MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF MECHANICAL ENGINEERING

2030374 MACHINE DRAWING PRACTICE

B.Tech.II Year-I Sem **L/T/P/C**
0/0/4/2

VISION

The Mechanical Engineering Department strives for immense success in the field of education, research and development by nurturing the budding minds of young engineers inventing sets of new designs and new products which may be envisaged as the modalities to bring about a green future for humanity"

MISSION

Equipping the students with manifold technical knowledge to make them efficient and independent thinkers and designers in national and international arena. Encouraging students and faculties to be creative and to develop analytical abilities and efficiency in applying theories into practice, to develop and to disseminate new knowledge. Pursuing collaborative work in research and development organizations, industrial enterprises, research and academic institutions of national and international standards, to introduce new knowledge and methods in engineering teaching and research in order to orient young minds towards industrial development.

LIST OF EXPERIMENTS

PART-A
Drawing of Machine Elements and simple parts:

1. Conventional representation of materials, common machine elements and parts such as screws, nuts, bolts, keys, gears, webs, ribs.
2. Types of sections-selection of section planes and drawing of sections and auxiliary sectional views.
3. Methods of dimensioning, general rules for sizes and placement of dimensions for holes, centers, curved and taper features.
4. Title boxes, their size, location and details. Common abbreviations and their usage.
5. Working drawings of machine parts. Popular forms of screw threads, bolts, nuts, stud bolts etc. Keys, cotter and knuckle joints, Riveted joints, shaft couplings, spigot and socket pipe joint, Bearings.

PART-B
Assembly Drawings:

1. Steam engine parts – Stuffing boxes, Cross heads, Eccentrics.
2. Machine tool parts – Tailstock, Tool Post, Machine Vices.
3. Other machine parts – Screwjacks, Petrolengine C.R, Plummerblock, FuelInjector.
4. Valves – Steam stop valve, spring loaded safety valve, feed check valve and aircock.

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF MECHANICAL ENGINEERING

2030374 MACHINE DRAWING PRACTICE

COURSE OUTCOMES

CO	Course outcome
ME 374.1	Conventional representation of materials, common machine elements and parts.
ME 374.2	Selection of section planes and drawing of sections and auxiliary sectional views.
ME 374.3	Methods of dimensioning, general rules for sizes and placement of dimensions.
ME 374.4	Title boxes, their size, location and details.
ME 374.5	Types of Drawings – working drawings for machine parts.
ME374.6	Developing assembly drawings using part drawings of machine components.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1	Graduates shall emerge as successful Mechanical engineer's as their career progress
PEO2	**G**raduates apply fundamentals of engineering, in practical applications and engage in active research.
PEO3	**Mechanical Graduates** shall have the ability to design products with interdisciplinary skills.
PEO4	**G**raduates will serve the society with their professional skills

PROGRAM SPECIFIC OUTCOMES

PSO1- Students acquire necessary technical skills in mechanical engineering that make them employable graduate.
PSO2- An ability to impart technological inputs towards development of society by becoming an entrepreneur

LIST OF EQUIPMENTS

1. DRAWING TABLES

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF MECHANICAL ENGINEERING

2030374 MACHINE DRAWING PRACTICE

Do's

- Enter laboratory with appropriate laboratory uniform and shoes.
- Keep all your belongings in the book rack or at the place suggested by lab instructor.
- Bring the laboratory manual, observation and record without fail.
- Eliminate drawing materials can be cause physical injury by inhalation or by skin contact.
- Hands should be kept clean at all times during work.
- Make sure that all drawing sheets is clean after performing experiments.
- Provide caps to harmful instruments when not in use.
- Wear disposable gloves, as provided in the laboratory, when handling hazardous materials.

Don'ts

- Don't place glassware near edge of laboratory bench.
- Don't let water drip onto drawing sheets.
- Never point the open end of drawing instruments containing a sharp edge at yourself or others.
- Don't use mobile phones during laboratory hours.
- Don't fool around in the laboratory.
- Don't come with long hair, dangling jewelry and loose or baggy clothing which are a hazard in the laboratory.