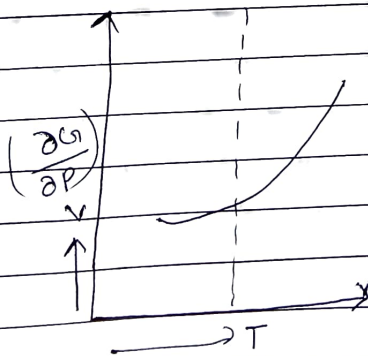
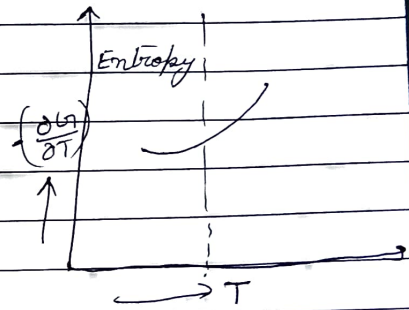
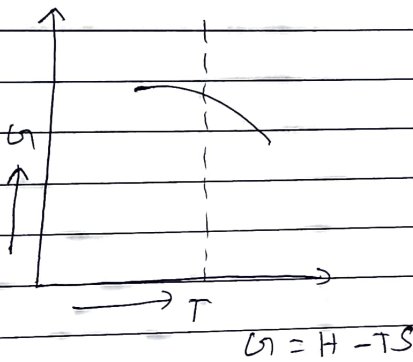


PHASE TRANSITION (second order)

In second order phase transition, No latent heat is required and this is also said to be continuous phase transition

Exp -

- (i) conversion of liquid He Ist into the liquid He IInd at triple point (λ-point)
- (ii) conversion of ferromagnetic substance into the paramagnetic substance.
- (iii) Mixing of metal and forming alloy.
- (iv) conversion of ordinary metal into the superconducting state at critical temperature.



$$dG = VdP - SdT$$

$$-\left(\frac{\partial G}{\partial T}\right)_P = S$$

$$\left(\frac{\partial G}{\partial P}\right)_T = V$$