

## PCC-CVE-204-P STRUCTURAL ANALYSIS – I LAB (P)

**Name of the Faculty** : Mr. MANIK GOYAL  
**Discipline** : B.Tech in Civil Engineering  
**Semester** : IV (2nd Year)  
**Subject** : Structural Analysis-I Lab (P)  
**Lesson Plan Duration** : 15 Weeks  
**Work Load (Lecture / Practical) per week (in hrs.)** : Practical – 02

Week	Practical	
	Lecture day	Topic (Including Assignment Test)
1 <sup>st</sup>	1	Exp.1-Verification of reciprocal theorem of deflection using a simply supported beam.(Group1)
	2	Exp.1-Verification of reciprocal theorem of deflection using a simply supported beam.(Group2)
2 <sup>nd</sup>	3	Exp.2-Verification of moment area theorem for slopes and deflections of the beam.(Group1)
	4	Exp.2-Verification of moment area theorem for slopes and deflections of the beam.(Group2)
3 <sup>rd</sup>	5	Exp.3-Deflections of a truss- horizontal deflection & vertical deflection of various joints of a pin-jointed truss.(Group1)
	6	Exp.3-Deflections of a truss- horizontal deflection & vertical deflection of various joints of a pin-jointed truss.(Group2)
4 <sup>th</sup>	7	Exp.4-Elastic displacements (vertical & horizontal) of curved members.(Group1)
	8	Exp.4-Elastic displacements (vertical & horizontal) of curved members.(Group2)
5 <sup>th</sup>	9	Exp.5-Experimental and analytical study of 3 hinged arch and influence line for horizontal thrust.(Group1)
	10	Exp.5-Experimental and analytical study of 3 hinged arch and influence line for horizontal thrust.(Group2)
6 <sup>th</sup>	11	Exp.6-Experimental and analytical study of behavior of struts with various end conditions.(Group1)
	12	Exp.6-Experimental and analytical study of behavior of struts with various end conditions.(Group2)
7 <sup>th</sup>	13	<b>VIVA- VOCE GROUP-1</b>
	14	<b>VIVA – VOCE GROUP-2</b>
8 <sup>th</sup>	15	Exp.7-To determine elastic properties of a beam.(Group1)
	16	Exp.7-To determine elastic properties of a beam.(Group2)
9 <sup>th</sup>	17	Exp.7-To determine elastic properties of a beam.(Group1)
	18	Exp.7-To determine elastic properties of a beam.(Group2)
10 <sup>th</sup>	19	Ex.8-Uniaxial tension test for steel (plain & deformed bars).(Group1)
	20	Ex.8-Uniaxial tension test for steel (plain & deformed bars).(Group2)
11 <sup>th</sup>	21	Exp.9-tension test for steel (plain & deformed bars).(Group1)

	22	Exp.9-Uniaxial tension test for steel (plain & deformed bars).(Group2)
12 <sup>th</sup>	23	Exp.10-Uniaxial compression test on concrete & bricks specimens.(Group1)
	24	Exp.10 -Uniaxial compression test on concrete & bricks specimens.(Group2)
13 <sup>th</sup>	25	Exp.11-Uniaxial compression test on concrete & bricks specimens.(Group1)
	26	Exp.11-Uniaxial compression test on concrete & bricks specimens.(Group2)
14 <sup>th</sup>	27	Exp.11-Uniaxial compression test on concrete & bricks specimens.(Group1)
	28	Exp.11-Uniaxial compression test on concrete & bricks specimens.(Group2)
15 <sup>th</sup>	29	<b>VIVA-VOCE Group- 1</b>
	30	<b>VIVA – VOCE Group - 2</b>