GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline :		Semester: 5th Sem		Name of the Teaching Faculty : LAXMIDHAR SAHU
Subject : UEET		No. of Days / per week class allotted : 04		Semester From date : 01.07.2024 To Date : 8.11.2024
MONTH	**Week**	**Day**	**UNIT**	**Topics**
JULY	1ST		UNIT-1	**1.Electrolytic Process**
		1st		Definition and Basic principle of Electro Deposition.
		3rd		Important terms regarding electrolysis.
		4th		Faradays Laws of Electrolysis
		5th		Definitions of current efficiency, Energy efficiency
	2ND	1st		Principle of Electro Deposition
		3rd		Factors affecting the amount of Electro Deposition
		4th		Factors governing the electro deposition
		5th		State simple example of extraction of metals.
	3RD	1st		Application of Electrolysis.
		3rd		**Muharram (Holiday)**
		4th		**Tutorial class**
			UNIT-2	**2.ELECTRICAL HEATING**
		5th		Advantages of electrical heating.
	4TH	1st		Mode of heat transfer and Stephen's Law.
		3rd		Principle of Resistance heating. (Direct resistance and indirect resistance heating.)
		4th		Discuss working principle of direct arc furnace and indirect arc furnace.
		5th		Principle of Induction heating :Working principle of direct core type Induction furnace.
	5TH	1st		Principle of Induction heating: vertical core type and indirect core type
		3rd		Principle of coreless induction furnace and skin effect.
	1ST	4th		Principle of dielectric heating and its application.
		5th		Principle of Microwave heating and its application
	2ND	1st		**Tutorial class**
				3.Principles of Arc Welding.
		3rd		Explain principle of arc welding
		4th		Discuss D. C. & A. C. Arc phenomena.

AUGUST		5th	UNIT -3	D.C. & A. C. arc welding plants of single and multi-operation type.
	3RD	1st		Types of arc welding & Explain principles of resistance welding
		3rd		Descriptive study of different resistance welding methods
		4th		**Independence Day**
		5th		**First Monthly Test**
	4TH	1st		**Jhulana Purnima (Holiday)**
		3rd		**Tutorial class**
			UNIT-4	**4.Illumination**
		4th		Nature of Radiation and its spectrum. Terms used in Illuminations.
		5th		Lumen, Luminous intensity, Intensity of illumination,MHCP, MSCP, MHSCP
	5TH	1st		**Janmastami (Holiday)**
		2nd		Solid angle, Brightness, Luminous efficiency.
		4th		Explain the inverse square law and the cosine law
		5th		Explain polar curves. Describe light distribution and control. Explain related definitions like maintenance factor and depreciation factors.
SEPTEMBER	1ST	1st		Design simple lighting schemes and depreciation factor.
		3rd		Constructional feature and working of Filament lamps, effect of variation of voltage on working of filament lamps.
		4th		Explain Discharge lamps. State Basic idea about excitation in gas discharge lamps
		5th		State Basic idea about excitation in gas discharge lamps.
	2ND	1st		State constructional factures and operation of Fluorescent lamp. (PL and PLL Lamps)
		3rd		Sodium vapor lamps. High pressure mercury vapor lamps
		4th		Neon sign lamps. High lumen output & low consumption fluorescent lamps.
		5th		**Tutorial class**
	3RD	1st		**Birthday of Mohammed (Holiday)**
		3rd		**Question Discussion**
				5.INDUSTRIAL DRIVES
		4th		State group and individual drive
		5th		**Internal Assessment**
		1st		Method of choice of electric drives
		3rd		Explain starting and running characteristics of DC and AC motor

	4TH	4th	UNIT-5	State Application of: DC motor. Phase induction motor...3 phase synchronous motors.
		5th		Single phase induction, series motor,
	5TH	1st		Universal motor and repulsion motor.
		3rd		**Gandhi Jayanti**
		4th		**Tutorial class**
				6.ELECTRIC TRACTION
		5th		Explain system of traction
	2ND	1st		**Durga Puja (Holiday)**
		3rd		
		4th		
		5th		
	3RD	1st		System of Track electrification
		3rd		**Kumar Purnima (Holiday)**
		4th		Running Characteristics of DC and AC traction motor
		5th		Explain control of motor: Tapped field control.
	4TH	1st		Rheostatic control. Series parallel control.
		3rd	UNIT-6	Multi-unit control.
		4th		Metaldyne control.
		5th		Explain Braking of the following types:. Regenerative Braking,Braking with 1-phase series motor
	5TH	1st		Magnetic Braking.
		3rd		**Tutorial class**
		4th		**Diwali (Holiday)**
NOVEMBER	1ST	5th		**Semester Question Discussion**
	2ND	1st		**Semester Question Discussion**
		3rd		**Second Monthly Test**
		4th		
		5th		**Semester Question Discussion**