

**St. Mira's College for Girls, Pune**  
**(Autonomous-Affiliated to SavitribaiPhule Pune University)**  
**Class:SYBSC Computer Science**  
**Subject: Numerical Analysis**  
**Subject Code:BS32104**  
**Semester: III**  
**Year: 2021-22**

1. Unit No.: 1
2. Employability/Entrepreneurship/Skill development  
Skill Development : Problem Solving, computing skills
3. Test on **Errors** on Google Form

3/19/22, 12:07 PM SYBSC Mathematics Paper 2 Sem 3 Numerical Analysis

**SYBSC Mathematics Paper 2 Sem 3 Numerical Analysis**  
Internal Exam 1 - 01-09-2021

Name \*

Komal sawant

Q.1) State the number of significant digits in each number and write the precision of each number. ( 3 Marks ) 1) 0.0003456 2) 1245.809800 3) 3456.0012990

0.0003456 -significant digits are 8 and precision is  $10^{-7}$ . 1245.809800 significant digits are 10 and precision number is  $10^{-6}$ . 3456.0012990-significant digits are 11 and precision number is  $10^{-7}$

Q.2) Find the absolute, relative and percentage error if true value is 12.675 and approximate value is 12.5675 (3 Marks)

Q2 - 5401 komal ...

Q.3) Find 3 approximations to the exact root of the following equation using Regula Falsi Method.  $x^5 - 5x + 3 = 0$  in the interval ( 0, 1 ). (4 Marks)

Q3 - 5401 komal ...

Q.4) Obtain a formula to find 4th root of a number using Newton Raphson Formula. Hence find 2 approximations to the 4th root of 650. (5 Marks)

This form was created inside of St. Mira's College for Girls

[https://docs.google.com/forms/d/10heOTQWW4EtdvAgMpcrmz2Bx...\\_Ggm5bUAgPQfmbLg/edit#response=ACYDBN9KkZTLn6llyc2w3LnrGJgh](https://docs.google.com/forms/d/10heOTQWW4EtdvAgMpcrmz2Bx..._Ggm5bUAgPQfmbLg/edit#response=ACYDBN9KkZTLn6llyc2w3LnrGJgh) 1/2



*Gitanjali Phadnis*  
**Gitanjali Phadnis**  
Subject Teacher

*Jh*  
**Principal Incharge**  
St. Mira's College for Girls