23CE3251-ENGINEERING MECHANICS & BUILDING PRACTICES LAB

Branch	CE	Year : I	Sem: II
Course Category:	Professional Core	Credits:	1.5
Course Type:	Lab	Lecture-Tutorial-Practical:	0-0-3
Prerequisites:	Nil	Continuous Evaluation:	30
		Semester End Evaluation:	70
		Total Marks:	100

Course Outcomes

On completion of the course, the student should be able to:

CO1	Evaluate the coefficient of friction between two different surfaces and between the inclined plane and the roller.	**K3**
CO2	Verify Law of Parallelogram of forces and Law of Moment using force polygon and bell crank lever.	**K2**
CO3	Determine the Centre of gravity of different configurations.	**K3**
CO4	Understand the Quality Testing and Assessment Procedures and principles of Non Destructive Testing.	**K2**
CO5	Exposure to safety practices in the construction industry.	**K2**

Contribution of course outcomes towards Achievement of Program Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	2	2	2	2	2	2					2	2	
CO2	2	2	2	2	2	2	2					2	2	
CO3	2	2	2	2	2	2	2					2	2	
CO4	2	2	2	2	2	2	2					2	2	
CO5	2	2	2	2	2	2	2					2	2	
Avg.	2	2	2	2	2	2	2					2	2	

Students have to perform any 10 of the following Experiments:

Experiment No.1	To study various types of tools used in construction.	**CO5**
Experiment No.2	Forces in Pin Jointed Trusses	**CO1**
Experiment No.3	Experimental Proof of Lami's Theorem	**CO2**
Experiment No.4	Verification of Law of Parallelogram of Forces.	**CO2**
Experiment No.5	Determination of Center of Gravity of different shaped Plane Lamina.	**CO3**
Experiment No.6	Determination of coefficient of Static and Rolling Friction.	**CO1**
Experiment No.7	Verification of Law of Moment using Rotation Disc Apparatus and Bell Crank Lever	**CO2**
Experiment No.8	Study of Alternative Materials like M-sand, Fly ash, Sea Sand etc.	**CO5**
Experiment No.9	Field-Visit to understand the Quality Testing - report.	**CO5**
Experiment No.10	Safety Practices in Construction industry	**CO5**
Experiment No.11	Demonstration of Non-Destructive Testing - using Rebound Hammer & UPV	**CO4**
Experiment No.12	Study of Plumbing in buildings.	**CO5**