

PANIPAT INSTITUTE OF TECHNOLOGY, SAMALKHA, PANTPAT

Department of Civil Engineering

Lecture Delivery Schedule

Name of Faculty: Khyati Saggu

Sem.: 5th

Section:

Session: 2020-21

Subject Code: CE-301N

Subject Name: SAI

1	L1	Introduction	
2	L2,3	Static and Kinematic Indeterminacies	
3	L4,5	Castigliano's theorems	
4	L6	Strain energy method	
5	L7	Analysis of frames with one or two redundant members using Castigliano's 2nd theorem	
6	L8,9	Practice	
7	L10,11,12	Analysis of continuous beams & portal frames,	
8	L13,14	Analysis of portal frames	
9	L13,14,15	Portal frames with inclined members.	
10	L16,17	Practice	
11	L18,19	Elastic centre,	
12	L20,21	Properties of analogous column,	
13	L23,24,25	Applications to beam & frames.	
14	L26,27,28	Practice	
15	L29,30	Parabolic and circular Arches, Bending Moment Diagram for various loadings,	

16	L31,32	Temperature effects, Rib shortening, Axial thrust and Radial Shear force diagrams.	
17	L33,34,35	Analysis of plane frame, pin jointed and rigid jointed.	
18	L36,37	Introduction Centroidal principal axes of sections,	
19	L38,39	Bending stresses in beam subjected to unsymmetrical bending,	
20	L40,41,42	shear centre, shear centre for channel, Angles and Z sections	
21	L43,44,45	Introduction, uniformly loaded cables, Temperature stresses,	
22	L46,47,48	three hinged stiffening Girder and two hinged stiffening Girder.	