BONAM VENKATACHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE(A), BATLAPALEM
DEPARTMENT OF CIVILENGINEERING-B. TECH

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Regulation	**BR23**				
I Year II Semester	**Course Code: 23CE21L0L**				
Course Title:	**ENGINEERING MECHANICS& BUILDING PRACTICE LAB**				

(Civil Engineering & allied branches)

Course Objectives: The students completing the course are expected to

- Verify the Law of Parallelogram of Forces and Lami's theorem.
- Determine the coefficients of friction of Static and Rolling friction and Centre of gravity of different plane Lamina.
- Understand the layout of a building, concepts of Non-Destructive Testing and different Alternative Materials.

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.

CO2: Verify Law of Parallelogram of forces and Law of Moment using force polygon and bell crank lever.

CO3: Determine the Centre of gravity different configurations and

CO4: Understand the Quality Testing and Assessment Procedures and principles of Non-Destructive Testing.

CO5: Exposure to safety practices in the construction industry.

Students have to perform any 10 of the following Experiments:

1. To study various types of tools used in construction.
2. Forces in Pin Jointed Trusses
3. Experimental Proof of Lami's Theorem
4. Verification of Law of Parallelogram of Forces.
5. Determination of Center of Gravity of different shaped Plane Lamina.
6. Determination of coefficient of Static and Rolling Friction.
7. Verification of Law of Moment using Rotation Disc Apparatus and Bell Crank Lever
8. Study of Alternative Materials like M-sand, Fly ash, Sea Sand etc.
9. Field-Visit to understand the Quality Testing - report.
10. Safety Practices in Construction industry
11. Demonstration of Non-Destructive Testing - using Rebound Hammer & UPV
12. Study of Plumbing in buildings.

Dr M C S MADAN HOD &BOS, Department of Civil Engineering, BVCITS Batlapalem	Dr G Yesuratnam Professor of Civil Engineering JNTU Kakinada. (University Nominee)	Dr Bhanavathu Balakrishna Professor in Mechanical Engineering & Director of Evaluation JNTU Kakinada.	Dr A Murali Krishna, Professor, Department of Civil Engineering, IIT Tirupathi	Dr B Raghuram kadali Asst Assistant Professor, Department of civil Engineering, NIT Warangal.	Mr P Rajesh Sr Engineer(P)SD VVL Survey &Constructions, Kakinada. (Industrial Expert)	Mr Chakradhar Prasad Assistant Professor, Department of civil DNR (Alumni Member)