Assignment - ②

① The sensible heat - gain of room is 4.8 kW and its latent heat gain is 1.4 kW. A conditioned air supply of 0.5 m^3/s is to be delived to the room. If the room is to be maintained at 25°C DBT, find the relative humidity that will result in the enter in conditioned room if the supply of air is 17°C and 90% RH

② Air at 25°C and 60% RH is supplied to the drug formulation unit. It is conditioned to this state first by cooling and dehumidifying and then by reheating it. Cooling coil surface temp is 13°C and ambient conditions are 32°C DBT & 65% RH. If the air supply rate is ~~15000~~ 15000 m^3/hr determine

① Cooling coil capacity in TR ② BPF of cooling coil (iii) Heating capacity in kW (iv) Heating coil surface temp if BPF = 0.3 (v) Mass of w.v. removed /hr

③ Discuss the comfort chart and assumptions on which it is based

④ Explain RSHF, RLHF, ERSHF

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