Lesson Plan

Week	Lecture	Topic	Actually covered on (date)	Teacher's Sign
1st	1	Circuit breakers		
	2	Theory of arc formation and its extinction		
	3	Re-striking and recovery voltages		
2nd	4	Current chopping		
	5	Capacitance and resistance switching		
	6	Air blast, Air break, Oil CB		
3rd	7	Vacuum and SF6 Circuit breakers		
	8	HVDC circuit breaker system		
	9	Testing of Circuit breakers		
4th	10	Rating and selection of Circuit breakers		
	11	Requirement of Protective Relaying		
	12	Zones of protection, primary and backup protection		
5th	13	Essential qualities of Protective Relaying		
	14	Classification of Protective Relays		
	15	Electromechanical - Electromagnetic		
6th	16	Attraction and induction type relays, Thermal relay		
	17	Static and Numerical relays, Microprocessor based relays		
	18	Over current relaying: Instantaneous, time delayed, definite time, inverse time		
7th	19	Differential relays: circulating current and voltage balance differential relays,		
	20	Biased percentage differential relays, Directional over current		
	21	directional power relays, Distance relays		
8th	22	Generator protection: faults in Generators		
	23	Generator protection: faults in Generators, stator and rotor protection Loss of synchronism		
	24	Motor Protection: Protectionagainst overload, unbalance, single phasing, under voltage and reverse phase,		
9th	25	Transformer protection: Faults in transformers, differential, over current and earth fault protection		
	26	Bucholz relay, Harmonic restraint relay, over flux protection		
	27	Protection of feeders: Differential pilot protection, Merz price protection		
10th	28	Protection of Lines: Over Current, Carrier Current		
	29	Three-zone distance relay protection using impedance relays		
	30	Power frequency over voltages-Switching over voltages		
11th	31	causes of over voltages, Protection against over voltages		
	32	Wave propagation in transmission lines and cables		
	33	transmitted and reflected waves, Surge impedance		
12th	34	Grounded and Ungrounded neutral Systems		
	35	Effects of Ungrounded neutral on system performance		
	36	Methods of Neutral Grounding: Solid, Resistance, Reactance		
13th	37	surge arrestors		
	38	ArcingGrounds and Grounding practices		
	39	Revision		