

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Mechanical Engineering

Faculty Name: - Mr. Abhishek Sharma

Subject Name: -MOS-I

Year/Semester: 2nd /3rd

Subject Code: -MEC-203A

LESSON PLAN

Sr. No.	Lecture No.	Topics To Be Covered	Tentative Date
1	L1	Force, Types & Characteristics of forces	16/07/2019
2	L2	Resolution of forces & Laws of equilibrium	17/07/2019
	L3	Numerical Practices	19/07/2019
3	L4	Free body diagrams	23/07/2019
	L5	Lami's Theorem	24/07/2019
4	L6	Numerical Practices	26/07/2019
	L7	M.O.I. of various Shapes	30/7/2019
5	L8	Numerical Practices M.O.I.	31/7/2019
6	L9	Introduction to the stresses and strains	02/8/2019
7	L10	Hook's Law, Polson's ratio	06/8/2019
8	L11	Stress-Strain Diagram of Mild Steel	07/8/2019
9	L12	Elastic constants & their relationships, Derivations	08/8/2019
10	L13	Thermal Stresses & Strain in simple	09/8/2019
	L14	Numerical Practices Stress Strain	13/8/2019
	L15	compound bars under axial loading	14/8/2019
11	L16	Two dimensional systems	16/8/2019
12	L17	Stresses on an Inclined Plane	20/8/2019

13	L18	Principal Stresses	21/8/2019
14	L19	Numerical Practices	22/8/2019
15	L20	Principal Strains	23/08/2019
16	L21	Mohr's circle of Construction Procedure	27/8/2019
17	L22	Numerical Practice	28/8/2019
18	L23	Types of Loads	29/8/2019
19	L24	Types of Beams	30/08/2019
20	L25	General Equations for SFD	03/9/2019
21	L26	General Equations for SFD	04/9/2019
22	L27	SFD of UDL	05/9/2019
23	L28	BMD of UDL	06/9/2019
24	L29	SFD and BMD of Combined Loads	10/9/2019
25	L30	Numerical Practice	11/9/2019
26	L31	Numerical Practice	12/9/2019
27	L32	SFD & BMD of UVL	13/9/2019
28	L33	Numerical Practice	17/9/2019
29	L34	Numerical Practice	18/9/2019
30	L35	Derivation of equation of torsion,	19/9/2019
31	L36	Solid and hollow circular shafts, tapered shaft,	01/10/2019
32	L37	stepped shaft & composite circular shafts,	03/10/2019
33	L38	Theory of simple bending	04/10/2019
34	L39	Assumptions, derivation of equation of bending,	09/10/2019
35	L40	Neutral axis, Determination of bending stresses, section	10/10/2019

		modulus of rectangular & circular (solid & hollow)	
36	L41	Bending Stresses on I,T, Angle, channel sections, composite beams,	11/10/2019
37	L42	Shear stresses in beams with derivation	15/10/2019
38	L43	Shear stress distribution across various beam sections	16/10/2019
39	L44	Numerical Practices	17/10/2019
40	L45	Combined bending and torsion, equivalent torque	18/10/2019
41	L46	Numerical Practices	23/10/2019
42	L47	Numerical Practices	24/10/2019
43	L48	Introduction to the column under axial load, concept of instability and buckling, Slenderness ratio	25/10/2019
44	L49	Derivation of Euler's formula for crippling load for columns of different ends	30/10/2019
45	L50	Concept of equivalent length	31/10/2019
46	L51	Rankine formulae	05/11/2019
47	L52	eccentric loading	06/11/2019
48	L53	Numerical Practices	07/11/2019
49	L54	Numerical Practices	08/11/2019
50	L55	Introduction to the slope and deflection	13/11/2019
51	L56	Relationship between bending moment, slope & deflection, moment area method, method of integration	14/11/2019
52	L57	Numerical Practices	15/11/2019
53	L58	Macaulay's method	19/11/2019

54	L59	Numerical Practices	20/11/2019
55	L60	Numerical Practices	22/11/2019

Abhishek Sharma
(COURSE INCHARGE)