Lesson Plan: Electrical Electronics Measurements Laboratory

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Semester: 3rd
Date: 01-07-2026 to 05-11-2026

WEEK	TOPICS
Week 1	Introduction to Electrical Measurements Laboratory, safety precautions, identification of measuring instruments.
Week 2	1. Identify measuring instruments based on symbols, type, accuracy class, position and scale.
Week 3	2. Identify the components of PMMC and MI instruments.
Week 4	3. Extend range of ammeter and voltmeter using shunt and multiplier.
Week 5	Evaluation and Viva Voce
Week 6	4. Measure power using electrodynamic wattmeter in a single-phase circuit.
Week 7	5. Measure active and reactive power of balanced three-phase load using single three-phase wattmeter.
Week 8	6. Measure active power of balanced three-phase load using two wattmeters.
Week 9	Evaluation and Viva Voce
Week 10	7. Calibrate single-phase electronic energy meter by direct loading. 8. Measure insulation resistance using Megger.
Week 11	9. Measure earth resistance using earth tester.
Week 12	10. Measure unknown frequency and phase angle using CRO by Lissajous figure.
Week 13	Practice/Repeat Experiments
Week 14	Revision and Record Verification
Week 15	Evaluation and Viva Voce

30/6/26

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