

Lesson Planning

Name of the Institute : CRSSIET SILANI-KESHO, JHAJJAR
Name of the teacher : Ms. Kritika Khunger
Department : Electrical
Subject & Code : Power Plant Engineering, OEC-EE07G
Branch/Semester : EE 5th Semester

Chapter Covered	Topic	Academic Activity	Test/Assignment
Section-A INTRODUCTION:	Coal based thermal power plants	<ul style="list-style-type: none"> • Presentation on Rankine cycle • Quiz based on presentation 	01 Test 01 Assignment
	basic Rankine cycle and its modifications		
	layout of modern coal power plant		
	super critical boilers, FBC boilers, turbines		
	condensers, steam and heating rates, subsystems of thermal power plants		
	fuel and ash handling, draught system, feed water treatment		
	binary cycles and cogeneration systems		
Section-B:	Gas turbine and combined cycle power plants	<ul style="list-style-type: none"> • Presentation on Brayton Cycle • Quiz based on presentation 	01 Test 01 Assignment
	Brayton cycle		
	components of gas turbine power plants		
	combined cycle power plants		
	Integrated Gasifierbased Combined Cycle (IGCC) systems		
Section-C	Basics of nuclear energy conversion	<ul style="list-style-type: none"> • Presentation on PHWR and FBR • Quiz based on presentation 	01 Test 01 Assignment
	Layout and subsystems of nuclear power plants		
	BWR, PWR, CANDU Reactor		
	PHWR and FBR		
	gas cooled and liquid metal cooled reactors, safety measures for nuclear power plants		
Section-D:	Hydroelectric power plants,		01 Test
	principles of wind, tidal, solar PV and solar thermal		
	geothermal, biogas and fuel cell power systems		
	economic and environmental issues		
	power tariffs, load distribution parameters		
	Load curve, capital and operating cost of different		
			01 Test

	power plants		01
	pollution control technologies		Assignment
	including waste disposal options for coal and nuclear plants.		