GOVT. POLYTECHNIC EDUCATION SOCIETY MANESAR
ELECTRONICS AND COMMUNICATION ENGG.

Lesson Plan(1ST) **Session:AUG.2025 to DEC.2025**

Semester-1st

Subject:FEE(THEORY)

LessonPlanDuration:Aug.2025–Dec.2025 work Load(Lecture/Practical)per week(in hours):03hours(Theory)

Name of the Faculty: Ms. Meenakshi, Discipline: Electronics and Communication Engg.

Subject: FEE Semester: 1st

Week	Theory		Week	Theory	
	Lecture day	Topic(including assignment/ test)		Lecture day	Topic(includingassignment/test)
1st	1	Unit1.nature of electricity, charge, current, potential, potential ddifference, energy, power & its unit	8th	22	Unit4.Concept of electro-magnetic field produced by flow of electric current
	2	Resistane, conductance their units and factor affecting both, color coding		23	Magnetic circuit, concept of magneto-motive force (MMF), flux
	3	Inductor & capacitor with their wattage ad factor affecting		24	Reluctance, permeability, Analogy between electric and magnetic
2nd	4	Unit2.Ohm'slawanditsverification	9th	25	Faraday's laws of electro-magnetic induction
	5	Kirchhoff's current law and Kirchhoff's voltage law.		26	Principles of self and mutual induction
	6	Star–Delta connections.		27	Self and mutually induced emf
3rd	7	Voltage and current source, symbol and Graphical representation, characteristics	10th	28	Energy stored in an inductor, series and Parallel combination of inductors.
	8	Mesh and Loop analysis		29	Assignment2
	9	Thevenin's theorem, Norton's theorem		30	**2nd Sessional Test**
4th	10	Superposition Theorem, Maximum Power Transfer Theorem	11th	31	Unit5. Basic idea of primary and secondary cells.
	11	Unit3.AC Fundamentals:Cycle, frequency, time period, amplitude		32	Construction, working principle and Applications of Lead-Acid
	12	Difference between AC And DC, instantaneous value, average		33	Nickel-Cadmium battery
5th	13	R.m.s. value, maximum value, form factor and peak factor	12th	34	LI-Ion batteries.
	14	Concept of conductance, susceptance, admittance, impedance, concept of		35	Series and parallel connections of batteries.
	15	Introduction to series and parallel resonance and its conditions		36	Introduction to maintenance of free batteries.
6th	16	Assignment1	13th	37	Disposal of batteries
	17	**Revision for 1st Sessional test**		38	General idea of solar cells
	18	1stSessionalTest		39	Solar panels and their applications.
7th	19	RL-RC Circuits , Introduction to series and parallel resonance and its conditions	14th	40	Assignment 3
	20	Power in pure resistance, inductance and capacitance, power in combined RLC		41	Revision
	21	Power factor, active and reactive power: Definition and their significance		42	**3rd Sessional test**

Subject:FEE(PRACTICAL)

Lesson Plan Duration: Aug 2025- Dec 2025 work Load (Practical) per week (inhours):08HOURS(04 Hours*2 Groups) (PRACTICAL)					
Name of the Faculty: Ms. Meenakshi Discipline: Electronics and Communication Engg. Subject: FEE Semester: 1st					
Week	Theory	Practical	Week	Theory	Practical
	Lecture day	Topic		Lecture day	Topic
1st	1	Familiarization of measuring instruments viz voltmeter, ammeter, CRO, Wattmeter and multi-meter and other accessories	8th	29	Verification of Superposition theorem and Maximum Power theorem
	2			30	
	3			31	
	4			32	
2nd	5	To measure (very low) resistance of an ammeter and(very high)resistance of a voltmeter	9th	33	Alternating voltage applied to resistance and inductance, resistance and capacitance in series
	6			34	
	7			35	
	8			36	
3rd	9	To verify Ohm's law by drawing a graph between voltage and current	10th	37	To find the voltage current relationship in a single phase R-L circuits and draw their impedance triangles
	10			38	
	11			39	To find the voltage current relationship in a single R-C Series circuits, and draw their impedance triangles
	12			40	
4th	13	To observe change in resistance of a bulb in hot and cold conditions, using voltmeter And ammeter.	11th	41	Measurement of power and power factor in a single phase R,L,C. circuit
	14			42	
	15			43	Calculation of active and reactive powers in the circuit.
	16			44	
5th	17	To determine the value of resistance using color coding method	12th	45	To test a lead-acid storage battery and measure its specific gravity
	18			46	
	19			47	
	20			48	
6th	21	Verification of Kirchhoff's Current and Voltage Laws in a DC circuit on bread board	13th	49	Care and maintenance of lead-acid battery.
	22			50	
	23			51	
	24			52	
7th	25	Verification of Thevenin's theorem, Norton's Theorem	14th	53	Visit to nearby Power Station
	26			54	
	27			55	
	28			56	