

**Govt.Polytechnic Panchkula**

**Sector-26**

**Electrical Engineering Department**

**Lesson plan**

<b>Name of Faculty</b>	Suchet Kumari
<b>Discipline</b>	<b>Electrical Engineering</b>
<b>Semester</b>	<b>4th</b>
<b>Subject</b>	<b>EMII</b>
<b>Lesson Plan Duration</b>	<b>March 2022</b>
<b>Work load [Theory + Practical] Per Week</b>	<b>[04T+02Pr]</b>

Week	Day	Theory Topic/ Assignment/ Test	No.	Practical
1 <sup>st</sup>	1	Introduction	1	Use of analog and digital multimeter.
	2	Unit-1 Concept of measurement and instruments		
	3	Concept of measurement and instruments		
	4	Sources of error in instruments Types of electrical measuring instruments-Indicating,integrating and recording		
2 <sup>nd</sup>	1	Essential of indicating instruments	2	Measurement of pressure by using LVDT.
	2	Revision of above		
	3	Unit-2 introduction of moving coil and moving iron instruments		
	4	Difference between ammeters and voltmeters		
3 <sup>rd</sup>	1	Construction and working of moving iron and moving coil instruments	3	Revision/Checking of Files
	2	Merits and demerits of above		
	3	Sources of error in above instruments		
	4	Application of moving iron and moving coil instruments		
4 <sup>th</sup>	1	Unit-3 wattmeter's construction	4	To measure of earth resistance by using of earth tester.
	2	Working and principle of wattmeter		
	3	Merits and demerits of dynamometer wattmeter		
	4	Digital wattmeter		
5 <sup>th</sup>	1	Unit-4 Energymeter- Introduction	5	To measure power, power factor in a single phase circuit , wattmeter and power factor meter and to verify results.
	2	Construction and principle of EM		
	3	Merits and demerits of EM.		
	4	Errors in EM,MDI		
6 <sup>th</sup>	1	Revision/Problem solution	6	Revision.
	2	Digital Energy Meter its construction and diagram.		
	3	Unit -5 Miscellaneous Measuring Instruments		
	4	Megger -construction working and principle.		
7 <sup>th</sup>	1	Earth tester analog and digital ,Single phase power factor meter	7	viva-voice
	2	synchroscope		
	3	Revision/Problem solution		
	4	Phase sequence indicator Clamp on meter		
	1	Class test.	8	Measurement of VOLTAGE and draw
	2	Instrument transformers-CT and PT.		

8 <sup>th</sup>	3	Unit-6 Electronic Instruments		wveshape of by using CRO.
	4	Introduction of EI. CRO Block Diagram		
9 <sup>th</sup>	1	Working principle of CRO	9	Revision/Checking of Files
	2	Application of CRO		
	3	Digital multi meter only block diagram and its application.		
	4	Class Test/Assignment		
10 <sup>th</sup>	1	Unit 7 introduction of LCR Meters.	10	Measurement of power in a 3 phase circuit by using CT AND PT.
	2	Applications of LCR meter.		
	3	Previous year question paper discussed of above chapters.		
	4	Surprise class test.		
11 <sup>th</sup>	1	Class Test/Assignment	11	Calibration of single phase energy meters
	2	Unit-8 power measurements in 3 phase circuit introduction		
	3	Two wattmeter method		
	4	Three wattmeter method.		
12 <sup>th</sup>	1	Class Test/Assignment	12	Use of LCR meter.
	2	Revision/Problem solution		
	3	Unit9 : introduction to transducers.		
	4	Types of transducers.		
13 <sup>th</sup>	1	Pressure measurement ,Flow measurement	13	Measurement of temperature by using thermistor.
	2	Level measurement.		
	3	Displacement measurement.		
	4	Evaluation of home assignments.		
14 <sup>th</sup>	1	Unit -10 Measurement of temperature	14	REVISION/VIVA.
	2	Types of thermometer.		
	3	Thermocouple and resistance temperature.		
	4	Thermal imager etc.		
	2	Revision/Problem solution		
	3	Revision/Problem solution		
	4	Previous year HSBTE Question Paper Solution		

