STUDY PLAN

Ashish SIR : Electrical Machine				Measurement and instrumentation		
Date	**Topic**	**Timing**		**Date**	**Topic**	**Timing**
Monday, September 1, 2025	Fundamentals of machine, Basics of transformer	2:00PM 3:30PM		Monday, October 20, 2025	Methods of measurements, type of instruments	2:00PM 3:30PM
Tuesday, September 2, 2025	Shell type and core type	2:00PM 3:30PM		Tuesday, October 21, 2025	Basic Characteristics of an Instrument & Error Analysis	2:00PM 3:30PM
Wednesday, September 3, 2025	Principle, ideal transformers, EMF equation	2:00PM 3:30PM		Wednesday, October 22, 2025	Types of Deflection, Damping and Controlling Torque	2:00PM 3:30PM
Thursday, September 4, 2025	Phasor diagram, Impedance transformer, rating of transformer	2:00PM 3:30PM		Thursday, October 23, 2025	classification of analog instruments, mcq	2:00PM 3:30PM
Friday, September 5, 2025	Equivalent cricuit	2:00PM 3:30PM		Friday, October 24, 2025	Basic Galvanometer, PMMC & MI instruments	2:00PM 3:30PM
Monday, September 8, 2025	OC test and SC test and Sumpner Test	2:00PM 3:30PM		Monday, October 27, 2025	Electrodyanamometer instruments	2:00PM 3:30PM
Tuesday, September 9, 2025	Voltage regulation	2:00PM 3:30PM		Tuesday, October 28, 2025	Thermal instruments electrostatic instruments rectifier type	2:00PM 3:30PM
Wednesday, September 10, 2025	Losses in transformer	2:00PM 3:30PM		Wednesday, October 29, 2025	Requirement of Range Extension and Basic DC Ammeter & Voltmeter	2:00PM 3:30PM
Thursday, September 11, 2025	Efficiency of a Transformer	2:00PM 3:30PM		Thursday, October 30, 2025	Loading Effect Due to Voltmeter Resistance	2:00PM 3:30PM
Friday, September 12, 2025	Parallel Operation of Single Phase Transformer	2:00PM 3:30PM		Friday, October 31, 2025	Property , materials, measurments of low resistance	2:00PM 3:30PM
Monday, September 15, 2025	Auto transformer	2:00PM 3:30PM		Monday, November 3, 2025	Measurments of medium resistance	2:00PM 3:30PM
Tuesday, September 16, 2025	3 phase transformer-1	2:00PM 3:30PM		Tuesday, November 4, 2025	Measurments of high resistance	2:00PM 3:30PM
Wednesday, September 17, 2025	3 phase transformer-2	2:00PM 3:30PM		Wednesday, November 5, 2025	Measurments of inductance-1	2:00PM 3:30PM
Thursday, September 18, 2025	DC generator introduction	2:00PM 3:30PM		Thursday, November 6, 2025	Measurments of inductance-2	2:00PM 3:30PM
Friday, September 19, 2025	Construction of DC machine	2:00PM 3:30PM		Friday, November 7, 2025	Capacitance and special bridges	2:00PM 3:30PM
Monday, September 22, 2025	Classification of windings and its analysis	2:00PM 3:30PM		Monday, November 10, 2025	DC and AC power,introduction to wattmeter	2:00PM 3:30PM
Tuesday, September 23, 2025	EMF equation & Classification of generators	2:00PM 3:30PM		Tuesday, November 11, 2025	Blondel theorem , two WM method, Single WM method	2:00PM 3:30PM
Wednesday, September 24, 2025	Armature Reaction	2:00PM 3:30PM		Wednesday, November 12, 2025	Errors in Wattmeter	2:00PM 3:30PM
Thursday, September 25, 2025	Commutation & interpolar winding	2:00PM 3:30PM		Thursday, November 13, 2025	Induction Type Energy Meter	2:00PM 3:30PM
Friday, September 26, 2025	DC Generator Characteristics	2:00PM 3:30PM		Friday, November 14, 2025	Measurement of Frequency	2:00PM 3:30PM

Monday, September 29, 2025	Voltage buildup condition and Critical Condition	2:00PM 3:30PM		Monday, November 17, 2025	Measurement of Power Factor	2:00PM 3:30PM
Tuesday, September 30, 2025	Voltage Regulation and Parallel Operation of DC Generator	2:00PM 3:30PM		Tuesday, November 18, 2025	Basics and construction of CRO	2:00PM 3:30PM
Wednesday, October 1, 2025	DC motor introduction	2:00PM 3:30PM		Wednesday, November 19, 2025	Measurement of phase and frequency	2:00PM 3:30PM
Thursday, October 2, 2025	Classification of DC motor	2:00PM 3:30PM		Thursday, November 20, 2025	Operation modes of CRO and Special CRO	2:00PM 3:30PM
Friday, October 3, 2025	Significance of back emf and torque analysis	2:00PM 3:30PM		Friday, November 21, 2025	AC Potentiometers	2:00PM 3:30PM
Monday, October 6, 2025	DC Motor Characterstic	2:00PM 3:30PM		Monday, November 24, 2025	Basic Potentiometer Circuit &Crompton's Potentiometer Circuit	2:00PM 3:30PM
Tuesday, October 7, 2025	DC Motor Losses and Efficiency	2:00PM 3:30PM		Tuesday, November 25, 2025	Strain gauges, LVDT, RTD. thermistor and pyrometer	2:00PM 3:30PM
Wednesday, October 8, 2025	Speed control of motor	2:00PM 3:30PM		Wednesday, November 26, 2025	Construction , principle, application of Q- meter	2:00PM 3:30PM
Thursday, October 9, 2025	DC Motor Starter	2:00PM 3:30PM		Thursday, November 27, 2025	CT & PT and Burden of Instrument Transformer	2:00PM 3:30PM
Friday, October 10, 2025	Breaking and testing	2:00PM 3:30PM		Friday, November 28, 2025	basic of DVM and its Extension, Type of DVM	2:00PM 3:30PM
Monday, October 13, 2025	3 phase IM introduction and construction	2:00PM 3:30PM		Monday, December 1, 2025	basic of Electronic AC Voltmeter and its principle operation	2:00PM 3:30PM
Tuesday, October 14, 2025	Slip and rotor circuit parameters	2:00PM 3:30PM		Tuesday, December 2, 2025	Type of Electronic AC Voltmeters	2:00PM 3:30PM
Wednesday, October 15, 2025	Torque Slip characteristics	2:00PM 3:30PM		Wednesday, December 3, 2025	Live doubt and miscellaneous-1	2:00PM 3:30PM
Thursday, October 16, 2025	Starting methods	2:00PM 3:30PM		Thursday, December 4, 2025	Live doubt and miscellaneous-2	2:00PM 3:30PM
Friday, October 17, 2025	Speed control of Induction Motor	2:00PM 3:30PM		Friday, December 5, 2025	Live doubt and miscellaneous-3	2:00PM 3:30PM
Monday, October 20, 2025	Testing of Indction motor	2:00PM 3:30PM		**Basic Electronics**		
Ashish SIR : Control system				**Date**	**Topic**	**Timing**
				Tuesday, October 21, 2025	Orientation	5:00PM - 6:00PM
				Wednesday, October 22, 2025	Introduction to Number systems	5:00PM - 6:00PM
Date	**Topic**	**Timing**		Thursday, October 23, 2025	Addition in different base	5:00PM - 6:00PM
Saturday, September 20, 2025	Basic of Control System	5:00 PM - 6:00 PM		Friday, October 24, 2025	Subtraction in Different Base	5:00PM - 6:00PM
Monday, September 22, 2025	Transfer Function Analysis of AC and DC servomotor	5:00 PM - 6:00 PM		Monday, October 27, 2025	Complements	5:00PM - 6:00PM
Tuesday, September 23, 2025	Control system Representation	5:00 PM - 6:00 PM		Tuesday, October 28, 2025	Interconversions part-1	5:00PM - 6:00PM
Wednesday, September 24, 2025	Time Response Analysis Part-1	5:00 PM - 6:00 PM		Wednesday, October 29, 2025	Interconversions part-2	5:00PM - 6:00PM
Thursday, September 25, 2025	Time Response Analysis Part-2	5:00 PM - 6:00 PM		Thursday, October 30, 2025	Binary Codes,BCD	5:00PM - 6:00PM
Friday, September 26, 2025	Routh Hurwitz Criterion, Root Locus	5:00 PM - 6:00 PM		Friday, October 31, 2025	Excess-3 and Gray Codes	5:00PM - 6:00PM
Saturday, September 27, 2025	Bode Plotting using semi log graph paper	5:00 PM - 6:00 PM		Monday, November 3, 2025	Practice Questions	5:00PM - 6:00PM
Sunday, September 28, 2025	Compensator	5:00 PM - 6:00 PM		Tuesday, November 4, 2025	Axioms and Operations	5:00PM - 6:00PM
Monday, September 29, 2025	Controller	5:00 PM - 6:00 PM		Wednesday, November 5, 2025	Laws of Boolean Algebra	5:00PM - 6:00PM

Ashish SIR : Estimation & Coasting

Date	Topic	Timing
Wednesday, October 1, 2025	Class -1	5:00 PM - 6:00 PM
Thursday, October 2, 2025	Class -2	5:00 PM - 6:00 PM
Friday, October 3, 2025	Class -3	5:00 PM - 6:00 PM
Monday, October 6, 2025	Class -4	5:00 PM - 6:00 PM
Tuesday, October 7, 2025	Class -5	5:00 PM - 6:00 PM

Ashish SIR : UEE

Date	Topic	Timing
Wednesday, October 8, 2025	Type of Motor and Characterstics	5:00 PM - 6:00 PM
Thursday, October 9, 2025	Type of loads	5:00 PM - 6:00 PM
Friday, October 10, 2025	System of electric traction and track electrification	5:00 PM - 6:00 PM
Monday, October 13, 2025	Speed-time curves for different services	5:00 PM - 6:00 PM
Tuesday, October 14, 2025	Calculation of various quantities of Electrical Traction	5:00 PM - 6:00 PM
Wednesday, October 15, 2025	Methods of Electrical Heating	5:00 PM - 6:00 PM
Thursday, October 16, 2025	Methods of Electrical Welding	5:00 PM - 6:00 PM
Friday, October 17, 2025	Introduction and terms used in Illumination	5:00 PM - 6:00 PM
Monday, October 20, 2025	Discharge Lamps, MV and SV Lamps	5:00 PM - 6:00 PM
Tuesday, October 21, 2025	Basic Principle of Light Control , Types and design of lightning and flood lighting	5:00 PM - 6:00 PM

END OF SUBJECT

Thursday, November 6, 2025	SOP and POS representation part-1	5:00PM - 6:00PM
Friday, November 7, 2025	SOP and POS representation part-2	5:00PM - 6:00PM
Monday, November 10, 2025	Basic Gates	5:00PM - 6:00PM
Tuesday, November 11, 2025	Special Gates	5:00PM - 6:00PM
Wednesday, November 12, 2025	Universal Gates	5:00PM - 6:00PM
Thursday, November 13, 2025	Circuits of Gates	5:00PM - 6:00PM
Friday, November 14, 2025	Adders	5:00PM - 6:00PM
Monday, November 17, 2025	Subtractors	5:00PM - 6:00PM
Tuesday, November 18, 2025	Multiplexers part-1	5:00PM - 6:00PM
Wednesday, November 19, 2025	Multiplexers part-2	5:00PM - 6:00PM
Thursday, November 20, 2025	Demultiplexers and Decoders	5:00PM - 6:00PM
Friday, November 21, 2025	Practice Questions	5:00PM - 6:00PM
Monday, November 24, 2025	Introduction to flip flops	5:00PM - 6:00PM
Tuesday, November 25, 2025	Different types of Flip flops	5:00PM - 6:00PM
Wednesday, November 26, 2025	Counters Basics	5:00PM - 6:00PM
Thursday, November 27, 2025	Counters Basics	5:00PM - 6:00PM
Friday, November 28, 2025	Practice Questions	5:00PM - 6:00PM
Monday, December 1, 2025	A/D Convertors	5:00PM - 6:00PM
Tuesday, December 2, 2025	D/A Convertors	5:00PM - 6:00PM
Wednesday, December 3, 2025	Practice Questions	5:00PM - 6:00PM
Thursday, December 4, 2025	Memories	5:00PM - 6:00PM

Power Electronics

Date	Title	Time
Recorded	Power Electronics -1	Recorded
Recorded	Power Electronics -2	Recorded
Recorded	Power Electronics -3	Recorded
Recorded	Power Electronics -4	Recorded
Recorded	Power Electronics -5	Recorded

				Recorded	Power Electronics -6	Recorded
				Recorded	Power Electronics -7	Recorded
				Recorded	Power Electronics -8	Recorded
				Recorded	Power Electronics -9	Recorded
				Recorded	Power Electronics -10	Recorded
				Recorded	Power Electronics -11	Recorded
				Recorded	Power Electronics -12	Recorded
				Recorded	Power Electronics -13	Recorded
				Recorded	Power Electronics -14	Recorded
				Recorded	Power Electronics -15	Recorded
				Recorded	Power Electronics -16	Recorded
				Recorded	Power Electronics -17	Recorded
				Recorded	Power Electronics -18	Recorded