

# MYMENSINGH POLYTECHNIC INSTITUTE

## TECHNOLOGY: ELECTRICAL

Outline Plan of Teaching (Semester Plan)

Subject: **ELECTRICAL CIRCUITS-1 (66721)**

2<sup>nd</sup> Semester / 2<sup>nd</sup> Shift

3	3	4
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Week	Theory			Practical		
	Content	Activity		Practical Job No	Content	Activity
	(Specific Objectives)	Test	Learning Materials		(Practical Name)	(Resources, Place, Tutorial, Methodology, Reference books, Viva, Job sheet)
1	Circuit parameters (1.1-1.4)			1	Show skill in using oscilloscope in measuring AC voltage & frequency.	oscilloscope
2	Electric Network (2.1-2.8)			2	Show skill in verifying kerchief's laws.	Ammeter, voltmeter, Wire, DC PSU
3	Circuit theorems (3.1-3.4)	Quiz Test-1		3	Show skill in verifying Thevenin's theorem.	Ammeter, voltmeter, Wire, DC PSU
4	Circuit theorems (3.5-3.7)			4	Show skill in verifying Norton's theorem.	Ammeter, voltmeter, Wire, DC PSU
5	Star-Delta conversion. (4.1-4.4)			5	Self check	
6	AC circuit and AC fundamentals.. (5.1-5.5)	Class Test-1		6	Show skill in verifying Superposition theorem.	Ammeter, voltmeter, Wire, DC PSU
7	AC circuit and AC fundamentals.. (5.6-5.10)			7	Show skill in maximum power transfer theorem.	Ammeter, voltmeter, Wire, DC PSU
8	Alternating quantities and rms values. (6.1-6.6)			8	Show skill in measuring effective resistance of a coll.	Ammeter, voltmeter, Wire, DC PSU
9	Vectors and vector quantities. (7.1-7.6)	Quiz Test-2		9	Self check	
10	AC circuit (containing pure resistance, inductance and capacitance). (8.1-8.5)			10	Show skill in determining the values of resistance & inductance and draw the vector diagram of RL series circuit.	Ammeter, voltmeter, Wire, AC PSU
11	AC circuit (containing pure resistance, inductance and capacitance). (8.5-8.10)			11	Show skill in determining the values of resistance & capacitance and drawing vector diagram of RC series circuit.	Ammeter, voltmeter, Wire, AC PSU
12	AC series circuit (containing resistance, inductance and capacitance). (9.1-9.4)	Class Test-2		12	Show skill in determining the values of resistance & inductance, capacitance and draw the vector diagram from of RLC series circuit.	Ammeter, voltmeter, Wire, AC PSU
13	AC series circuit (containing resistance, inductance and capacitance). (9.5-9.10)			13	Self check	
14	AC series circuit (containing resistance, inductance and capacitance).(9.10-9.14)			14	Show skills in determining power factor of a RLC series circuit and drawing vector diagram.	Ammeter, voltmeter, Wire, AC PSU
15	Power & power factor in AC circuit. (10.1-10.4)			15	Self check	
16	Power & power factor in AC circuit. (10.1-10.4)			16	Self check	

Marker Pen, White Board, Multimedia

Name of the teacher : ENGR. NIPUL CHANDRA KARMOKAR

Designation...INSTRUCTOR (ELECTRICAL) .  
Signature