

Dicipline: EE	Semester :5th Sem	Name of the Teaching faculty: SwetaleenaDehury
Subject: UEET	No.of days/per week classalloted:4p(55Min)/week	Semester From date: 15 Sept2022 to Date: 22 Dec 2022 No . Of Weeks:15
Week	Class Day	Theory Topics
1st	1st	1. ELECTROLYTIC PROCESS 1.1. Definition and basic principle of Electro Deposition.
	2nd	1.2 Important terms regarding electrolysis
	3rd	1.3 Faradays law of Electrolysis
	4th	1.4.Definition of current efficiency ,Energy Efficiency
2nd	1st	1.5.Principle of Electrodeposition
	2nd	1.6 Factors Affecting the amount of Electrodeposition
	3rd	1.7. Factor governing the amount of electrodeposition 1.8 Application of Electrolysis
	4th	Tutorial
3rd	1st	2. ELECTRICAL HEATING 2.1.Advantages of Electrical heating
	2nd	2.2.Mode of heat transfer &stephens law
	3rd	2.3. Principle of Resistance Heating(Direct & indirect Resistance Heating)
	4th	2.4.Working Principle of Direct & indirect arc furnace
4th	1st	2.5. Principle of Induction Heating
	2nd	2.6 Principle of Dielectric heating & its application
	3rd	2.7. Principle of Microwave heating and its application
	4th	Class Test 1
5th	1st	3. Principle of ARC welding
	2nd	3.2. Discuss DC & AC Arc welding
	3rd	3.3 DC & AC arc welding plants of single and multi operation type
	4th	3.4.Types of Arc welding
6th	1st	3.5 . Explain principle of Resistance welding
	2nd	3.6. Different types of Resistance welding Methods
	3rd	Tutorial Classes
	4th	4. ILLUMINATION 4.1 Nature of Radiation & its spectrum.
7th	1st	4.2. Terms used in illumination (umen.luminousintensity,intensity of illumination.MHCP,MSCP,MHSCP,Solidangle.Brightness,luminous efficiency)
	2nd	4.3.Explain the inverse square law & the cosine law
	3rd	4.4. Explain polar curve

	4th	4.5 Describe light distribution & control .Explain maintenance factor and depreciation Factor
8th	1st	4.6 Design simple lighting schemes
	2nd	4.7 Constructional Feature and working of Filament lamps, effect of variation of voltage on working of filaments lamp
	3rd	4.8 Explain Discharge lamps
	4th	4.9 state basic idea about excitation in gas discharge lamp
9th	1st	4.10. State constructional features and operation of fluorescent lamp (PL & PLL Lamps)
	2nd	4.11. Sodium Vapour Lamps
	3rd	4.12 High pressure mercury vapor lamp
	4th	Tutorial Classes
10th	1st	4.13. Neon Sign lamp
	2nd	4.14. High lumen output & low consumption fluorescent lamp
	3rd	INTERNAL
	4th	INTERNAL
11th	1st	5. INDUSTRIAL DRIVE 5.1. State group & Individual Drive
	2nd	5.2. Method of choice of Electric drive
	3rd	5.3 Explain starting & running c/s of DC & AC motor
	4th	Tutorial
12th	1st	5.4 State application of DC Motor
	2nd	5.4.2. Three phase Induction motor
	3rd	5.4.3. Three phase Synchronous motor
	4th	5.4.4 Single phase induction ,series motor, universal motor and repulsion motor
13th	1st	6.ELECTRIC TRACTION 6.1 Explain system of traction
	2nd	6.2 System of Electrification
	3rd	6.3. Running c/s of DC & AC Traction motor
	4th	Class Test 2
14th	1st	6.4 Explain control of motor 6.4.1 Tapped Field control
	2nd	6.4.2. Rheostatic Control
	3rd	6.4.3. Series Parallel Control
	4th	6.4.4 Multi unit control 6.4.5 Metadyne Control
15th	1st	6.5 Explain Braking 6.5.1 Regenerative Braking
	2nd	6.5.2 Braking with 1 phase series motor
	3rd	6.5.3. Magnetic Braking
	4th	Tutorial Classes