

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
A	Explain Werner's theory.	07
B	Discuss structural isomerism in detail.	07
Q-3	Attempt all questions	(14)
A	Write a note on classification of d-block elements.	07
B	Discuss optical isomerism in 6 coordinated complexes.	07
Q-4	Attempt all questions	(14)
A	Give IUPAC name of given complexes. i) $K[Cr(NH_3)_2(NCS)_4]$ ii) $K_3[Fe(CN)_6]$ iii) $[Co(NH_3)_6]Cl_3$ iv) $Cr(en)_3Cl_3$ v) $K_3[Cr(OX)_3]$ vi) $K[PtBrCl(NH_3)(NO_2)]$ vii) $[Mn(H_2O)_6]^{2+}$	07
B	Give various preparations of Organo-beryllium and Organo-aluminium.	07
Q-5	Attempt all questions	(14)
A	Give any one preparation of Zeise salt and explain the structure of Trimethyl Aluminium in detail.	07
B	Write a note on formation of interstitial compound.	07
Q-6	Attempt all questions	(14)
A	Define the terms with example: Addition of operators, Subtraction of operators, Multiplication of operators, and Linear Operators.	07
B	Derive energy equation for a particle moving in one dimensional box.	07
Q-7	Attempt all questions	(14)
A	Give the properties and applications of Organolithium compounds.	07
B	Derive equation for electron in a ring.	07
Q-8	Attempt all questions	(14)
A	Explain any four physicochemical properties of transition metals.	07
B	Discuss the magnetic properties of transition metal ions.	07

