

MYMENSINGH POLYTECHNIC INSTITUTE
TECHNOLOGY: CIVIL
Outline Plan of On line Teaching (Semester Plan)

Subject Name: Hydraulics			T	2 Nos theory class per week
Subject Code: 66456			P	3 Period practical class per week
Semester : 5th , Shift: 1st & 2nd			C	3 Credit hour & 1 Credit 50 Mark

Week	Theory		Learning Materials	Practical Job No	Practical	
	Content				Content	
	Specific Objectives				Practical Name	
1	Discussion on the basic concept of fluid and its properties.	1.1----1.4	MARKER PEN, WHITE BOARD, MULTIMEDIA CONTENT & YOU TUBE CONTENT	1	Introducing to different equipment which is required to perform practical experiment.	
2	Discussion on the aspects of fluid pressure.	2.1----2.7		2	Expt No:- 01 Measurement of pressure by using a piezometer & a simple manometer.	
3	Discussion on the techniques of measuring the fluid pressure.	3.1----3.6		3	Expt No:- 02 Measurement difference of pressure by using differential & inverted differential manometer.	
4	Discussion on the concept of total pressure and center of pressure on immersed plane surface..	4.1----4.7		4	Expt No:- 03 Demonstration on proof of Bernoulli's theorem.	
5	Discussion on the fundamental concepts of buoyancy.	5.1----5.4		5	Expt No:- 04 Measurement discharge through a pipe line by venturimeter.	
6	Discussion on the principles of flow of liquid under different conditions.	6.1----6.4		6	Expt No:- 05 Determination coefficient of discharge (Cd), coefficient of velocity (Cv) and coefficient of contraction (Cc).	
7	Discussion on the concept of Bernoulli's theorem.	7.1----7.5		7	Expt No:- 06 Measurement discharge through a triangular notch (V-notch) and calculate coefficient of discharge.	
8	Discussion on d the aspects of flow through orifice and mouthpiece.	8.1----8.7		8	Expt No:- 07 Determination co-efficient of friction in GI and PVC pipe.	
9	Discussion on the aspects of different types of losses of head of flowing liquid.	9.1----9.4		9	Expt No:- 08 Measurement the loss of head due to friction in pipe.	
10	Discussion on the aspects of friction and flow through pipes.	10.1---10.7		10	Expt No:- 09 Measurement the loss of head due to sudden enlargement and sudden contraction of pipe.	
11	Discussion on the principle of flow through notches.	11.1---11.7		11	Expt No:- 10 Observe different types of flow in a typical open channel.	
12	Discussion on the principle of flow through weirs.	12.1---12.6		12	Expt No:- 11 Measurement velocity of flow in a typical open channel by a current meter, a float, a pitot tube.	
13	Discussion on the aspects of flow of liquid through open channel.	13.1---13.4		13	Expt No:- 12 Observe hydraulic jump in a typical open channel due to obstruction of flow by a weir and measure the depth of the jump.	
14	Discussion on the aspects of flow of liquid through open channel.	13.5---13.7		14	Expt No:- 13 Discussion on all previous class.	
15	REVIEW CLASS			15	REVIEW CLASS	
16				16	END OF THE SEMESTER	