

**GOVERNMENT POLYTECHNIC JAJPUR**

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**DEPARTMENT OF MECHANICAL ENGINEERING**

**LESSON PLAN**

<b>Discipline: Mechanical</b>	<b>Semester: 5th</b>	<b>Name of the Teaching faculty: Gitanjali Sethi</b>
<b>Subject: Refrigeration &amp; Air Conditioning lab(Pr1)</b>	<b>No of Days/Week class allotted: 4</b>	<b>Semester from Date: To Date: 15/9/2022 to 22/12/2022 No of weeks: 15</b>
<b>Week</b>	<b>Class Day</b>	<b>Topics</b>
<b>1st</b>	1st(2p)	<b>EXPT-1</b> Study the construction features of Domestic Refrigerator
		i) Aim of the expt
		ii) Types of refrigerants and Equipment details
	2nd(2p)	iii) Basic working principle of domestic refrigerator
		Study the construction features of Domestic Refrigerator
		i) Aim of the expt
<b>2nd</b>	3rd(2p)	ii) Types of refrigerants and Equipment details
		iii) Basic working principle of domestic refrigerator
		Study the construction features of Domestic Refrigerator
	4th(2p)	<b>EXPT-2</b> Study of construction features of water cooler
		i) Aim of the expt
		ii) Equipment details
<b>3rd</b>	5th(2p)	iii) Basic Theory and working
		Study of construction features of water cooler
		i) Aim of the expt
	6th(2p)	ii) Equipment details
		iii) Basic Theory and working, VIVA
		Study of construction features of water cooler
<b>4th</b>	7th(2p)	<b>EXPT-3</b> Study the construction features of window air conditioner
		i) Aim of the expt
		ii) Equipment details
	8th(2p)	iii) Basic working principle of window air conditioner
		Study the construction features of window air conditioner
		i) Aim of the expt
		ii) Equipment details

		iii) Basic working principle of window air conditioner
5th	9th(2p)	Study the construction features of window air conditioner
		i) Aim of the expt
		ii) Equipment details
	10th(2p)	iii) Basic working principle of window air conditioner and VIVA
		<b>EXPT-4</b> Study the construction features of split air conditioner
		i) Aim of the expt
ii) d Equipment details		
6th	11th(2p)	iii) Basic working principle of split air conditioner
		Study the construction features of split air conditioner
		i) Aim of the expt
	12th(2p)	ii) d Equipment details
		iii) Basic working principle of split air conditioner
		Study the construction features of split air conditioner
i) Aim of the expt		
7th	13th(2p)	ii) d Equipment details
		iii) Basic working principle of split air conditioner, VIVA
		<b>EXPT-5</b> Determine the capacity and cop of vapour compression Refrigerator test rig
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
	14th(2p)	iv) procedure
		v) Calculation
		Determine the capacity and cop of vapour compression Refrigerator test rig
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
	15th(2p)	iv) procedure
		v) Calculation, VIVA
		Determine the capacity and cop of vapour compression Refrigerator test rig
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
16th(2p)	iv) procedure	
	v) Calculation	
	<b>EXPT-6</b> Determine the capacity and cop of water cooler	
	i) Aim of the expt	
	ii) Equipment details	
	iii) Basic Theory	
17th(2p)	iv) procedure	
	v) Calculation	
	Determine the capacity and cop of water cooler	
		i) Aim of the expt
		ii) Equipment details

9th	17th(2p)	iii) Basic Theory
		iv) procedure
		v) Calculation
	18th(2p)	Determine the capacity and cop of water cooler
		i) Aim of the expt
		ii) Equipment details
iii) Basic Theory		
iv) procedure		
v) Calculation, VIVA		
10th	19th(2p)	<b>EXPT-7</b> Determine the capacity and cop of window air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
	v) Calculation	
	20th(2p)	Determine the capacity and cop of window air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
iv) procedure		
v) Calculation		
11th	21st(2p)	Determine the capacity and cop of window air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
	v) Calculation, VIVA	
	22nd(2p)	<b>EXPT-8</b> Determine the capacity and cop of split air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
iv) procedure		
v) Calculation		
12th	23rd(2p)	Determine the capacity and cop of split air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
	v) Calculation	
	24th(2p)	Determine the capacity and cop of split air conditioner
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
iv) procedure		
v) Calculation, VIVA		
		<b>EXPT-9</b> Determine the capacity and cop of vapour absorption Refrigerator test rig

13th	25th(2p)	i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
		v) Calculation
	26th(2p)	Determine the capacity and cop of vapour absorption Refrigerator test rig
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
v) Calculation		
14th	27th(2p)	Determine the capacity and cop of vapour absorption Refrigerator test rig
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
	v) Calculation, VIVA.	
	28th(2p)	<b>EXPT-10</b> Complete charging of a domestic refrigerator and its leak test
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
iv) procedure		
v)Charging and leak test calculation		
15th	29th(2p)	Complete charging of a domestic refrigerator and its leak test
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
		iv) procedure
	v)Charging and leak test calculation, VIVA.	
	30th(2p)	<b>EXPT-11 (ADD ON )</b> Study and performance on sling psychrometer
		i) Aim of the expt
		ii) Equipment details
		iii) Basic Theory
iv) procedure		
v) Calculation, VIVA.		

