

General Principles of Extraction of Metals

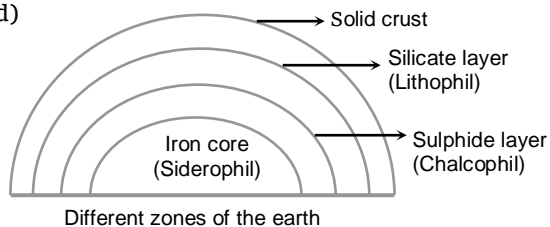
SET Self Evaluation Test -16

- The region in which main metals are found in earth is called
(a) Atomophil (b) Lithophil
(c) Calcophil (d) Siderophil
- Which metal is found in free state
(a) Iron (b) Gold
(c) Aluminium (d) Sodium
- Which metal is found in Khetri region of Rajasthan
(a) Iron (b) Copper
(c) Gold (d) Lead
- Sapphire** is mineral of [BHU 1977]
(a) *Cu* (b) *Zn*
(c) *Al* (d) *Mg*
- Of the following substances the one which does not contain oxygen is [JIPMER 1997]
(a) Bauxite (b) Epsom salt
(c) Cryolite (d) Dolomite
- The chief impurity present in red bauxite is : [DCE 2004]
(a) SiO_2 (b) Fe_2O_3
(c) K_2SO_4 (d) NaF
- In the froth floatation process for the purification of ores, the ore particles float because [MP PMT 1984; NCERT 1981; CPMT 1987; MNR 1992; UPSEAT 2002]
(a) They are light
(b) Their surface is not easily wetted by water
(c) They bear electrostatic charge
(d) They are insoluble
- Difference in density is the basis of [Kerala (Med.) 2002]
(a) Ultrafiltration
(b) Molecular sieving
(c) Gravity separation
(d) Molecular attraction
- Mark the wrong statement
(a) Wrought iron is prepared by heating cast iron in a reverberatory furnace
(b) The impurities present in cast iron are oxidised by air
(c) The impurities are oxidised by Fe_2O_3
(d) CO burns with blue flame and the *Si, Mn* and other impurities form slag with silica
- Thomas slag is [RPET 2003]
(a) $CaSiO_3$ (b) $Ca_3(PO_4)_2$
(c) $MnSiO_3$ (d) $CaCO_3$
- Which is correct [MADT Bihar 1995]
(a) Aluminium : Calamine
(b) Copper : Malachite
(c) Magnesium : Calamine
(d) Zinc : Carnellite

AS Answers and Solutions

(SET -16)

1. (d)



2. (b) Gold, *Ag* and *Pt* are called noble metals. They are unreactive and found in free state.

3. (b) Copper metal is found in khetri region of Rajasthan with that it is also found in singhbhum and Hazaribagh district in Bihar, Agnigundala in Andhra pradesh, Malanjkh in M.P.

4. (c) Sapphire (Blue colour) is mineral of *Al*.

5. (c) Cryolite (Na_3AlF_6)

6. (b) Red bauxite has chief impurity of Fe_2O_3 .

7. (b) Ore particles are wetted by oil. Hence, float on the surface.

8. (c) Levigation or gravity separation is used when the ore particles are heavier than the earthy or rocky gangue particles.

9. (b) The wrong statement is that the impurities present in cast iron are oxidised by air.

10. (b) Thomas slag $Ca_3(PO_4)_2$ is used as a valuable fertilizer.

***11. (b) Malachite is an ore of copper.