

LESSON PLAN.

Academic Session :- 2022-23

Subject :-RAC , Subject code - Th-5

Total Period :-
60 per Sem

Teacher :- SHEKHAR SUMAN PRADHAN(PTGF, MECHANICAL ENGINEERING DEPT.)

Theory :- 4p/week
SEMESTER:-5TH

SL NO	MONTH	Week	DATE	UNIT NO/PERIOD ALLOTTED	Syllabus to be covered	Syllabus actually covered	Short fall	Signature
1	SEPTEMBER	4TH	19/09/22	1T	AIR REFRIGERATION CYCLE. Definition of refrigeration and unit of refrigeration	COVERED	NILL	
2		4TH	20-09-22	1T	Definition of COP, Refrigerating effect (R.E)	COVERED	NILL	
3		4TH	21-09-22	1T	Principle of working of open and closed air system of refrigeration.	COVERED	NILL	
4		4TH	22-09-22	1T	Calculation of COP of Bell-Coleman cycle and numerical on it	COVERED	NILL	
5		5TH	26-09-22	1T	SIMPLE VAPOUR COMPRESSION REFRIGERATION SYSTEM,schematic diagram of simple vapors compression refrigeration system'	COVERED	NILL	
6		5TH	27-09-22	1T	Cycle with dry saturated vapors after compression.	COVERED	NILL	
7		5TH	28-09-22	1T	Cycle with wet vapors after compression	COVERED	NILL	
8		5TH	29-09-22	1T	Cycle with superheated vapors after compression	COVERED	NILL	
9	OCTOBER	2ND	10-10-22	1T	Cycle with superheated vapors before compression	COVERED	NILL	
10		2ND	11-10-22	1T	Cycle with sub cooling of refrigerant	COVERED	NILL	
11		2ND	12-10-22	1T	Representation of above cycle on temperature entropy and pressure enthalpy diagram	COVERED	NILL	
12		2ND	13-10-22	1T	Numerical on above (determination of COP,mass flow	COVERED	NILL	
13		3RD	17-10-22	1T	VAPOUR ABSORPTION REFRIGERATION SYSTEM,Simple vapor absorption refrigeration system	COVERED	NILL	
14		3RD	18-10-22	1T	Practical vapor absorption refrigeration system	COVERED	NILL	
15		3RD	19-10-22	1T	COP of an ideal vapor absorption refrigeration system	COVERED	NILL	
16		3RD	20-10-22	1T	Numerical on COP	COVERED	NILL	

17		25-10-22	1T	REFRIGERATION EQUIPMENTS, Principle of working and constructional details of reciprocating and rotary compressors.	COVERED	NILL	
18		26-10-22	1T	Centrifugal compressor only theory	COVERED	NILL	
19		27-10-22	1T	Important terms. Hermetically and semi hermetically sealed compressor.	COVERED	NILL	
20		31-10-22	1T	CONDENSERS, Principle of working and constructional details of air cooled and water cooled condenser	COVERED	NILL	
21	NOVEMBER	1-11-22	1T	Heat rejection ratio, Cooling tower and spray pond.	COVERED	NILL	
22		2-11-22	1T	EVAPORATORS, Principle of working and constructional details of an evaporator.	COVERED	NILL	
23		3-11-22	1T	Types of evaporator.	COVERED	NILL	
24		7-11-22	1T	Bare tube coil evaporator, finned evaporator, shell and tube evaporator	COVERED	NILL	
25		9-11-22	1T	EXPANSION VALVES, Capillary tube	COVERED	NILL	
26		10-11-22	1T	Automatic expansion valve	COVERED	NILL	
27		14-11-22	1T	Thermostatic expansion valve	COVERED	NILL	
28		15-11-22	1T	REFRIGERANTS, Classification of refrigerants	COVERED	NILL	
29		16-11-22	1T	Desirable properties of an ideal refrigerant.	COVERED	NILL	
30		17-11-22	1T	Designation of refrigerant.	COVERED	NILL	
31		21-11-22	1T	Thermodynamic Properties of Refrigerants.	COVERED	NILL	
32		22-11-22	1T	Chemical properties of refrigerants.	COVERED	NILL	
33		23-11-22	1T	commonly used refrigerants, R-11, R-12, R-22, R-134a, R-717	COVERED	NILL	
34		24-11-22	1T	Substitute for CFC	COVERED	NILL	
35		28-11-22	1T	Applications of refrigeration, cold storage	COVERED	NILL	
36		29-11-22	1T	dairy refrigeration	COVERED	NILL	
37		30-11-22	1T	ice plant, water cooler	COVERED	NILL	
38		1-12-22	1T	frost free refrigerator	COVERED	NILL	
39		5-12-22	1T	Psychometric terms	COVERED	NILL	
40		DECEMBER	6-12-22	1T	Adiabatic saturation of air by evaporation of water	COVERED	NILL
41	7-12-22		1T	Psychometric chart and uses			
42	8-12-22		1T	Psychometric processes			
43	12-12-22		1T	Sensible heating and Cooling			
44	13-12-22		1T	Cooling and Dehumidification			
45	14-12-22		1T	Heating and Humidification			
46	15-12-22		1T	Adiabatic cooling with humidification			

47	DECEMBER	3RD	19-12-22	1T	Total heating of a cooling process			
48		3RD	20-12-22	1T	SHF, BPF,			
49		4TH	21-12-22	1T	Adiabatic mixing			
50		4TH	22-12-22	1T	Problems on above			
51		4TH	26-12-22	1T	Effective temperature and Comfort chart			
52		4TH	27-12-22	1T	AIR CONDITIONING SYSTEMS			
53		5TH	28-12-22	1T	Factors affecting comfort air conditioning. .			
54		5TH	29-12-22	1T	Equipment used in an air-conditioning.			
55		5TH	2-01-23	1T	Classification of air-conditioning system			
56		5TH	3-01-23	1T	Winter Air Conditioning System			
57	JANUARY	1ST	4-01-23	1T	Summer air-conditioning system.			
58		1ST	5-01-23	1T	Numerical on above			
59		1ST	9-01-23	1T	Numerical on above			
60		1ST	10-01-23	1T	Numerical on above			
61		2ND	11-01-23	1T	Numerical on above			
62		2ND	12-01-23	1T	Numerical on above			
63		2ND	16-01-23	1T	Numerical on above			
64		2ND	17-01-23	1T	Numerical on above			

Shekhar Suman Pradhan