

Government of the People's Republic of Bangladesh  
Mymensingh Polytechnic Institute  
**Semester Plan**  
Power Technology

**Subject: REFRIGERATION CYCLES AND COMPONENTS**

**T P C**  
**2 3 3**

**Subject Code: 27231**  
**3rd Semester (1<sup>st</sup> Shift)**  
**Class Start : 14-01-2024**

Week	Activity/Lesson	Teaching aids		Remark
		Theory	Practical	
01	<b>Theory:</b> UNDERSTAND THE <i>CONVENTIONAL &amp; NON- CONVENTIONAL REFRIGERATION CYCLES</i> <b>Practical:</b> Identify the Components of Vapor Compression Refrigeration Cycle.	White Board Marker Pen, Internet Connected Laptop & Multimedia Projector	Job Sheet	
02	<b>Theory:</b> UNDERSTAND THE VAPOR COMPRESSION AND ABSORPTION REFRIGERATION SYSTEM <b>Practical:</b> Operate Thermo-Electric Refrigeration System.	Do	Do	QT-1
03	<b>Theory:</b> UNDERSTAND THE VAPOR COMPRESSION AND ABSORPTION REFRIGERATION CYCLE COMPONENTS <b>Practical:</b> <i>Operate the Evaporative Refrigeration System.</i>	Do	Do	CT-1
04	<b>Theory:</b> UNDERSTAND THE ACCESSORIES and AUXILIARIES of REFRIGERATION CYCLES. <b>Practical:</b> Observe Major Working Parts of Seal type Reciprocating Compressor.	Do	Do	CT-2
05	<b>Theory:</b> UNDERSTAND THE REFRIGERANT RECOVERY & RECYCLING SYSTEMS <b>Practical:</b> Dismantle, Reassemble and Identify Internal Parts of a Thermostatic Expansion Valve.	Do	Do	
06	<b>Theory</b> UNDERSTAND THE VRF & VRV SYSTEM <b>Practical:</b> <i>Dismantle, Reassemble and Identify Internal Parts an Automatic Expansion Valve.</i>	Do	Do	QT-2
07	<b>Mid Term Examination</b>			

08	<b>Theory:</b> UNDERSTAND THE <i>INVERTER &amp; VOICE CONTROL RAC SYSTEMS</i> . <b>Practical:</b> Identify the Different types of Refrigerants by Pressure Temperature Method.	Do	Do	
09	<b>Theory:</b> UNDERSTAND THE REFRIGERENT & GREEN HOUSE EFFECTS. <b>.Practical:</b> Perform the Transfer Refrigerant from Storage Cylinder to Service Cylinder.	Do	Do	QT-3
10	<b>Theory:</b> UNDERSTAND THE AIR COURTAIN, AHU,CCU and FCU <b>.Practical:</b> Perform the Recover CFC-12, HCFC-22, HFC-134a and HFC-410A from refrigeration system by Active Method.	Do	Do	
11	<b>Theory:</b> UNDERSTAND THE REFRIGERENT OIL <b>Practical:</b> Perform the Recover HFC 600a, HCFC-22, HFC-134a and HFC-410A from Refrigeration System by Passive Method.	Do	Do	CT-3
12	<b>Theory:</b> Revise	Do	Do	QT-4
13	Theory: Revise	Do	Do	CT-4
14	<b>Theory:</b> Revise	Do	Do	
15 & 16	<b>Semester Final Examination</b>			

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