# HIGHER SECONDARY SECOND YEAR CHEMISTRY-REDUCED SYLLABUS FIRST REVISION JANUARY -2022 - IMPORTANT QUESTIONS

#### LESSON 1. METALLURGY

S.NO	QUESTION	IMPORTANCE	PAGE NO
1.	What are the difference between minerals and ores?	5*	2
2.	What are the metallurgical process for the extraction of metal?	5*	2
3.	What is Gangue?	5*	3
4.	What is slag?	5*	8
5.	What are types of ores used in froath flotation process?	5*	4
6.	Explain froath flotation process	5*	4
7.	What is blistered copper?	1*	9
8.	Explain Gravity separation or Hydraulic wash	5*	3
9.	Explain Magnetic separation	3*	6
10.	What is meant by calcinations?	5*	7
11.	What is the role of silica in the extraction of copper?	1*	8
12.	What is the role of limestone in the extraction of iron from its oxide Fe <sub>2</sub> O <sub>3</sub> ?	5*	8
13.	What is meant by Zone refining?	3*	16
14.	Give the Electrochemical principle of metallurgy?	5*	14
15.	Give Mond process for refining of nickel?	5*	16
16.	Write Van-Arkel method for refining of Zr/Ti?	5*	17

## LESSON 2. p-BLOCK ELEMENTS-1

S.NO	QUESTION	IMPORTANCE	PAGE NO
1.	What are the anomalous properties of first 3 elements in p- Block?	5*	29
2.	What is inert pair effect?	5*	30
3.	What are the uses of boron?	3*	33
4.	What is Borax beads test?	3*	34
5.	What are the uses of Borax?	5*	34
6.	What is Ethyl Borate test?	5*	35
7.	What are the uses of Boric acid?	5*	35
8.	Write the preparation of Potash alum.	1*	40
9.	What is burnt alum?	3*	40
10.	What are the Uses of Alum	5*	40
11.	What is meant by Catenation?	5*	41
12.	What are the difference between Graphite and diamond	3*	41-42
13.	What are the uses of Silicones?	5*	48

14.	What are silicones? What are its types?	3*	46-48
NOTE: $5^*$ means Very very important question, $3^*$ means Very important question, $1^*$ means important question,			

#### LESSON 6. SOLID STATE

S.NO	QUESTION	IMPORTANCE	PAGE NO
1.	What are the difference between Crystalline solids and Amorphous solids?	5*	178
2.	Why ionic crystals hard and brittle?	5*	179
3.	What are Ionic Solids? Give their general characteristics?	5*	179
4.	What are the Classification of crystalline solids	3*	179
5.	What is Unit cell?	5*	180
6.	What is Bragg's equation?	3*	184
7.	Calculate number of atoms in a SC unit cell	5*	183
8.	Calculate number of atoms in a BCC unit cell	5*	183
9.	Calculate number of atoms in a FCC unit cell	5*	184
10.	What is Packing efficiency?	5*	187
11.	Calculate the Packing efficiency of BCC	5*	188
12.	What is Imperfection in solids?	3*	192
13.	Explain (i) Schottyky defect (ii) Frenkel defect	5*	193
14.	Explain i) Metal excess defect ii) metal deficiency defect	1*	194
15.	What is called as impurity defects?	1*	195
NOTE: $5^st$ means Very very important question, $3^st$ means Very important question, $1^st$ means important question,			

## LESSON 7. CHEMICAL KINETICS

S.NO	QUESTION	IMPORTANCE	PAGE NO
1.	Define Average rate and instantaneous rate.	5*	207
2.	Bring the difference between Rate of a reaction and Rate constant of a reaction?	3*	209
3.	Bring the difference between Molecularity and Order of a reaction?	5*	210
4.	Write Arrhenius equation.	5*	219
5.	Derive integrated rate law for a first order reaction A→Product	5*	212
6.	What is Pseudo first order reaction? Give example	5*	214
7.	Write the Examples for the first order reaction	3*	213
8.	Write the Examples for the zero order reaction	1*	215
9.	Derive integrated rate law for a zero order reaction A→Product	5*	215
10.	Define Half life period of a reaction	5*	215

11.	Show that for a first order reaction half life is independent of initial concentration	5*	216	
NOTE: $5^*$ means Very very important question, $3^*$ means Very important question, $1^*$ means important question,				

### LESSON 11. HYDROXY COMPOUNDS AND ETHERS

S.NO	QUESTION	IMPORTANCE	PAGE NO
1.	How do you differentiate three types of alcohos by Lucas test?	5*	110
2.	How do you differentiate three types of alcohos by Victor Meyer's test	3*	111
3.	Convert Glycerol to acrolein.(Give the dehydration of glycerol)	3*	121
4.	Convert Glycol to 1,4-Dioxane	1*	120
5.	Give Dow's process?	5*	126
6.	Give Schotten Baumann reaction?	5*	127
7.	How picric acid is prepared?	5*	129
8.	Give Kolbe's reaction?	5*	130
9.	Give Rimer Tiemann reaction?	5*	130
10.	Give Phthalein reaction	5*	131
11.	Give coupling reaction?	5*	131
12.	Why C-O-C bond angle in ether slightly greater than the tetrahedral bond angle?	1*	133
13.	What is Baeyer's reagent?	1*	110
NOTE: $5^*$ means Very very important question, $3^*$ means Very important question, $1^*$ means important question,			

For video explanations for the above questions, touch the below image

