

SESSION: WINTER 2023
 BRANCH: MECHANICAL ENGINEERING
 SEMESTER: 5TH SEC-A
 SUBJECT: REFRIGERATION & AIR CONDITIONING TH-5

NAME OF THE FACULTY: CHANDRAKANTA PATHI

SL NO.	MONTH	CHAPT. NO.	DATE	TOPICS TO BE COVERED	NO. OF ACADEMIC DAYS AVAILABLE FOR THE SUBJECT	% COVERED
1	AUGUST	1	5/8/2023	CH-1,1.1: Definition of refrigeration and unit of refrigeration.	16	30%
			8/8/2023	1.2: Definition of COP, Refrigerating effect (R.E)		
			9/8/2023	1.3: Principle of working of open and closed air system of refrigeration		
			10/8/2023	Calculation of COP of Bell-Coleman cycle and numerical on it.		
			12/8/2023	PROBLEM		
			16/8/23	PROBLEM		
			17/8/23	PROBLEM		
			19/8/23	PROBLEM		
		2	21/8/23	2.1: schematic diagram of simple vapors compression refrigeration system'		
			22/8/23	2.2: Types Cycle with dry saturated vapors after compression.		
			23/8/23	Cycle with wet vapors after compression		
			24/8/23	PROBLEM		
			26/8/23	PROBLEM		
			28/8/23	2.3: Cycle with superheated vapors after compression.		
			29/8/23	PROBLEM		
31/8/23	2.4: Cycle with superheated vapors before compression. 2.2.5 Cycle with sub cooling of refrigerant					
SEPT.	2	2/9/2023	2.6: Representation of above cycle on temperature entropy and pressure enthalpy diagram	16	30%	
		3	4/9/2023			CH-3,3.1: Simple vapor absorption refrigeration system
			5/9/2023			3.2: Practical vapor absorption refrigeration system

2	SEPT.	3	7/9/2023	Practical vapor absorption refrigeration system	16	30%
			9/9/2023	3.3: COP of an ideal vapor absorption refrigeration system		
			11/9/2023	3.4:PROBLEM		
			12/9/2023	PROBLEM		
		4	13/9/23	CH-4,4.1: Principle of working and constructional details of reciprocating and rotary compressors.		
			16/9/23	4.1.2: Centrifugal compressor only theory		
			21/9/23	4.1.3: Important terms		
			23/9/23	4.1.4: Hermetically and semi hermetically sealed compressor.		
			25/9/23	4.2: Principle of working and constructional details of air cooled and water cooled condenser		
			26/9/23	4.2.2: Heat rejection ratio		
			27/9/23	4.2.3: Cooling tower and spray pond.		
			28/9/23	4.3: Principle of working and constructional details of an evaporator.Types of evaporator.Bare tube coil evaporator, finned evaporator, shell and tube evaporator		
		5	30/9/23	5.1 & 5.2 EXPANSION VALVES ,REFRIGERANTS		
	OCT.	5	3/10/2023	5.3 Applications of refrigeration	9	17%
			4/10/2023	CH-6,6.1:Psychometric terms		
		6	5//10/23	Psychometric terms		
			7/10/2023	6.2: Adiabatic saturation of air by evaporation of water 6.3:Psychometric chart and uses.		
			9/10/2023	6.4: Psychometric processes Sensible heating and Cooling		
			10/10/2023	Cooling and Dehumidification		
			11/10/2023	Heating and Humidification		
			12/10/2023	Adiabatic cooling with humidification		
			31/10/23	Total heating of a cooling process SHF, BPF		
			NOV.	6		
2/11/2023	PROBLEM					
4/11/2023	PROBLEM					
6/11/2023	PROBLEM					
7/11/2023	PROBLEM					
8/11/2023	6.5: EFFECTIE TEMPRATURE AND COMFORT CHART					
7	9/11/2023	CH-7,7.1: Factors affecting comfort air conditioning. .				

3	NOV.	7	13/11/23	7.2: Equipment used in an air-conditioning	12	23%
			14/11/23	7.3: Classification of air-conditioning 7.4: system Winter Air Conditioning System		
			15/11/23	7.5: Summer air-conditioning system. Numerical on above		
			16/11/23	7.5: Summer air-conditioning system. Numerical on above		
			18/11/23	7.5: Summer air-conditioning system. Numerical on above		

BRIEF SUMMARY OF THE PLAN

SL NO.	MONTH	UNIT/CHAPTER TO BE COVERED	% COVERAGE
1	AUGUST	CHAPTER NO .- 1 & 2	30%
2	SEPTEMBER	CHAPTER NO .- 2 , 3 , 4 & 5	30%
3	OCTOBER	CHAPTER NO .- 5 & 6	17%
4	NOVEMBER	CHAPTER NO .- 6 & 7	23%

signature of faculty

G. S. H. W.
3/8/23

signature of HOD

G. S. H. W.
3/8/23

signature of principal

[Signature]
3/8/23