Statistical Engg. Son of Daysper Week Class ENERGY AND TRACTION(TH.4) Son of Daysper Week Class 04 Semester From: 0.1.10.2021 To:-08.01.2022 14 ENERGY AND TRACTION(TH.4) 10 No of Weeks: 15 134 19 Definition and Basic principle of Electro Deposition. 134 201 Important terms regarding electrolysis. 214 201 Fandays Laws of Electrolysis. 224 301 1.4 Definitions of current efficiency. Energy efficiency. 214 1.9 Application of Electro Deposition. 1.1 Fractors governing the electro deposition. 224 301 1.9 Application of Electrolysis 2.1 ELECTRICL HEATING 224 301 1.9 Application of Electrolysis 2.1 ELECTRICL HEATING 324 2.2 Explain mode of heat transfer and Stephen's Law. Discuss principle of Resistance heating. 324 301 Discuss principle of accurate furmace and indirect are furmace and skin effect 44° 2.4 Explain working principle of direct core type, vertical core type and indirect Core type induction furmace and skin effect 44° 2.4 Explain working principle of direct are furmace and skin effect </th <th>Dissipling</th> <th>Semester:-</th> <th>Nama of the Teaching Feaultry</th>	Dissipling	Semester:-	Nama of the Teaching Feaultry
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7th 2 nd 4.2 Terms used in Illuminations.			
	7th	2 nd	
i. Luminous intensity ii. Lumen iii. Intensity of illumination iv. MHCP			
v. MSCP vi. MHSCP vii. Brightness viii. Solid angle ix. Luminous			
efficiency			
3^{rd} 4 .3 Explain the inverse square law and the		3rd	
cosine law.4 .4 Explain polar curves.			
4 th 4 .5 Describe light distribution and control. Explain related		4 th	
definitions like maintenance factor and depreciation factors.			definitions like maintenance factor and depreciation factors.

1 st	4 .6 Design simple lighting schemes and depreciation factor.4 .7 Constructional feature and working of Filament lamps, effect of variation of
	voltage on working of filament lamps.
2 nd	4 .8 Explain Discharge lamps
3rd	4.9 State Basic idea about excitation in gas discharge lamps.
4 th	4.10 State constructional factures and operation of: - Fluorescent lamp. (PL and PLL Lamps)
1 st	4 .11 Sodium vapor lamps
2 nd	4 .12 High pressure mercury vapour lamps.
3rd	4 .13 Neon sign lamps.
4 th	4 .14 High lumen output & low consumption fluorescent lamps
1 st	5. INDUSTRIAL DRIVES5 .1 State group and individual drive
2nd	5 .2 Method of choice of electric drives.
3rd	5 .2 Method of choice of electric drives.(Contd)
4 th	5 .3 Explain starting and running characteristics of DC and AC motor.
1st	5 .4 State Application of : 5.4.1 DC motor
2 nd	5.4.2 3 phase induction motor
3rd	5.4.3 3 phase synchronous motors
4 th	5.4.3 3 phase synchronous motors.(Contd)
1 st	5.4.4 Single phase induction, series motor, universal motor and repulsion motor
2nd	5.4.4 Single phase induction, series motor, universal motor and repulsion motor(Contd)
3rd	6. ELECTRIC TRACTION 6. 1. Explain system of traction.
4 th	6. 2. System of Track electrification.
1st	6. 2. System of Track electrification. (Contd)
2 nd	6. 3. Running Characteristics of DC and AC traction motor.
3rd	6. 4. Explain control of motor6.4.1 Tapped field control
4 th	6.4.2 Rheostatic control
1 st	6.4.3 Series parallel control
2nd	6.4.4 Metadyne control
3rd	6. 5. Explain Braking of the following types.
4 th	6.5.1 Regenerative Braking
4	
1 st	6.5.1 Regenerative Braking(Contd)
	6.5.1 Regenerative Braking(Contd) 6.5.2 Braking with 1-phase series motor
1 st	
	2nd 3rd 4th 1st 2nd 3rd 3rd 4th 1st 2nd 3rd 3rd 4th 1st 2nd 3rd 3rd 3rd 3rd 3rd 3rd 3rd 3r