



15	a) Write down the various advantages of Vapour absorption refrigeration system over Vapour compression refrigeration system b) With the help of a neat sketch explain the working of Ammonia-Hydrogen refrigerator	5M 5M	3	L2
OR				
16	Draw a neat diagram of lithium bromide water absorption system and explain its working	10M	3	L2
17	a) Define the following Psychrometric terms: i) Dry air ii) Moist air iii) Saturated air iv) Degree of saturation and v) Humidity b) Explain room sensible heat factor	5M 5M	4	L2
OR				
18	a) What do you understand by the term cooling load b) A room has a sensible heat gain of 24 KW and a latent heat gain of 5.2 KW and it has to be maintained at 26 <sup>0</sup> C DBT and 50%RH. 180m <sup>3</sup> /min of air is delivered to the room. Determine the state of supply air.	5M 5M	4	L2
19	a) Explain the following: i) Dry filters ii) Viscous filters and iii) Wet filters b) Explain the difference between winter air conditioning and summer air conditioning	5M 5M	5	L2
OR				
20	a) What is a function of a fan in an air conditioning system? b) Define specific speed for a centrifugal fan. Derive its expression	5M 5M	5	L2