

2/4 B.Tech. FOURTH SEMESTER

ME4L1

PRODUCTION TECHNOLOGY LAB

Credits: 2

Lecture:- -

Lab Practice : 3 periods/week

Internal assessment: 25marks
Semester end examination: 50 marks

Objectives:

1. Preparation of wooden pattern using carpentry tools.
2. Making sand mold using pattern.
3. Various operations performed on press tools.
4. Simple joints like T-joint, butt joint are prepared using arc, oxy-acetylene, MIG, TIG welding techniques.
5. Preparation of gear wheel and hub nut cover using injection molding machine.

Learning outcomes:

At the end of course the students will have:

- Make the wooden pattern using carpentry tools.
- Use the pattern for creating mould cavity.
- Perform blanking and piercing operations on press tools.
- Fabricate welded structures for engineering applications.
- Prepare components using blow and injection molding.

Pre-Requisites:

Production Technology

I. FOUNDRY

- Preparation of single piece pattern
- Preparation of split pattern
- Sand Molding

WELDING

- 1) Arc welding – Two exercises
- 2) Spot Welding
- 3) TIG welding

II. PRESS WORKING

- 1) Piercing and Blanking
- 2) Study of Press Tools

III. PLASTICS PROCESSING

- 1) Injection Molding – Two exercises
- 2) Blow Molding