

Core I Inorganic Chem. (20-23)

Q.1. What is hybridisation? Write down the rules for hybridisation.

Q.2. Write down the electronic configuration of the following elements.

K	Sc	Cr	Mn	Cu	Ag	Au	Pd	Zn	Fe
19	21	24	25	29	47	79	72	30	26

Q.3. Write short notes on Lattice Energy.

Derive Born-Landé equation for the Lattice Energy

or
Write notes on Born-Haber cycle.

Core II
Q.1. What are Ideal and real gases (20-23)

Q.2. Discuss the deviation of real gases from ideal gases. Physical Chem.

Q.2. What are electrolytes? Define electrolysis and discuss the types of electrolytes?

Q.3. Write short notes on

(a) pH scale.

(b) Common Ion Effect

(c) Buffer solution

(d) Mean free path.