



Instruction for report writing for CA2 test (Mathematics Department)

Paper Code: OEC-IT601A

Paper Name: Numerical Methods

About CA2 Test: CA2 test is aligned with CO4 & CO6(Solve algebraic and transcendental equations using numerical methods & Analyze the error for different numerical methods.). As per MAKAUT guideline CA2 test is evaluated through report writing (25 marks).

List of Report Writing Topic for CA2:

S.0: Write a report on “limitations of Newton Raphson Method”.

S.1: Write a report on “intermediate value property and its implication on root finding method”.

S.2: Write a report on “comparison between bisection and Newton Raphson method in the light of order of convergence”.

S.3: Write a report on “fixed point theorem and its application on root finding methods”.

Instruction to the students:

- Each student has to prepare a report (within 500 words) on a specific topic from the above list.
- Your assignment number will be: **last two digits of your university roll no (modulo 4).**
- For example: Suppose your university roll no is: 13000219010. Then your assignment no will be:
S.2: Curves in 2D and radius of curvature [as $10 \pmod{4} = 2$]

General guideline for preparing the report: In your report include the following sections: introduction, definition, examples, theorems, application and conclusion. Adopt minimalistic, consistent presentation style. Save your report as a pdf. All students are advised to use LaTeX and standard report format of the AMS class.

Rename the file as: **CA2_university roll_OECIT601A_CSE A/B.pdf**. This file needs to be uploaded in the appropriate google form link which will be circulated later on.

Last date of submission of the report: **29/02/2024** .