

#### JAWAHARLAL NEHRUTECHNOLOGICALUNIVERSITY: KAKINADA

# KAKINADA-533003, Andhra Pradesh, India

R-13 Syllabus for EEE.JNTUK

III Year-II Semester	L	T	P	C
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#### ELECTRICAL MEASUREMENTS LABORATORY (R1631028)

### **Prerequisite Course:**

**Electrical Measurements** 

## **CourseDescriptionandObjectives:**

To analyze the performance and testing of different meters

# **CourseOutcomes:**

Upon completion of the course, the student will be able to achieve the following outcomes.

Cos	S Course Outcomes	
1	To be able to measure the electrical parameters voltage, current, power, energy and electrical characteristics of resistance, inductance and capacitance	4
2	To be able to test transformer oil for its effectiveness	7
3	To be able to measure the parameters of inductive coil	1

## **Syllabus:**

## Any 10 of the Following Experiments are to be conducted

- 1 Calibration and Testing of single phase energy Meter
- 2. Calibration of dynamometer wattmeter using phantom loading
- 3. Calibration of PMMC ammeter and voltmeter using Crompton D.C. Potentiometer
- 4. Measurement of resistance and Determination of Tolerance using Kelvin's double Bridge.
- 5. Capacitance Measurement using Schering bridge.
- 6. Inductance Measurement using Anderson bridge.
- 7. Measurement of 3 phase reactive power with single phase wattmeter for balanced loading.
- 8. Calibration of LPF wattmeter by direct loading.
- 9. Measurement of 3 phase power with single watt meter and using two C.Ts.
- 10. Testing of C.T. using mutual inductance method.
- 11. Testing of P.T. using absolute null method.
- 12. Dielectric oil testing using H.T test Kit.
- 13. Calibration of AC voltmeter and measurement of choke parameters using ACPotentiometer in polarform.
- 14. Measurement of Power by 3 Voltmeter and 3 Ammeter method..