

# MANUFACTURING TECHNOLOGY LAB

**Course Code: 22ME1107**

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**Course Outcomes:** At the end of the course, the student will be able to

**CO1:** design and prepare simple castings

**CO2:** build welded joints using TIG welding

**CO3:** build welded joints using MIG welding

**CO4:** demonstrate various metal forming processes

**CO5:** demonstrate processing of plastics

## List of Exercises

Note: Any **twelve** of the following exercises are to be performed

1. Preparation of single piece pattern
2. Determination of Grain Fineness Number, Green Strength and Permeability of molding sand
3. Gating Design and pouring time and solidification time calculations of a casting
4. Demonstration of molding, melting, pouring and knock out of simple casting
5. Preparation of a butt joint using TIG Welding
6. Preparation of a butt joint using MIG Welding
7. Preparation of a lap joint using Spot welding
8. Preparation of blanks using punch-die set
9. Making of holes using punch-die set
10. Making of articles using deep drawing process
11. Making of bends of pipes at different angles
12. Making of a plastic component using injection molding
13. Making of a plastic component using blow molding
14. Joining of plastics by ultrasonic welding