

Note: - Attempt All Questions From Section A & B And Only Two Questions From Section C.

Section A (Short Answer Type Questions)

3 x 8 = 24

Q.no.1:- State second law of Thermodynamics?

Q.no.2:- What is residual entropy?

Q.no.3:- What is transport number?

Q.no.4:- State Kohlrausch's law?

Q.no.5:- What is Cram's rule?

Q.no.6:- How are acid chlorides converted to aldehydes?

Q.no.7:- Write a note on SN² reaction.

Q.no.8:- Represent formation of sigma complexes with energy profile diagram.

Section B (Long Answer Type Questions)

4 x 5 = 20

Q.no.9:- State and explain Joule's law?

Q.no.10:- Derive Nernst Equation and give its application?

Q.no.11:- Discuss conductometric titration curve of strong acid vs strong base?

Q.no.12:- Explain Pinacole-Pinacolone rearrangement with mechanism?

Q.no.13:- Discuss various factors affecting strength of Carboxylic Acid?

Section C (Very Long Answer Type Questions)

8 x 2 = 16

Q.no.14:- Discuss construction and working of Carnot's Cycle.

Q.no.15:- Explain Riemer-Tieman reaction with mechanism.

Q.no.16:- Discuss any method to determine transport number?

Q.no.17:- Explain Cannizzaros reaction?

====End====

Note:- Students are requested to upload Answer sheet in Google Classroom with code **6hodpbc**.