## PCC-CVE202-P- INTRODUCTION TO FLUID MECHANICS LAB (P)

Name of the Faculty : Mr. Kamaldeep Singh

**Discipline** : B.Tech in Civil Engineering

**Semester**: IV (2nd Year)

Subject : Introduction to Fluid Mechanics 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- To determine meta-centric height of the ship model. (Group 1)	
	2	Exp. 1 - To determine meta-centric height of the ship model. (Group 2)	
2 <sup>nd</sup>	3	Exp. 2 -To verify the Bernoulli's theorem &To determine coefficient of discharge for an Orifice-meter.  (Group 1)	
	4	Exp. 2 - To verify the Bernoulli's theorem &To determine coefficient of discharge for an Orifice-meter.  (Group 2)	
3 <sup>rd</sup>	5	Exp.3-Velocity measurements by current meter, float, double float (demonstration only). (Group 1)	
	6	Exp.3-Velocity measurements by current meter, float, double float (demonstration only). (Group 2)	
4 <sup>th</sup>	7	Exp.4-To determine coefficient of discharge of a venture-meter. (Group 1)	
7	8	Exp.4-To determine coefficient of discharge of a venture-meter. (Group 2)	
5 <sup>th</sup>	9	Exp.5-To determine the various hydraulic coefficients of an Orifice (Cd, Cc, Cv). (Group 1)	
	10	Exp.5-To determine the various hydraulic coefficients of an Orifice (Cd, Cc, Cv). (Group 2)	
6 <sup>th</sup>	11	Exp.6-To determine coefficient of discharge for an Orifice under variable head. (Group 1)	
J	12	Exp.6-To determine coefficient of discharge for an Orifice under variable head. (Group 2)	
7 <sup>th</sup>	13	Exp.6-To determine coefficient of discharge for an Orifice under variable head. (Group 1)	
ŕ	14	Exp.6-To determine coefficient of discharge for an Orifice under variable head. (Group 2)	
8 <sup>th</sup>	15	VIVA- VOCE Group -1	
	16	VIVA – VOCE Group - 2	
9th	17	Exp.7-To calibrate a given notch & To determine coefficient of discharge for a mouth piece. (Group 1)	
	18	Exp.7-To calibrate a given notch & To determine coefficient of discharge for a mouth piece. (Group 2)	
10 <sup>th</sup>	19	Exp.8-Experiment on Vortex formation (demonstration only). (Group 1)	
	20	Exp.8-Experiment on Vortex formation (demonstration only). (Group 2)	
11 <sup>th</sup>	21	Exp.9-Drawing of a flow-net by Viscous Analogy Model and Sand Box Model. (Group 1)	

	22	Exp.9-Drawing of a flow-net by Viscous Analogy Model and Sand Box Model.(Group 2)
12 <sup>th</sup>	23	Exp.10-To study development of boundary layer over a flat plate. (Group 1)
	24	Exp.10-To study development of boundary layer over a flat plate. (Group 2)
13 <sup>th</sup>	25	Exp.11-To study velocity distribution in a rectangular open channel. (Group 1)
	26	Exp.11-To study velocity distribution in a rectangular open channel. (Group 2)
14 <sup>th</sup>	27	Exp.11-To study velocity distribution in a rectangular open channel. (Group 1)
	28	Exp.11-To study velocity distribution in a rectangular open channel. (Group 2)
15 <sup>th</sup>	29	VIVA-VOCE Group- 1
	30	VIVA – VOCE Group - 2