

CBSE Chemistry Worksheets Class 12 on Chapter 6 General Principles and Processes of Isolation of Elements - Set 5

Q1. A substance that acts as a collector in the froth floatation method is-

- a.) Sodium xenate
- b.) Sodium pyrophosphate
- c.) Sodium nitroprusside
- d.) Sodium ethyl xanthate

Q2. Copper is obtained during the extraction by the reduction of cuprous oxide with:

- a.) Cu_2S
- b.) SO_2
- c.) FeS
- d.) CO

Q3. The thermodynamic property useful to select the reducing agent is-

- a.) Gibbs free energy change
- b.) internal energy change
- c.) Specific heat capacity
- d.) All of the above

Q4. The better reducing agent for ZnO is-

- a.) CO
- b.) C
- c.) CO_2
- d.) None of the above

Q5. The metal that can be purified using zone refining is-

- a.) Ni
- b.) Zr
- c.) In
- d.) Fe

Q6. Why is an external emf of more than 2.2 V required for the extraction of Cl_2 from brine?

- Q7.** Wrought iron is the purest form of iron. Write a reaction used for the preparation of wrought iron from cast iron. How can the impurities of sulphur, silicon and phosphorous be removed from cast iron?
- Q8.** How do we separate two sulphide ores by the Froth floatation method? Explain with an example.
- Q9.** Why is sulphide ore of copper heated in a furnace after mixing with silica?
- Q10.** How are metals used as semiconductors refined? What is the principle of the method used?
- Q11.** Define metallurgy. Name the important metallurgical operations.
- Q12.** What is electrorefining? Explain with one example.
- Q13.** (a) Why is zinc not extracted from zinc oxide through reduction with CO?
(b) Is carbon a satisfactory reducing agent for all metal oxides? Give reasons.
- Q14.** Discuss the froth floatation process and magnetic separation method for the concentration of ore.
- Q15.** Differentiate between the following:
(a) Roasting and calcination
(b) Minerals and ores
(c) Gangue and flux
- Q16.** (a) Which solution is used for the leaching of silver metal in the presence of air in the metallurgy of silver?
(b) Out of C and CO, which is a better reducing agent at the lower temperature range in the blast furnace to extract iron from the oxide ore?
- Q17.** (a) What is flux? Give one example each of an acid and a basic flux.
(b) Why are metallic ores converted into oxide usually?
(c) Discuss the process of leaching with reference to the extraction of aluminium.
- Q18.** Name the processes from which chlorine is obtained as a by-product. What will happen if an aqueous solution of NaCl is subjected to electrolysis?
- Q19.** What is the role of the graphite rod in the electrometallurgy of aluminium?
- Q20.** Explain-
(i) Zone refining
(ii) Column chromatography