Samrat Ashok Technological Institute VIDISHA
Department of Mechanical Engineering
Board of Study Meeting 14 December 2023

Subject Name:	Applied Thermodynamics	Semester:4th
Subject Code:	ME-402	
Faculty Name:	GOPAL KUMAR DESHMUKH	
Course Outcomes:		
CO1	Understand the Steam generator, its performance parameter and boiler code	
CO2	Analyze the Vapour Power Cycles.	
CO3	Evaluate the Mach Numberin Gas dynamics	
CO4	Evaluate the performance parameter of the Reciprocating Compressor	
CO5	Understand the working of Steam Turbines and Condensers.	

s.n.	Title Of Experiments	CO
1	Study of High-Pressure Benson Boiler	1
2	Study of High-Pressure Loeffler Boiler	1
3	Study of Convergent and Divergent Steam Nozzles	2
4	Performance Analysis of Air Blower	3
5	Performance Analysis of Two-Stage Reciprocating Air Compressor	4
6	Study of different types of Steam Condensers	5
7	Study of UNI-STA Test Rig	4
8	Performance Analysis of Steam Power Generation (UNI-STA Test Rig)	5
9	To determine dyness fraction of steam	5

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Subject Name:	Theory of Machine-I	Semester: IV
Subject Code:	MEC-403	
Faculty Name:	Dr. C. P. Singh	
Course Outcomes:		
After completion of the course, students would be able to -		
CO1	Learn various mechanisms and concepts of degree of freedom.	
CO2	Learn kinematic analysis of mechanisms.	
CO3	Learn gear mechanism	
CO4	Learn cam and follower mechanism.	
CO5	Understand concept gyroscope	

s.n.	Title of Experiments	CO
1	Calculate degree of freedom of various mechanisms and identify types of kinematicpairs present init.	CO1
2	Measure torque at different speeds and find efficiency of an epicyclic geartrain.	CO2
3	Analyze gyroscopic effect for rotating disc in various dynamic conditions	CO3
4	Experimentally verify theoretical relation of gyroscopiccouple for a rotating disc.	CO5
5	Measure various parameters comprising the Corioli's component of acceleration and to verify theoretical expression.	CO2
6	Plot graph between follower displacement and cam rotation angle for different cam follower pairs andcalculate jump speed.	CO4
7	Calculate module, gear ratio and speed ratio for each pair of gears in a simple geartrain.	CO3
8	Calculate gear ratio and speed ratio for each pair of gears in an epicyclic geartrain.	CO3
9	Analyze slider crank mechanism and itsinversions.	CO1
10	Analyze double slider mechanism and itsinversions	CO1

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Subject Name:	Fluid Mechanics	Semester: IV
Subject Code:	MEC-404	
Faculty Name:		
Course Outcomes:		
After completion of the course, students would be able to -		
CO1	To verify the energy equation	
CO2	To determine the discharge of various flow meters	
CO3	To understand streamline and turbulent flow through experiment.	
CO4	To learn about flow in pipes.	
CO5	To verify the principle of impulse-momentum.	

s.n.	Title of Experiments	CO
1	Verification of Energy equation	CO1
2	Calibration of Venturimeter	CO2
3	Calibration of Orifice meter	CO2
4	Calibration of Mouth Piece	CO2
5	Calibration of Water meter	CO2
6	Calibration of Nozzle meter	CO2
7	Determination of C_c, C_d, C_v of orifice	CO2
8	Reynolds experiment for demonstration of streamlines & turbulent flow	CO3
9	Determination of friction factor of a pipe	CO4
10	Verification of impulse momentum principle	CO5