

Department of Civil Engineering And Applied mechanics

Lesson Plan B. Tech I year

CE-10013 FUNDAMENTALS OF CIVIL ENGINEERING & APPLIED MECHANICS

No. of periods per week: 02

Total-20periods (10 weeks)

Name of faculty: **Ms. Megha Patel**

Semester: I/II

S.No.	Topic covered (Theory)	Session 2023-24
		LECTURE NO
1	Graphical and Analytical Treatment of Concurrent and non-concurrent Co-planer forces	Lecture No 01
2	free body Diagram	Lecture No 02
3	Force Diagram and Bow's notations	Lecture No 03
4	Application of Equilibrium Concepts	Lecture No 04
5	Analysis of plane Trusses- method of joints	Lecture No 05
6	Analysis of plane Trusses- method of section	Lecture No 06
7	Frictional force in equilibrium problems	Lecture No 07
8	Centroid and Centre of Gravity	Lecture No 08
9	Moment of Inertia of Area and Mass	Lecture No 09
10	Radius of Gyration	Lecture No 10
11	Introduction to Product of Inertia and Principle Axes	Lecture No 11
12	Power Transmission and its applications.	Lecture No 12
13	Types of Beams: Simply Supported Beam, Overhanging Beam, and Cantilever Beam	Lecture No 13
14	Types of Supports of a Beam or Frame: Roller, Hinged and Fixed Supports.	Lecture No 14
15	Load on the Beam and Frame: Different Types of Loading	Lecture No 15
16	Support Reaction of a Beam or Frame.	Lecture No 16
17	Introductions to shear force and Bending Moment for Cantilever beam with concentrated load	Lecture No 17
18	Introductions to shear force and Bending Moment for Cantilever beam with distributed load and Couple	Lecture No 18
19	Introductions to shear force and Bending Moment for simply supported beam with concentrated load	Lecture No 19
20	Introductions to shear force and Bending Moment for simply supported beam with distributed load and Couple	Lecture No 20

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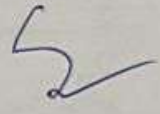
No. of periods per week: 01

Total-10 periods (10 weeks)

Name of faculty: Mr. Pranav Thepe

Semester: I/II

S.No.	Topic covered (Theory)	Session 2023-24
		LECTURE NO
1	Introduction to surveying.	Lecture No 01
2	Introduction to surveying Instruments – Levels, Theodolites, Plane tables and related devices.	Lecture No 02
3	Linear Measurement.	Lecture No 03
4	Correction.	Lecture No 04
5	Angular measurement, bearings.	Lecture No 05
6	Calculation of included angles and bearings.	Lecture No 06
7	Local attraction, Electronic surveying instruments.	Lecture No 07
8	Levelling, Height of instrument method.	Lecture No 08
9	Rise and fall method.	Lecture No 09
10	Contours and remote sensing.	Lecture No 10


Prof. & Head
CE-AMD