DEPARTMENT OF MECHANICAL ENGINEERING

Name of the Lab : WORKSHOP

OBJECTIVES:

- To provide exposure to the students with hands on experience on various basic engineering practices in Civil and Mechanical Engineering.
- To Study and practice the various operations that can be performed in lathe, shaper, drilling, milling machines etc. and to equip with the practical knowledge required in the core industries.
- To Study and acquire knowledge on various basic machining operations in special purpose machines and its applications in real time manufacturing of components in the industries.

OUTCOMES:

Upon the completion of this course the students will be able to

- Fabricate carpentry components and pipe connections including plumbing works.
- Use welding equipments to join the structures.
- Carry out the basic machining operations
- Illustrate on centrifugal pump, Air conditioner, operations of smithy, foundry and fittings
- Demonstrate the safety precautions exercised in the mechanical workshop.
- Make the work piece as per given shape and size using lathe, shaper, drilling, milling machines etc.
- Join two metals using arc and gas welding.
- Use sheet metal fabrication tools and make simple models as per the given diagram.
- Use different moulding tools, patterns and prepare sand moulds.
- Apply different machine tools to manufacturing gears.
- Utilize different machine tools like Surface Grinding Cylindrical Grinding etc, for finishing operations
- Manufacture and reconditioning tools using cutter grinder