



Padalsalai's Telegram Groups!

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CHAPTER1 METALLURGY IMPORTANT QUESTIONS

1. What Is A Mineral? And What Is An Ore? (Pg.No:2)
2. Differentiate Ore And Mineral With Suitable Example. (Pg.No:2)
3. What Are The 3 Metallurgical Processes Involving In Extraction Of Metal Of Interest. (Pg.No:2)
4. Write The Ores Of 1) Al 2) Fe 3) Cu 4) Zn 5) Pb 6) Ag 7) Sn With Formula. (Pg.No:3)
5. Write A Note On Gangue (Or) Matrix. (Pg.No:3)
6. Write About Concentration Of Ores. (Pg.No:3)
7. Write A Note On Hydraulic Wash (Or) Gravity Separation. (Pg.No:3)
8. Briefly Explain The Process Of Froth Floatation. (Pg.No:4)
9. Why Na(Cn) And Na_2CO_3 Are Used In Froth Floatation. (Pg.No:4)
10. Define Leaching. (Pg.No:4)
11. Write A Note On Cyanide Leaching Of Au. (Pg.No:4)
12. What Is Cementation Process? (Pg.No:5)
13. Write A Note On NH_3 Leaching. (Pg.No:5)
14. Write A Note On Alkali Leaching. (Pg.No:5)
15. Write A Note On Acid Leaching. (Pg.No:5)
16. How Ferromagnetic Ores Are Separated From Impurities? (Pg.No:6)
17. Write About Extraction Of Ores. (Pg.No:6)
18. What Is Roasting? (Pg.No:6)
19. Why Sulphurs Are Trapped And Converted To H_2SO_4 During Roasting? (Pg.No: 7)
20. What Is Calcination And How You Differentiate It With Roasting. (Pg.No:6-7)
21. Write A Note On Smelting. (Pg.No:8)
22. What Is A Flux? (Pg.No:8)
23. What Is A Slag? (Pg.No:8)
24. Write About Reduction Of Metals By Carbon. (Pg.No:9)
25. Write About Reduction Of Metals By Hydrogen. (Pg.No:9)
26. Write About Reduction Of Metals By Using Another Metal. (Pg.No:9-10)
27. Write A Short Note About Ellingham Diagram. (Pg.No:12)
28. What Are The Observations Obtained From Ellingham Diagram? (Pg.No:12)
29. What Are The Applications Of Ellingham Diagram? (Pg.No:13)
30. What Are The Limitations Of Ellingham Diagram? (Pg.No:13)
31. Briefly Explain The Electrochemical Principles Of Metallurgy. (Pg.No:14)

CHAPTER1 METALLURGY IMPORTANT QUESTIONS

32. Write A Note On Hall Herold Process. (Pg.No:14-15)
33. Write About Refining Process. (Pg.No:15)
34. Write A Note On Distillation & Liquation. (Pg.No:15)
35. Write A Note On Electrolytic Refining. (Pg.No:15-16)
36. Write A Note On Zone Refining. (Pg.No:16)
37. Write A Note On Vapour Phase Method. (Pg.No:16)
38. Write A Note On Mond's Process. (Pg.No:16)
39. Write A Note On Van Arkel Method. (Pg.No:17)
40. Write The Applications Of 1) Al 2) Zn 3) Fe 4) Cu 5) Au. (Pg.No:17-18)
41. Write Your Facts About Iron Pillar Of Delhi. (Pg.No:18)

Notes. 1). Refer Book Back Questions And Problems Too....

2). For All The Given Questions, Diagram Should Be Drawn If It Is Necessary.

3). The Question Bank Consists Of 2 Mark, 3mark & 5 Mark Questions. For Answers Refer Textbook Or Notes Given By Chemistry Teacher (**T.BABU SIR**) Or Refer Any Other Study Materials.

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All The Best

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CHEMICAL KINETICS – IMPORTANT QUESTIONS

1. Define: Chemical Kinetics. (Pg.no: 205)
2. Define: Rate. (Pg.No:205)
3. Explain The Rate Of A Chemical Reaction. (Pg.No:205)
4. Define The Unit Of Rate Of A Reaction. (Pg.No:206)
5. How Does We calculate the average and instantaneous rate? (pg.no:207-208)
6. Define: 1) rate law 2) rate constant. (pg.no:208).
7. Differentiate between rate and rate constant of a reaction. (pg.no:209-210)
8. What is an elementary reaction? (pg.no:210)
9. What is a molecularity of a step? (pg.no:210)
10. Differentiate between order and molecularity. (pg.no:210)
11. Derive integrated rate law for a 1st order reaction. (pg.no:212-213)
12. Write a note on pseudo 1st order reaction. (pg.no:214)
13. Derive integrated law for a 0th order reaction. (pg.no:214-215)
14. Derive an equation for half life period of a reaction and define it. (pg.no:215)
15. How does you calculate the $\frac{1}{2}$ life period for a 0th order reaction? (pg.no:216)
16. Define: collision theory. (pg.no:217)
17. Derive Arrhenius equation for the effect of temperature on reaction rate. (pg.no:219)
18. What are the factors that affect the reaction rate? And explain that factors. (pg.no:222-223)
19. Define: pharmacokinetics.(pg.no:225)
20. Write the uses of chemicals in pharmaceuticals. (pg.no:225)

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September 3, 2019

5.CO ORDINATION CHEMISTRY

IMPORTANT QUESTIONS

1. **What Is A Co Ordination Compound? (Pg.No: 131)**
2. **Explain Werner's Theory And Its Postulates. (Pg.no: 131-132)**
3. **Important Components Pertaining To Co Ordination Compounds. (Pg.No:133)**
4. **Explain The Types Of Complexes And Classify Based On 1) Net Charge Of Complex. 2) Kind Of Ligands. (Pg.No: 135)**
5. **How Will Name A Complex Compound? (Pg.No: 136)**
6. **Explain The Types Of Isomers In Co Ordination Compounds. (Pg.No: 141-146)**
7. **Explain Valence Bond Theory And Its Postulates. (Pg.No: 147)**
8. **Find The Magnetic Moments Of Given Complex Using Vb Theory. 1) $[\text{Ni}(\text{Co})_4]^0$ 2) $[\text{Ni}(\text{CN})_4]^{2-}$ 3) $[\text{Fe}(\text{CN})_6]^{3-}$ 4) $[\text{CoF}_6]^{3-}$ (pg.no :149-152)**
9. **Limitations Of Vb Theory. (Pg.No : 152)**
10. **Crystal Field Theory. (Pg.No: 153-155)**
11. **CFSE. (pg.no: 157 upto examples(pg.no: 158))**
12. **Classify The Types Of Metal Carbonyls. (Pg.No : 161-162)**
13. **Explain The Bonding In Metal Carbonyls. (Pg.No:162-163)**
14. **Explain About Stability Constant. (Pg.No: 163-164)**
15. **Explain The Uses Of Complex Compounds. (Pg.No: 166)**

CHAPTER 6- SOLID STATE IMPORTANT QUESTIONS

- 1 Write About Solid State In Your Own Words (Pg.No:177)
- 2 What Are The Two Major Types Of Solid And Differentiate Them (Pg.No:177-178)
- 3 Write A Note On Isotropy And Anisotropy. (Pg.No:178)
- 4 Discuss About Ionic Solid And Its Characteristics (Pg.No:179)
- 5 Discuss About Covalent Solid And Its Characteristics (Pg.No:179)
- 6 Discuss About Molecular Solid And Its Characteristics (Pg.No:179)
- 7 Mention The Types Of Molecular Solid And Explain Them (Pg.No:179-180)
- 8 Why Graphite Is Used In Pencil & In Lubricants? (Pg.No:179)
- 9 Discuss About Metallic Solid (Pg.No:180)
- 10 What Is Crystal Lattice? (Pg.No:180)
- 11 Why Ionic Crystals Are Hard And Brittle? (Book Back Question)
- 12 Define Unit Cell. And Explain How It Is Characterised? (Pg.No:180)
- 13 Write A Note On Primitive And Non Primitive Unit Cell (Pg.No:181)
- 14 Mention Seven Primitive Crystalline Systems (Pg.No:181)
- 15 Write About Simple Cubic Unit Cell (Pg.No:183)
- 16 Write About Body Centred Cubic Unit Cell (Pg.No:183)
- 17 Write About Face Centred Cubic Unit Cell (Pg.No:184)
- 18 Write Bragg's Equation And Explain It (Pg.No:184)
- 19 How Do You Calculate The Density Of Unit Cell (Pg.No:184-185)
- 20 Write A Note On Linear Arrangement Of Spheres In A Direction (Pg.No:186)
- 21 In How Many Ways That The 2 Dimensional Close Packing Is Done. Explain? (Pg.No:186)
- 22 How Do You Calculate The Packing Efficiency Of An Arrangement? (Pg.No:187)
- 23 Write A Note On Simple Cubic Arrangement Of Spheres (Pg.No:187)
- 24 Write A Note On Body Centred Cubic Arrangement (Pg.No:188)
- 25 How Do You Calculate Packing Efficiency Of BCC Arrangement? (Pg.No:188)

CHAPTER 6- SOLID STATE IMPORTANT QUESTIONS

- 26 Write A Note On Hexagonal And Face Centred Cubic Arrangement (Pg.No:189)
- 27 Briefly Explain The Formation Of 1st, 2nd, 3rd Layer Formation In HCC. (Pg.No:189-191)
- 28 Distinguish Tetrahedral And Octahedral Voids. (Book Back Question)
- 29 How Do You Calculate The Packing Efficiency Of HCC? (Pg.No:192)
- 30 Write About Radius Ratio And Relate It With Structural Arrangement. (Pg.No:192)
- 31 How Do You Classify The Crystal Defects? And Further Classify The One Of It.(Pg.No:193)
- 32 Write A Note On Intrinsic Defect. (Pg.No:193)
- 33 Write A Note On Schottky Defect. (Pg.No:194)
- 34 Write A Note On Frenkel Defect. (Pg.No:194)
- 35 Write A Note On Metal Excess Defect. (Pg.No:194)
- 36 Write A Note On Metal Deficiency Defect. (Pg.No:195)
- 37 Write A Note On Impurity Defect. (Pg.No:195)
- 38 What Is Piezoelectricity? (Pg.No:195)
- 39 Write A Note On Energy Harvesting By Piezoelectric Crystals. (Pg.No:195-196).

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