SESSION	WINTER 2022				
BRANCH:	MECHANICAL ENGINEERING				
SEMESTER:	5TH (SEC-A)				
SUBJECT:	REFRIGERATION AND AIR CONDITIONING (TH 5)				
NAME OF THE FACULTY:	C K PATHI				
SL NO.	MONTH	No. of academic days available for the subject	DATE	TOPICS TO BE COVERED	% COVERED
1	Sep-22	9	19.9.22	CH-1,1.1:Definition of refrigeration and unit of refrigeration.	18%
			20.9.22	1.2: Definition of COP, Refrigerating effect (R.E)	
			21.9.22	1.3: Principle of working of open and closed air system of refrigeration	
			22.9.22	Calculation of COP of Bell-Coleman cycle and numerical on it.	
			24.9.22	PROBLEM	
			26.9.22	PROBLEM	
			27.9.22	PROBLEM	
			28.9.22	PROBLEM	
			29.9.22	2.1: schematic diagram of simple vapors compression refrigeration system'	
2	Oct-22	15	10.10.22	2.2: Types Cycle with dry saturated vapors after compression.	29%
			11.10.22	Cycle with wet vapors after compression	
			12.10.22	PROBLEM	
			13.10.22	PROBLEM	
			15.10.22.	2.3:Cycle with superheated vapors after compression.	
			17.10.22	PROBLEM	
			18.10.22	2.4: Cycle with superheated vapors before compression. 2.2.5 Cycle with sub cooling of refrigerant	
			19.10.22	2.6: Representation of above cycle on temperature entropy and pressure enthalpy diagram	
			20.10.22	CH 3.3.1 Simple vapor absorption refrigeration system	
			22.10.22	3.2: Practical vapor absorption refrigeration system	

			25.10.22	Practical vapor absorption refrigeration system	
			26.10.22	3.3: COP of an ideal vapor absorption refrigeration system	
			27.10.22	3.4:PROBLEM	
			29.10.22	PROBLEM	
			31.10.22	CH-4,4.1: Principle of working and constructional details of reciprocating and rotary compressors.	
3	Nov-22	15	1.11.22	4.1.2: Centrifugal compressor only theory	29%
			2.11.22	4.1.3: Important terms	
			3.11.22	4.1.4: Hermetically and semi hermetically sealed compressor.	
			5.11.22	4.2: Principle of working and constructional details of air cooled and water cooled condenser	
			9.11.22	4.2.2: Heat rejection ratio	
			10.11.22	4.2.3: Cooling tower and spray pond.	
			12.11.22	4.3: Principle of working and constructional details of an evaporator.	
			21.11.22	Types of evaporator.	
			22.11.22	Bare tube coil evaporator, finned evaporator, shell and tube evaporator	
			23.11.22	CH-6,6.1:Psychometric terms	
			24.11.22	Psychometric terms	
			26.11.22	6.2: Adiabatic saturation of air by evaporation of water 6.3:Psychometric chart and uses.	
			28.11.22	6.4: Psychometric processes Sensible heating and Cooling	
			29.11.22	Cooling and Dehumidification	
			30.11.22	Heating and Humidification	
4	Dec-22	12	1.12.22	Adiabatic cooling with humidification	12%
			3.12.22	Total heating of a cooling process SHF, BPF	
			5.12.22	Adiabatic mixing Problems on above	
			6.12.22	PROBLEM	
			7.12.22	PROBLEM	
			8.12.22	PROBLEM	
			10.12.22	PROBLEM	
			12.12.22	6.5: EFFECTIE TEMPRATURE AND COMFORT CHART	
			13.12.22	CH-7,7.1: Factors affecting comfort air conditioning. .	

			14.12.22	7.2: Equipment used in an air-conditioning
			15.12.22	7.3: Classification of air-conditioning 7.4: system Winter Air Conditioning System
			17.12.22	7.5: Summer air-conditioning system. Numerical on above

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