

Q 10 Write the electronic configuration of the elements with atomic number 61, 91, 101 and 109

OR

What are inner transition elements ? Write which of the given atomic numbers are the numbers of the inner transition elements :- 29, 59, 74, 95, 102.

Q 11 Explain why some square planar complexes of Ni(II) are diamagnetic while some others are paramagnetic.

OR

Give main postulates of Valence Bond (VB) theory.

Q 12 Explain nature of C-X Bond in case of haloalkanes.

Q 13 Explain Hofmann ammonolysis by giving one example.

SECTION- C	12 X 3 marks = 36 marks	
-------------------	--------------------------------	--

Q 14 Calculate the number of atoms in a unit cell of simple cubic lattice, body centered cubic lattice and face centered cubic lattice.

Q 15 Define the following and write the formula and unit of each:-

- (i) Conductivity
- (ii) Molar conductivity
- (iii) Cell constant

Q 16 Give any three differences between order of reaction and its molecularity.

Q 17 Explain electrophoresis OR cataphoresis with the help of diagram.

Q 18 Explain the use of the following:-

- (i) NaCN in froth floatation method.
- (ii) Carbon monoxide in Mond process.
- (iii) Cryolite in metallurgy of aluminium.

Q 19 Draw labelled diagram of Haber process for the manufacture of NH_3 . what is the importance of Le- Chatlier's principle in this process?

Q 20 Explain the following:-

- (i) Lanthanoid contraction.
- (ii) Interstitial compounds.
- (iii) Oxidation states of actinoids.

Q 21 Give three methods of preparation of alcohols.

Q 22 (i) Why aromatic primary amines cannot be prepared by Gabriel Phthalimide reaction.

(ii) Give one point of difference between aniline and benzyl amine.

What are interhalogen compounds ? How are they classified ? Discuss the structure of IF_7 .

Q 28 Explain the following reactions by giving one example:-

- a) Rosenmund Reduction. (1)
- b) Cross-Aldol condensation. (2)
- c) Cross-Cannizaro reaction (2)

OR

Give five methods of preparation of caboxylic acids . (5)

Blue Print of Paper of Chemistry

S.No.	Name of Chapters	Questions			
		1 mark	2 marks	3 marks	5 marks
1	Solid State	1	-	1	-
2	Solutions	-	-	-	1
3	Electrochemistry	-	1	1	-
4	Chemical Kinetics	-	1	1	-
5	Surface Chemistry	1	-	1	-
6	General principles of isolation of elements	-	-	1	-
7	P- Block elements	-	-	1	1
8	d- & f- Block elements	-	1	1	-
9	Coordination compels	1	1	-	-
10	Haloalkanes & haloarenes	-	2	-	-
11	Alcohols, Phenols & Ethers	1	-	1	-
12	Aldehydes, Ketones, Carboxylic acid	1	-	-	1
13	Organic compounds containing Nitrogen	1	-	1	-
14	Biomolecules	1	-	1	-
15	Polymers	-	-	1	-
16	Chemistry in everyday life	-	-	1	-