name: Dr. Rangnath Ravi

Time : 1 hr

Attempt all questions.

1. Simplify the following expression

a)  $(x^2+2x)^2 - x^2(x-2)^2 + 12x^4$

b)  $(P+an^2/V^2)(V-nb) = nRT$

2. Identify the number of significant figures in following

a) 91600      b) 2.735

3. What is uncertainty in measurement? How many types of uncertainty are there.

4. Use the binary bisection method to find x for the equation

$$X^2 - 3 = 0$$

5. Discuss Simpson rule .

**Faculty Signature:** *Rangnath Ravi*