

LESSON PLAN OF UTILIZATION OF ELECTRICAL ENERGY AND TRACTION

	2 nd	Describe light distribution and control panel
	3 rd	Ch-6 maintenance factor and depreciation factor, simple lighting schemes and lighting factor
	4 th	Constructional feature and working of filament lamps, effect of variation of voltage on working of filament lamps
9th	1 st	Discharge lamps
	2 nd	Constructional features of and operation of fluorescent lamp
	3 rd	Sodium vapour lamp, high pressure mercury vapour lamps
	4 th	Neon sign lamp,
10th	1 st	High lumen output & low consumption fluorescent lamp
	2 nd	Ch-5 industrial drive, group and individual drive
	3 rd	Methods of choice of electric drive
	4 th	Starting and running characteristics of DC and AC motor
11th	1 st	Application of DC motor, 3-ph induction motor
	2 nd	Application of 3-ph synchronous motor,
	3 rd	Application 1-ph induction motor, series motor,
	4 th	Application universal motor and repulsion motor
12th	1 st	Ch-6 Electric traction
	2 nd	System of traction
	3 rd	System of tracking electrification
	4 th	Running characteristics of DC traction motor
13th	1 st	Running characteristics of AC traction motor
	2 nd	Control of motor
	3 rd	Tapped field control
	4 th	Rheostatic control
14th	1 st	Series parallel control
	2 nd	Metadyne control
	3 rd	Braking
	4 th	Magnetic braking
15th	1 st	Braking with 1-ph series motor
	2 nd	Regenerative braking
	3 rd	Numerical practice
	4 th	Overall discussion

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DISCIPLINE	SEMESTER	Name of the teaching faculty- Chinmaya Kumar Patra
SUB-UEET	5th	Semester From Date-
	4days/week	No of Weeks-15
1st	1 st	Ch-1 Electrolytic process
	2 nd	Definitionandbasicprincipleofelectrodeposition
	3 rd	Importantterms regardingelectrolysis
	4 th	Faraday'slawofelectrolysis
2nd	1 st	currentefficiency,energy efficiency
	2 nd	Principleofelectrodeposition,andfactorsaffectingtheamountofelectrodeposition
	3 rd	Factorsgoverningtheelectrodeposition
	4 th	Simpleexamplerelatedtoextractionofmetals
3rd	1 st	Applicationofelectrolysis
	2 nd	Ch-2Advantage ofelectrical heating
	3 rd	Modeofheattransferandstephen'slaw
	4 th	Principleof resistanceheating(direct,indirect)
4th	1 st	workingprincipleof directArcfurnaceandindirectarcfurnace
	2 nd	Principleofinductionheating
	3 rd	Workingprincipleof directcoretypeverticalcoretypeandindirectcoretypeinductionfurnace
	4 th	Principleofcorelessinductionfurnaceandskin effect
5 th	1 st	Principleofdielectriceheatingandapplication
	2 nd	PrincipleofMicrowaveheatinganditsapplication
	3 rd	Ch-3explainprincipleofarcwelding
	4 th	D.CandA.Carcphenomena
6th	1 st	D.CandA.Carcweldingplants ofsingle type
	2 nd	D.CandA.Carcweldingplants ofMultioperation type
	3 rd	Types ofarcwelding
	4 th	Principle ofresistancewelding
7th	1 st	Descriptivestudy ofdifferentresistancewelding methods
	2 nd	Ch-4illumination,nature ofradiationanditsspectrum
	3 rd	Luminousintensity,lumen,intensity ofillumination,MHCP,MSCP,MHSCP,brightness,solidangle Luminousefficiency
	4 th	Inversesquarelawandthecosinelaw
8th	1 st	Polarcurves