

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF CIVIL ENGINEERING
LESSON PLAN

SUBJECT NAME-WATER SUPPLY AND WASTE WATER ENGINEERING (TH-02)

TOTAL NO. OF WEEK-16

SEMESTER-5RD

TOTAL PERIODS-75

CLASSES ALLOTTED PER WEEK-5

NAME OF TEACHING FACULTY –ASHA MISHRA

SESSION-(2020-2021) WINTER

Week & Date		No of Periods Available	Topics to be covered	Topics actually covered	If any Short fall	Reason of short fall	How to make up	Remarks /Signature with date
1 ST	07/09/2020	03	1.1 Necessity of treated water supply	All covered				
	08/09/2020		1.2 Per capita demand, variation in demand and factors affecting demand	All covered				
	10/09/2020		1.3 Methods of forecasting population, Numerical problems using different methods	All covered				
2 ND	11/09/2020	04	1.4 Impurities in water – organic and inorganic, Harmful effects of impurities	All covered				
	14/09/2020		1.5 Analysis of water –physical, chemical and bacteriological	All covered				
	15/09/2020		1.6 Water quality standards for different uses	All covered				

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			3.1 Flow diagram of conventional water treatment system					
	16/09/2020		3.2 Treatment process / units: 3.2.1 Aeration ; Necessity 3.2.2 Plain Sedimentation : Necessity, working principles, Sedimentation tanks – types, essential features, operation & maintenance	All covered				
3 RD	18/09/2020	03	3.2.3 Sedimentation with coagulation: Necessity, principles of coagulation, types of coagulants, Flash Mixer, Flocculator, Clarifier	All covered				
	21/09/2020		3.2.4 Filtration : Necessity, principles, types of filters Slow Sand Filter, Rapid Sand Filter and Pressure Filter – essential features	All covered				
	24/09/2020		3.2.5 Disinfection : Necessity, methods of disinfection Chlorination – free and combined chlorine demand,	All covered				
4 TH	25/09/2020	04	3.2. available chlorine, residual chlorine, pre-chlorination, break point chlorination, superchlorination	All covered				
	28/09/2020		3.2.6 Softening of water – Necessity, Methods of softening – Lime soda	All covered				

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			process and Ion exchange method					
	29/09/2020		Exam of 2 nd chapter	All covered				
5 TH	30/09/2020	03	Problems solving on chapter 2	All covered				
	01/10/2020		2.1 Surface sources – Lake, stream, river and impounded reservoir	All covered				
	05/10/2020		2.2 Underground sources – aquifer type & occurrence – Infiltration gallery, infiltration well, springs, well	All covered				
6 TH	06/10/2020	04	2.3 Yield from well- methods of determination,	All covered				
	07/10/2020		2.3.Numerical problems using yield formulae	All covered				
	08/10/2020		2.4 Intakes – types, description of river intake, reservoir intake, canal intake	All covered				
7 TH	12/10/2020	04	2.5 Pumps for conveyance & distribution – types, selection, installation.					
	14/10/2020		2.6 Pipe materials – necessity, suitability, merits & demerits of each type					

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	15/10/2020		2.7 Pipe joints – necessity, types of joints, suitability, methods of jointing Laying of pipes – method					
	17/10/2020							
8 TH	19/10/2020	03						
	20/10/2020							
	22/10/2020							
9 TH	27/10/2020	02						
	29/10/2020							
10 TH	02/11/2020	04						
	03/11/2020							
	05/11/2020							
	06/11/2020							
11 TH	09/11/2020	04						

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	10/11/2020							
	12/11/2020							
	13/11/2020							
12 ^T _H	16/11/2020	04						
	17/11/2020							
	19/11/2020							
	20/11/2020							
13 ^T _H	23/11/2020	04						
	24/11/2020							
	26/11/2020							
	27/11/2020							
14 ^T _H	01/12/2020	03						

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	03/12/2020							
	04/12/2020							
15 ^T _H	07/12/2020	04						
	08/12/2020							
	10/12/2020							
	11/12/2020							
16 ^T _H	14/12/2020	04						
	15/12/2020							
	17/12/2020							
	18/12/2020							
17 ^T _H	21/12/2020	03						
	22/12/2020		RIVISION					

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	24/12/2020							
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