SWAMI VIVEKANAND COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

SESSION:- JAN -JUNE 2025

LAB MANUAL

SEM-II

BME (BT-203)

Submitted to

Mr.

Submitted by

Name -

Roll No. -

Swami Vivekanand College of Engineering

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Student Practical Evaluation Sheet

S. No.	Name of Experiment	Date of Experiment	Date of Submission	Marks Obtained		Signature of Student	Signature of Faculty
				LW(10 Marks)	PQ(10 marks)		
1.	Study of parts of I.C Engine						
2	Study of Four stroke petrol & two stroke petrol engines						
3	Study of four stroke diesel & two stroke diesel Engines						
4	Study of boiler Mounting & Accessories.						
5	Study of water tube boilers (Simple Vertical boiler and Babcock &Wilcox Boiler).						
6	Study of Fire Tube boiler (Cochran and Locomotive Boiler),						
7	Study of Steam Engine.						
8	Study of Lathe Machine.						
9	Study of UTM.						
10	Linear And Angular measurement						
Total marks obtained							

Department's Vision and Mission -

Vision: To develop technically sound human resources of high quality in Mechanical Engineering who can contribute to the technological and socioeconomic development of the nation constructively.

Mission:

M1. Quality Education: to prepare liable graduates having sound technical knowledge and problem solving ability, by continuously improving educational methods in academic programme.

M2. Innovation: prepare graduates to fulfil the desired needs of industry by inculcating creative thinking and competitive spirit in all activities.

M3. Research: develop collaborative environment with the industries to promote research.

M4. Entrepreneurship: to develop the spirit of taking calculated risk for generating self-employment among graduates.

M5. Value: prepare graduates having moral values for the growth of the society.

Course Learning Objectives (CLO)

The Learning Objectives of Basic Mechanical Engineering are such that the student will

CLO1: Understand different types of engineering material, there composition, properties and applications.

CLO2: Understand different types of measuring instruments and production processes.

CLO3: Study and understand fluid properties, its types, Bernoulli's equation and different type of hydraulic machines.

CLO4: Understand basic concepts of thermodynamics formation of steam and use of steam table.

CLO5: Understand different type of IC engines and Air standard cycles on which the engines work.

Course Outcomes (CO)

At the end of the course, student would be able to

CO1: Know the basic concepts to understand different types of engineering material.

CO2: Use different types of measurement tools.

CO3: Get familiar with basics concepts of fluid mechanics.

CO4: Know the thermodynamic system, processes and laws and also the concept of steam formation.

CO5: Get familiar with the internal combustion engine and air standard cycles.

CO6: Expected to possess basic understanding and knowledge about the scope, current and future trends in mechanical engineering.

Program Specific Outcome

PSO – 1: Ability to Develop and implement new ideas on product design and development with the help of modern computer aided tools, while ensuring best manufacturing practices.

PSO – 2: Ability to apply engineering knowledge and design & analysis tools to solve problems in the domains of structural, thermal and fluid mechanics.

PSO - 3: Engage professionally in industries or as an entrepreneur by applying manufacturing and management practices.