

Subject - Hydraulics

2024-25 NOV-Dec

DETAILED TEACHING DAIRY					
LECTURE NO.	UNIT NO.	TOPICS TO BE COVERED	PLANNED DATE	EXECUTION DATE	REMARK
1	1	definition of liquid, properties of liquid	3/9/24	10/9/24	
2		Branches of hydraulic	4/9/24	11/9/24	
3		pressure and its measurement, pascal's law	4/9/24	11/9/24	
4		Numericals			
5		measurement of pressures- piezometer, differential & inverted differential	5/9/24	12/9/24	
6		Numericals	5/9/24	12/9/24	
7					
8		hydrostatic; total pressure, centre of pressure	7/9/24	14/9/24	
9		computation of total pressure, centre of pressure on plane horizontal surface			
10		vertical and inclined surface		17/9/24	
11				10/9/24	17/9/24
12		Numericals	11/9/24	18/9/24	
13		numericals	11/9/24	18/9/24	
1	2	types of liquid flow			
2		rate of flow, law of conservation of mass	12/9/24	21/9/24	
3		Numerical	12/9/24	24/9/24	
4		Numerical	14/9/24	25/9/24	
5		continuity equation, stream line, path line streak line	18/9/24	28/9/24	
6		Numericals			
7		Numericals	18/9/24	11/10/24	
8		Numericals		11/10/24	
9		hydrodynamics- total energy, bernoulli's theorem	21/9/24	8/10/24	
10		Numericals	24/9/24	14/10/24	
11		Numericals	25/9/24	14/10/24	
12		pilot tube & numerical	25/9/24	16/10/24	
1	3	venturimeter- discharge through venturimeter	28/9/24	16/10/24	
2		Numericals	11/10/24	21/10/24	
3		orifice meter- discharge through orificemeter	5/10/24	21/10/24	
4		Numericals			
5		Numericals	8/10/24	22/10/24	
6		Numericals			
7		flow through orifice, time required for emptying tank	9/10/24	23/10/24	
8		Numericals		23/10/24	
9		flow through notches - rectangular	9/10/24	26/10/24	
10		v-notch, trapezoidal notch			
11		Numericals	19/10/24	26/10/24	
12		Numericals		5/11/24	
13		Numericals		6/11/24	

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9	flow through notches - rectangular		6/11/24	
10	v-notch, trapezoidal notch	22/10/24	8/11/24	
11	Numericals	23/10/24	9/11/24	
12	Numericals		9/11/24	
13	Numericals	23/10/24	9/11/24	
1	flow through weir, broad crested weir	26/10/24	16/11/24	
2	characteristics of flow, major losses in pipe	29/10/24		
3	Numericals			
4	minor energy losses in pipe	30/10/24	20/11/24	
5	Numericals		20/11/24	
6	Numericals		20/11/24	
7	hydraulic gradient line and total energy line	5/11/24		
8	flow of water from one tank to another by long pipe	6/11/24	23/11/24	
9	Numericals		23/11/24	
10	Numericals	6/11/24	25/11/24	
11	flow through pipe in series and parallel	9/11/24	26/11/24	
12	Numericals		27/11/24	
1	open channel, comparison of pipe and open channel flow	12/11/24	27/11/24	
2	Numericals	13/11/24	28/11/24	
3	Numericals	13/11/24	28/11/24	
4	hydraulic mean depth, wetted perimeter, uniform and non uniform	16/11/24	2/12/24	
5	Numericals	19/11/24	2/12/24	
6	use chezy and mannings formula	20/11/24	7/12/24	
7	Numericals	23/11/24	9/12/24	
8	Numericals	26/11/24	10/12/24	
9	most economical section of channel	27/11/24	10/12/24	
10	Numericals	30/11/24	10/12/24	
11	Numericals	3/12/24		
12	pump- centrifugal pump	7/12/24	12/12/24	
13	reciprocating pump, Efficiency	10/12/24	12/12/24	

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