

(2023-W)

Semester - 5th

Sub - Refrigeration And Air conditioning


(Basudev Meshra.)

DESCRIPTION	Mech.	SEM	5th	Name of faculty	Basudev Mesthra.
Sub	Refrigeration Air conditioning	No. of days per week	04	Sem. from	15/9/22 - 21/1/23

WEEK	CLASS/DAY	THEORY.
1st	mon.	x Introduction, definition and unit of refrigeration
	Tues	Introduction, definition and unit of refrigeration
	Wed	x
	Thurs	Definition of COP and refrigerating effect and different systems.
	Fri	Working principle of closed and open air system of refrigeration
	Sat	Calculation of COP of Bell Coleman cycle
2nd	mon	x
	Tues	Numericals on Bell Coleman cycle
	Wed	x
	Thurs	Numericals on Bell Coleman cycle
	Fri	Schematic diagram of VCR and types
	Sat	cycle with dry saturated vapour after compression with numerical solving
3rd	mon	x
	Tues	cycle with wet vapour after compression with numerical solving
	Wed	x
	Thurs	cycle with superheated vapour after compression with numerical solving
	Fri	cycle with superheated vapour before compression with numerical solving
	Sat.	cycle of sub cooling of refrigerant.
4th	mon	x
	Tues	Solving numericals
	Wed	x
	Thurs	Solving numericals
	Fri	Simple VARS, Schematic diagram
	Sat	Working principle of VARS

	mon.	x	Automatic and Thermostatic expansion valve
	TUES		
	Wed	x	
9th	THURS		Classification of refrigerant
	FRI.		Properties and designation of refrigerant.
	SAT.		Designation of refrigerant
	mon.	x	
	TUES		Thermodynamic and chemical properties of refrigerant
10th	Wed.	x	
	THURS.		Commonly used refrigerant, substitute for CFC
	FRI.		Application of refrigeration in cold storage Dairy refrigeration.
	SAT.		ICE Plant
	mon.	x	
	TUES		Water cooler
11th	Wed.	x	
	THURS.		frost free refrigeration
	FRI.		Psychrometric term
	SAT.		adiabatic saturation of air by evaporation of water
	mon.	x	
	TUES		Psychrometric chart and uses
12th.	Wed	x	
	THURS.		numerical solving
	FRI.		sensible heating and cooling with numerical solving
	SAT.		adiabatic cooling with humidification

	mon	x	
	TUES		Total heating of a cooling process SHF and BPF
	WED	x	
12th	THURS		Adiabatic mixing, numerical solving
	FRI		numerical solving, effective temp.
	SAT		comfort chart
	mon	x	
	TUES		numerical solving, factors affecting air conditioning
14th	WED	x	
	THURS		Equipment used in air conditioning
	FRI		classification of air conditioning systems
	SAT		winter air conditioning systems
	mon	x	
	TUES		summer air conditioning system
	WED	x	
15th	THURS		summer air conditioning system
	FRI		numerical solving
	SAT		numerical solving
	mon.	x	
	TUES		numerical solving
	WED	x	
16th	THURS		
	FRI		
	SAT.		


 21/1/23.