



DATE _____

B. Sc. (Hons) Chemistry
Sem II, DSC-6
Thermodynamics & Applications

Time: -1 hour (one hour)

Max Marks: 12

Attempt All Questions

- Q1 Prove $TV^{\gamma-1} = \text{const}$. (2)
- Q2 Prove entropy is a state function (2)
- Q3 Prove $\left(\frac{\partial P}{\partial T}\right)_V = \frac{\alpha}{\beta}$ (2)
- Q4 Explain Joule's law. What does it give. (2)
- Q5 Derive isothermal expansion of ideal gas and give its value of ΔE , q , w when external pressure $P = 0$ for reversible & irreversible expansion (3)
- Q6 Explain residual entropy with an example (2)

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