GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline :		Semester: 5th Sem		Name of the Teaching Faculty : Laxmidhara Sahu
Subject : UEET		No. of Days / per week class allotted : 04		Semester From date : 01.08.2023 To Date : 30.11.2023
MONTH	Week	Day	UNIT	Topics
			UNIT-1	**1.Electrolytic Process**
AUGUST	1ST	2nd		Definition and Basic principle of Electro Deposition.
		4th		Important terms regarding electrolysis.
		5th		Faradays Laws of Electrolysis
		6th		Definitions of current efficiency, Energy efficiency
	2ND	2nd		Principle of Electro Deposition
		4th		Factors affecting the amount of Electro Deposition
		5th		Factors governing the electro deposition
		6th		State simple example of extraction of metals.
		2nd		**Independance Day**
	3RD	4th		Application of Electrolysis.
		5th		**Question Discussion**
		6th	UNIT-2	**2.ELECTRICAL HEATING**
				Advantages of electrical heating.
		2nd		Mode of heat transfer and Stephen's Law.
	4TH	4th		Principle of Resistance heating. (Direct resistance and indirect resistance heating.)
		5th		Discuss working principle of direct arc furnace and indirect arc furnace.
		6th		Principle of Induction heating. Working principle of direct core type, vertical core type and indirect core type Induction furnace.
	5TH	2nd		Principle of coreless induction furnace and skin effect.
		4th		Principle of dielectric heating and its application.
	1ST	5th		Principle of Microwave heating and its application
		6th		**Question Discussion**
	2ND	2nd	UNIT-3	**3.Principles of Arc Welding.**
				Explain principle of arc welding
		4th		Discuss D. C. & A. C. Arc phenomena.
		5th		D.C. & A. C. arc welding plants of single and multi-operation type.
		6th		Types of arc welding & Explain principles of resistance welding
	3RD	2nd		Descriptive study of different resistance welding methodsUNIT-4
		4th		**Question Discussion**

SEPTEMBER	3RD	5th		**Class Test-1**
		6th		
	4TH	2nd		**Ganesh Puja**
		4th		**4.Illumination**
		5th		Nature of Radiation and its spectrum. Terms used in Illuminations.
				[Lumen, Luminous intensity, Intensity of illumination, MHCP, MSCP, MHSCP, Solid angle, Brightness, Luminous efficiency.]
		6th		Explain the inverse square law and the cosine law
	5TH	2nd		Explain polar curves. Describe light distribution and control. Explain related definitions like maintenance factor and depreciation factors.
		4th		Design simple lighting schemes and depreciation factor.
		5th		**Birthday of Mohammad**
		6th	**UNIT-4**	Constructional feature and working of Filament lamps, effect of variation of voltage on working of filament lamps.
OCTOBER	1ST	2nd		Explain Discharge lamps. State Basic idea about excitation in gas discharge lamps
		4th		State Basic idea about excitation in gas discharge lamps.
		5th		State constructional factures and operation of Fluorescent lamp. (PL and PLL Lamps)
		6th		Sodium vapor lamps. High pressure mercury vapor lamps
	2ND	2nd		Neon sign lamps. High lumen output & low consumption fluorescent lamps.
		4th		**Question Discussion**
		5th		**5.INDUSTRIAL DRIVES**
			UNIT-5	State group and individual drive
		6th		Method of choice of electric drives
	3RD	2nd		Explain starting and running characteristics of DC and AC motor
		4th		**Internal Exam**
		5th		
		6th		**Durga Puja**
	4TH	2nd		
		4th		
		5th		
		6th		
	5TH	2nd		State Application of: DC motor. Phase induction motor...3 phase synchronous motors.
	1ST	4th		Single phase induction, series motor,
		5th		Universal motor and repulsion motor.
		6th		**Question Discussion**

NOVEMBER		2nd		**6.ELECTRIC TRACTION**
	2ND		**UNIT-6**	Explain system of traction
		4th		System of Track electrification
		5th		Running Characteristics of DC and AC traction motor
		6th		Explain control of motor: Tapped field control.
	3RD	2nd		Rheostatic control. Series parallel control.
		4th		Multi-unit control.
		5th		Metaldyne control.
		6th		Explain Braking of the following types:. Regenerative Braking.
	4TH	2nd		Braking with 1-phase series motor.
		4th		Magnetic Braking.
		5th		**Question Discussion**
		6th		Revision
	5TH	2nd		Revision
		4th		**Class Test-2**