

MVSR Engineering College, Nadergul.
Department of Mechanical Engineering
COURSE OUTCOMES

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

Name of the Course: **DYNAMICS OF MACHINES**

Course Code: ME 302

At the end of the course student is able to

Outcome No.	Course Outcome	POs	PSOs
C302.1	Determine the forces and torques in basic kinematic linkages in motion; crank effort of slider crank mechanism with correction factors; Determine the gyroscopic couple and its effect on vehicles in motion	1,2,3,4,12	
C302.2	Distinguish the working principles of governors viz, Watt, Porter, Hartnell and Hartung in the speed control of engines, and evaluate of stability, isochronism, sensitivity and effort characteristics	1,2,3	
C302.3	Design flywheels using turning moment diagram data, for single / multi-cylinder engines and punching presses, in order to reduce fluctuations in speed and energy.	1,2,3	
C302.4	Analyse the unbalanced forces in rotating and reciprocating parts of mechanical systems, and calculate the magnitude and position of the balancing masses in the case of single and multi-cylinder in-line and radial engines.	1,2,3,4	1
C302.5	Distinguish between free, damped and forced vibrations of spring-mass, shaft-rotor, or lateral vibrations; and evaluate the natural frequencies or magnification factors.	1,2,3,6,7	
C302.6	Evaluate the natural frequencies and mode shapes of 2 d.o.f. systems; and apply Holzer, Dunkerley and Raleigh's methods to determine fundamental / higher natural frequencies and mode shapes of multi-d.o.f systems.	1,2,3,6,7,12	1,2

