

**unit-5**

		level		
1	What are the sources of heat in nature which can be used for heat pumps?	Understand	Co5	Po2,po5
2	Discuss about the performance of Heat pump when used with the different sources of heat. State the advantages and disadvantages in each case.	Understand	Co5	Po2,po5
3	Differentiate between the unitary and central air conditioning system	Remember	Co5	Po2,po5
4	The amount of air supplied to air conditioned hall is 300 m <sup>3</sup> /min. The atmospheric conditions are 35°C DBT and 55% RH. The required conditions are 20°C DBT and 60% RH, determine, the sensible heat and latent heat removed from the air per minute. Also, find SHF for the system	Understand	Co5	Po2,po5
5	Explain the summer air conditioning system with a neat sketch.	Remember	Co5	Po2,po5
6	Explain the procedure of construction of comfort chart.	Understand	Co5	Po2,po5
7	An air conditioned plant is to be designed for a small office for winter conditions: Outdoor conditions are 10°C DBT and 80°C WBT, required indoor conditions are 20°C DBT and 60% RH, amount of air circulations 0.3 m <sup>3</sup> /min./person, seating capacity of the office is 50 persons. The required condition is achieved first by heating and then by adiabatic humidifying, determine; i. Heating capacity of the coil in KW and the surface temperature; if the by-pass factor of the coil is 0.32; and ii. capacity of the humidifier.	Understand	Co5	Po2,po5
8	Briefly explain the thermodynamics of human body	Understand	Co5	Po2,po5
9	Give the classification of the effects of heat on human body? Explain briefly	Understand	Co5	Po2,po5
10	List out different sources that contribute sensible heat load of the room to be air conditioned	Remember	Co5	Po2,po5