

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

Subject Name: Water Supply Engineering		T		2 Nos theory class per week		
Subject Code: 66453		P		3 Period practical class per week		
Semester : 5 th , Shift: 1st & 2nd		C		3 Credit hour & 1 Credit 50 Mark		
Week	Theory Content		Learning Materials	Practical Job No	Practical Content	
	Specific Objectives				Practical Name	
1	Understand the concept of water supply engineering.	1.1---1.5	MARKER PEN, WHITE BOARD, MULTIMEDIA CONTENT & YOU TUBE CONTENT	1	Introducing to different equipment which is required to perform practical experiment.	
2	Understand the various aspects of consumption of water.	2.1---2.4		2	Expt No:- 01 Identification of pipes and fittings.	
3	Understand the different sources of water.	3.1---3.6		3	Expt No:- 02 2 Demonstration of water purification plant and deep tube well.	
4	Understand the different type of pipes & pipe joints used in water supply and the reasons for corrosion in metal pipes.	4.1---4.6		4	Expt No:- 03 Maintenance works: 1 .Identify, take out and replace unserviceable fixtures/ fittings or any other component parts. 2. Identify the common troubles of submersible pump and their solutions. after visiting pump house.	
5	5 Understand the collection and transmission system of water.	5.1---5.5		5	Expt No:- 04 4 Identify the common troubles in water supply pipe lines and their solution by visiting concern authorities (WASA, City Corporation and Pourashava).	
6	6 Understand the various types of impurities in water.	6.1---6.6		6	Expt No:- 05 Conduct physical tests of water (pH value & turbidity) using field pH and turbidity meter.	
7	Understand the safe water.,Understand the treatment of water by clarification.	7.1---7.6 & 8.1---8.7		7	Expt No:- 06 Conduct chemical tests of water (iron, manganese and chloride) using field kits.	
8	Understand the treatment of water by filtration.	9.1---9.5		8	Expt No:- 07 7 Conduct the arsenic test of water using field kits.	
9	Understand the treatment of water by disinfection.	10.1---10.5		9	Expt No:- 08 8 Conduct residual chlorine test using field kits.	
10	Understand the treatment of water by softening.Understand the different processes of removing color, odor, taste, arsenic, iron, manganese and salinity.	11.1---11.4 & 12.1---12.6		10	Expt No:- 09 Conduct hardness test using field kits.	
11	Understand the different water distribution methods.	13.1---13.6		11	Expt No:- 10 Physically identify different parts of a) No. 6 hand pump, b) Deep-set (tara) hand pumps. c) Submersible pump	
12	Understand different types of reservoir. Understand the construction and maintenance of distribution system.	14.1---14.3 & 15.1---15.2		12	Expt No:- 11 Inspect installation of a) No. 6 hand pump	
13	Understand the water supply systems with specific reference to rural Bangladesh.	16.1---16.6		13	Expt No:- 12 Inspect installation of b) deep-set (Tara) hand pumps	
14	Understand the importance of plumbing system.	17.1---17.7		14	Expt No:- 13 Inspect installation of c) Submersible pump	
15	Understand the effect of socio-economic factors on water supply and sanitation.	18.1---18.3		15	REVIEW CLASS	
16	REVIEW CLASS			16	END OF THE SEMESTER	