Assignment Unit-II US05CPHY23

Short Questions:

1. What is the entropy change during an isochoric and isobaric process?
2. What is enthalpy?
3. What is throttling process?
4. Shows that the change in enthalpy during an isobaric process is equal to the heat transferred.
5. What is the condition for the exact differentials?
6. What is path function? Give suitable example.
7. What is state function? Give suitable example.

Long Questions:

1. Discuss the theory of T-S diagram for pure substance in detail.
2. What is Enthalpy? Discuss the properties of Enthalpy in detail.
3. Discuss Helmholtz Function in detail.
4. What is Gibb's function in thermodynamics? Discuss it in detail.
5. Derive Maxwell's equations
6. Derive first TdS equation.
7. Derive second TdS equation.
8. Derive the equation for difference in heat capacities.
9. Derive the equation for ratio of heat capacities.
10. What is Expansivity? Discuss in detail
11. Discuss the Abbe-Pulfrich dilatometer experiment.
12. Discuss the Fizeau dilatometer experiment.
13. What is compressibility?
14. Disscuss the Bridgman's piezometer.
15. Discuss Joule Kelvin Effect or (Porous plug Experiment).