

MVSR Engineering College, Nadergul.

Department of Mechanical Engineering

COURSE OUTCOMES

Class: B.E.IV Year I Sem (Mech. Engg.)

Name of the Course: **THERMAL ENGINEERING LAB**

Course Code: ME 431

At the end of the course student is able to

CO no.	Course outcome	POs
M431.1	Interpret the link between refrigeration effects, work done and COP of the system, describe different methods adopted to evaluate COP, list the different psychrometric processes and describe how those processes can be maintained	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PSO1, PSO2
M431.2	Calculate the overall efficiency of centrifugal blower and axial flow fan at different volume flow rates, show the variation of overall efficiency with load and speed graphically	PO1, PO2, PO3, PO4, PO5, PSO1
M431.3	Identify the various components of low speed wind tunnel, plot a graph showing variation of pressure over the entire length of aerofoil blade and also evaluate the lift and drag coefficient values for a given aerofoil blade at different angle of assign	PO1, PO2, PO3, PO5, PSO1
M431.4	Describe the modes of heat transfer, calculate thermal conductivity, heat transfer coefficient subjected to natural and forced convection environment and Stefan Boltzmann constant value of thermal radiation	PO1, PO2, PO4, PO3, PO5, PO11
M431.5	Express the working principle of heat exchangers and its application in real life, calculate the LMTD and effectiveness of a given heat exchanger for both parallel and counter flows	PO1, PO2, PO3, PO4, PO5, PO9