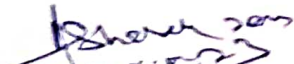


SESSION:		WINTER 2023				
BRANCH:		MECHANICAL ENGINEERING				
SEMESTER:		5TH SEC-A				
SUBJECT:		FLUID MECHANICS AND HYDRAULIC MACHINE TH-3				
NAME OF THE FACULTY:			ABHISHEK JENA			
SL NO.	MONTH	CHAPT. NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	AUGUST	1	4/8/2023	CH-1, 1.1: Definition and classification of hydraulic turbines	16	29%
			8/8/2023	1.2: Construction and working principle of impulse turbine		
			9/8/2023	1.3: Velocity diagram of moving blades, work done and derivation of various efficiencies of impulse turbine		
			10/8/2023	Velocity diagram of moving blades, work done and derivation of various efficiencies of impulse turbine.		
			11/8/2023	Velocity diagram of moving blades, work done and derivation of various efficiencies of impulse turbine.		
			16/8/23	1.4: Velocity diagram of moving blades, work done and derivation of various efficiencies of Francis turbine.		
			17/8/23	Velocity diagram of moving blades, work done and derivation of various efficiencies of Francis turbine.		
			18/8/23	Velocity diagram of moving blades, work done and derivation of various efficiencies of Francis turbine.		
			21/8/23	1.5: Velocity diagram of moving blades, work done and derivation of various efficiencies of Kaplan turbine		
			22/8/23	Velocity diagram of moving blades, work done and derivation of various efficiencies of Kaplan turbine		
			23/8/23	1.6: Numerical on above		
			24/8/23	1.6: Numerical on above		
			25/8/23	1.6: Numerical on above		
			28/8/23	1.7: Distinguish between impulse turbine and reaction turbine		
		2	29/8/23	CH-2, 2.1: Construction and working principle of centrifugal pumps		
			31/8/23	Construction and working principle of centrifugal pumps		
		3	1/9/2023	2.2: work done and derivation of various efficiencies of centrifugal pumps		


2	SEPT.	3	4/9/2023	2.3: Numerical on above	17	30%					
			5/9/2023	Numerical on above							
			7/9/2023	CH-3,3.1: Describe construction & working of single acting reciprocating pump							
		8/9/2023	3.2 Describe construction & working of double acting reciprocating pump								
		11/9/2023	3.3: Derive the formula for power required to drive the pump (Single acting & double acting)								
		12/9/2023	3.4 Define slip.								
		13/9/23	3.5 State positive & negative slip & establish relation between slip & coefficient of discharge.								
		14/9/23	3.5 State positive & negative slip & establish relation between slip & coefficient of discharge.								
		15/9/23									
		21/9/23	3.6: Solve numerical on above								
		4	22/9/23	CH-4,4.1: Elements - filter-regulator-lubrication unit							
			25/9/23	4.2: Pressure control valves							
			26/9/23	4.2.1 Pressure relief valves							
			27/9/23	4.2.2 Pressure regulation valves							
			28/9/23	4.3: 3/2DCV, 5/2 DCV, 5/3DCV							
			29/9/23	Flow control valves Throttle valves							
		3	OCT.	4			3/10/2023	4.4: ISO Symbols of pneumatic components	10	18%	
4/10/2023	4.5: Direct control of single acting cylinder										
5/10/2023	Operation of double acting cylinder										
6/10/2023	Operation of double acting cylinder with metering in and metering out control										
5	9/10/2023			CH-5,5.1: Hydraulic system, its merit and demerits							
	10/10/2023			5.2: Hydraulic accumulators							
	11/10/2023			Pressure control valves							
	12/10/2023			Pressure relief valves							
	13/10/23			Pressure regulation valves							
	31/10/23			5.3 Direction control valves							
5			1/11/2023	3/2DCV, 5/2 DCV, 5/3DCV	14	23%					
			2/11/2023	Flow control valves, Throttle valves							
			3/11/2023	5.4.1: External and internal gear pumps							
			6/11/2023	Vane pump							
			7/11/2023	Radial piston pumps							
			8/11/2023	5.5: ISO Symbols for hydraulic components							
			4	NOV.				9/11/2023	5.6: Actuators		
								10/11/2023	5.7: Direct control of single acting cylinder		
13/11/23	Operation of double acting cylinder										
14/11/23	Operation of double acting cylinder with metering in and metering out control										

5	15/11/2023	5.8: Comparison of hydraulic and pneumatic system	14	23%
	16/11/23	Comparison of hydraulic and pneumatic system		
	17/11/23	Comparison of hydraulic and pneumatic system		

BRIEF SUMMARY OF THE PLAN			
SL. NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	AUGUST	CHAPTER NO.- 1 & 2	29%
2	SEPTEMBER	CHAPTER NO.- 2, 3 & 4	30%
3	OCTOBER	CHAPTER NO.- 4 & 5	18%
4	NOVEMBER	CHAPTER NO.- 5	23%


signature of faculty


signature of HOD
3/8/23


signature of principal
3/8/23