

Electrical Engineering Department
Lesson plan

Name of Faculty	KAUSHAL KUMAR
Discipline	Electrical Engineering
Semester	Fifth Sem (5th sem)
Subject	Solar Panel Installation and Maintenance
Lesson Plan Duration	From Sep 2023
Work load [Theory + Practical] Per Week	[04+02]

Week	Day	Theory Topic/ Assignment/ Test	No.	Practical
1st	1	Introduction Of The Subject,	1	Panel Installation
	2	Its Need, Applications ,Basics on solar energy		
	3	power generation systems		
	4	Use and handling procedure of solar panels		
2nd	1	Energy storage		
	2	control and conversion		
	3	Basic electrical system and functioning		
	4	Mechanical equipment		
3rd	1	Functioning of Mechanical equipment		
	2	Maintenance procedure of equipment		
	3	Site survey		
	4	Design and evaluation of various parameters		
4th	1	Tools involved in installation of system		
	2	Quality and process standards		
	3	Occupational health		
	4	Safety Standards		
5th	1	Revision	2	Using Tools and Machines
	2	Quiz		
	3	Class test no.1		
	4	Discussion on Questions of class test		
6th	1	Introduction Of The Installation of Solar Panel		
	2	Installation of Solar Panel		
	3	Solar energy system components such as panels, batteries, charge controllers, inverters		

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7 th	1	Significance of volts, amps and watts		
	2	Series connection		
	3	Parallel connection		
	4	Voltage requirement of various equipment		
8 th	1	Panel mounting		
	2	Inclination and angle of tilt		
	3	Placement of solar panel mounting		
	4	Sunlight and direction assessment		
9 th	1	Site surveying methods and evaluation parameters	3	Handling Safety Equipment
	2	Tools involved in installation of system		
	3	Revision		
	4	Revision		
10 th	1	Assignment no.2		
	2	Class test no.2		
	3	Discussion on Questions of class test		
	4	Discussion on Questions of class test		
11 th	1	Coordinate colleagues at work		
	2	Company's policies on incentives, delivery standards, and personnel management		
	3	Importance of the individual's role in the workflow		
	4	Reporting structure		
12 th	1	Communicating effectively		
	2	Building team coordination		
	3	Safety at workplace		
	4	Maintaining the work area safe and secure		
13 th	1	Handling hazardous material	4	Revision and Copy Checking
	2	Operating hazardous tools and equipment		
	3	Emergency procedures to be followed such as fire accidents, etc.		
	4	Concept of Solar Tracking System		
14 th	1	Concept of Solar Tracking System		

	2	Revision		
		Revision		
	3	Previous Exam Questions solved		
15th	1	Revision		
	2	Assignment no.3		
	3	Class test no.3		
	4	Discussion on Questions of class test		