



SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

DEPARTMENT OF MECHANICAL ENGINEERING

COURSE OUTCOMES OF ALL COURSES OF SIXTH SEMESTER

BE MECHANICAL ENGINEERING

6ME01 Design of Machine Elements

After successfully completing the course, students will be able to:

- 1 Understand the concept of various stresses and apply the design procedure to riveted joints and welded joints.
- 2 Understand design procedure of knuckle joint, springs and power screw.
- 3 Analyze & select types of shafts, keys, couplings for various machines and industrial applications.
- 4 Analyze the various types of bearings and understand the design procedure of IC Engine parts.

6ME02 Dynamics of Machines

After successfully completing the course, students will be able to:

- 1 Analyze the mechanisms to attain equilibrium.
- 2 Determine the effect of gyroscopic couple on a dynamic body.
- 3 Calculate the natural frequency of the vibrating system.
- 4 Determine balancing for rotating and reciprocating mass system.

6ME03 Control System Engineering

After successfully completing the course, students will be able to:

- 1 Demonstrate of basics of Control Systems.
- 2 Develop Mathematical Model and the transfer functions of the basic systems.
- 3 Demonstrate mathematical modelling of PID controllers, automatic speed controllers.
- 4 Check system stability using Bode Plot, Root Locus and Routh's Criterion

6ME04 Non-Conventional Energy Sources

After successfully completing the course, students will be able to:

- 1 Able to study the concept of renewable and non-renewable sources.
- 2 Apply the basic concept of solar energy utilization and storage.
- 3 Apply the concept of energy from ocean and wind.
- 4 Study the concept of bio-mass energy resources.

6ME04 Lean Manufacturing

After successfully completing the course, students will be able to:

- 1 Explain the concept, history and applications of lean manufacturing
- 2 Interpret different element of lean manufacturing
- 3 Interpret different tools of lean manufacturing
- 4 Apply lean manufacturing in real life situation.
- 5 Identify the barriers in implementation of Lean Manufacturing
- 6 Explain the concept of Six Sigma