SRM INSTITUTE OF SCIENCE AND TECHNOLOGY Ramapuram Campus

FACULTY OF ENGINEERING AND TECHNOLOGY

Department of Mathematics

Odd Semester 2022 – 2023

Innovative Teaching Methods

21MAB101T - Calculus and Linear Algebra

Pedagogy 3 – Inquiry based learning

Inquiry-based learning (also **enquiry-based learning**) is a form of active learning that starts by posing questions, problems or scenarios.

- 1. What are increasing and decreasing functions in Calculus?
- 2. Give an example for (a) increasing (b) decreasing functions.
- 3. Explain Concavity, Convexity and Point of Inflexion of a curve.
- 4. What do you mean by maxima and minima of a function in Calculus?
- 5. How do you find the maxima and minima of a function graphically?
- 6. What are the conditions for maxima and minima?
- 7. What are turning points of the function?
- 8. What are saddle points?
- 9. How do you find local maxima and local minima of a function?
- 10. How do you find global maxima and local minima of a function?
- 11. Is every global maximum a local maximum?
- 12. Does every continuous function have a global maximum?