

QUARTERLY EXAM 2023-2024**+2 CHEMISTRY COLLECTION OF QUESTION PAPER UNIT WISE
GOLDEN FIVE MARK****1.METALLURGY**

1. Explain zone refining process with an example (In. P.NO:16)
- 2.Explain froth flotation process. How can you depress ZnS Present in galena in concentration of galena in this process.(B/B-4) ****
- 3.Explain the principle of electrolytic refining with an example.(B/B-14)
- 4.what are the main observation of Ellingham diagram.

2.p-block-I

1. Describe the structure of diborane. (B/B-10) ****
2. Write a note on zeolites. (B/B-16) ****
3. Write a note on Fisher tropesch synthesis(B/B-6) ****
- 4.How is potash Alum prepared? (In.P.NO-40) ****
- 5.Explain the classification of inosilicates. in. p. no 49 ****
- 6.Write a note on Fisher tropesch synthesis. (B/B-6) ****

3.p-BLOCK ELEMENTS-II

1. Write short notes on holme's signal ? (In.P.NO-70) ****
2. What are inter halogens compounds ? mention their properties . (B/B-5) ****
3. Explain the dehydrating property of sulphuric acid (B/B-12) with suitable example. (In.P.NO78) ****

4. TRANSITION AND INNER TRANTION ELEMENTS

1. What is lanthanide contraction ? Mention its consequences. (B/B-9) ****
2. Write the any five difference between Lanthanide and Actinide (B/B-17) ****
3. Describe the preparation of potassium dichromate (B/B-8). ****

6.SOLID STATE

1. Explain schottky defect . Frenkel defect. (B/B-25) **** (B/B-9) ****
2. Differentiate between crystalline solid and amorphous solid.(B/B-3) ****

3. calculate the percentage efficiency of packing in case of body centered cubic crystal.(B/B-14)
4. Calculate the packing efficiency of fcc. (In.p.no:192) ****
5. Explain metal deficiency defect with example. (B/B-10)

7.CHEMICAL KINETICS

1. Derive integrated rate law for a first order reaction $A \rightarrow \text{product}$. (B/B-7) ****
2. What is zero order reaction ? Derive rate law for zero order reaction? (B/B-3) ****

8.CHEMICAL KINETICS

1. Derive Henderson- Hasselbalch equation. (In. P.NO:18) ****
2. Derive an expression for the hydrolysis constant and degree of hydrolysis of salt of strong acid and weakbase. (B/B-18) ****
3. Derive an expression for oswald's dilution law(B/B-12). ****

11.HYDROXY COMPOUNDS AND ETHERS

1. How will you distinguish 1^o, 2^o, 3^o alcohols by Lucas test. (In. P.NO:111) ****

12.CARBONYL COMPOUNDS AND CARBOXYLIC ACID

1. Explain the mechanism of cannizaro reaction? (In.p.no: 163) ****
2. Explain the reaction mechanism of aldol condensation . (In.p.no: 162) ****
3. Explain the steps involved in the mechanism of esterification reaction? (In.p.no: 174) ****