Department of Mechanical Engineering

Semester: 7

Academic Year : 2021-22

Subject Code: ME18701

Subject Name: Finite Element Analysis

Teaching Methods	Type of learning
Online resources – Videos	Participative Learning
Use of digital pads	Participative Learning
PowerPoint presentations	Participative Learning
Assessment Methods	**Type of learning**
Quizzes	Participative Learning
Descriptive Assignments	Participative Learning
Activity Assignment	Experimental Learning
Flipped Classroom using Edpuzzle	Participative Learning

M. M.
(M. Maheswaran, AP/ME)

Course Instructor

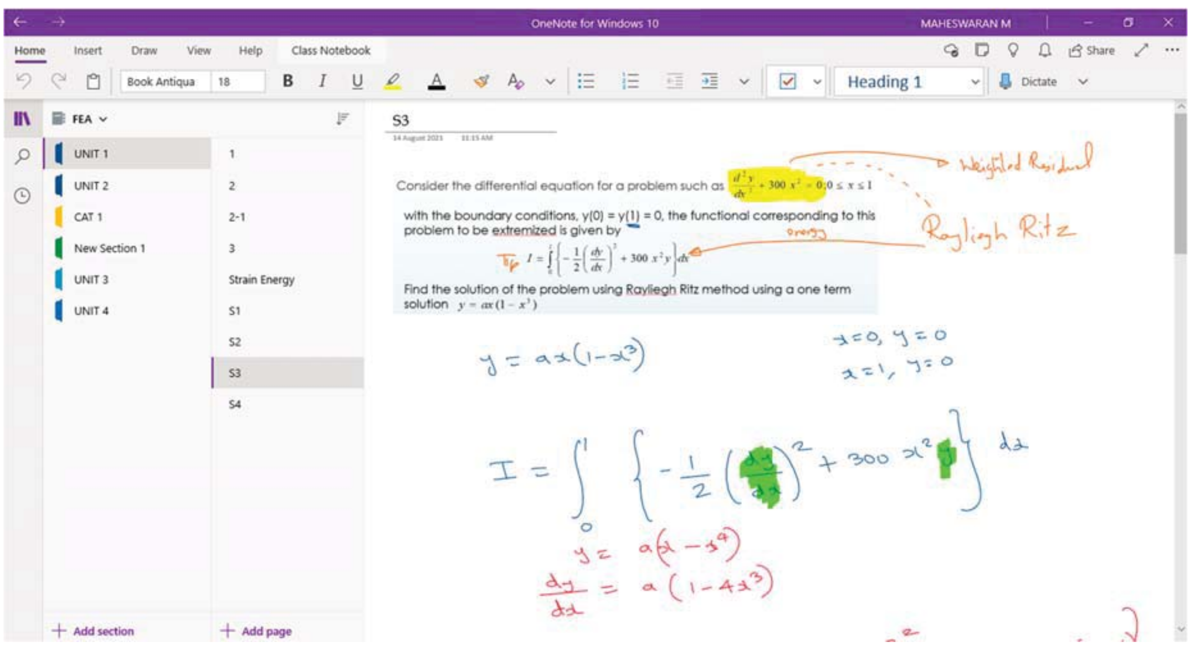
Head of the Department

Sample Proof for Teaching Methods:

Online resources

S.No	Topics	Online resources Link	Mapping
1	Basics of FEM and its practical application	https://www.youtube.com/watch?v=Rp4PRLqKKXQ	UNIT 1
2	What is Finite Element Analysis	https://www.youtube.com/watch?v=boSLQYhDXoE	
3	Introduction to FEM	https://www.youtube.com/watch?v=C6X9Ry02mPU&t=627s	
4	Application of Vibration analysis in FEM	https://www.youtube.com/watch?v=pihYx0a3t-4	UNIT 4
5	Random Vibration analysis in ANSYS	https://www.youtube.com/watch?v=m7fAvQa59N4	

Use of Digital pads in Microsoft OneNote



Sample Proof for Assessment Methods:

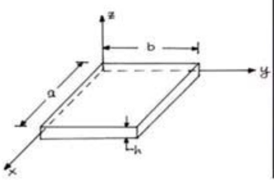
Activity Assignment

CAT 2 Assignment 2

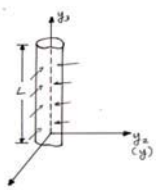
Posted Sep 22, 2021

Activity Problem:
Take 3 photos in your house which can be analyzed as Plane stress, Plane strain and Axi-symmetric problem.
Upload the Photos and explain Why and how you will consider that as Plane stress/ Plane Strain / Axisymmetric .
Mark distribution:
Legible Photos indicating Plane stress/ Plane strain / Axisymmetric example - 50 marks
Explanation - 50 marks

Plane Stress:



Plane Strain:



Axisymmetric:

Flipped Classroom using Edpuzzle