

Date Planned : __ / __ / __	Daily Tutorial Sheet-1	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced (Archive)	Exact Duration : _____

- Write the chemical equations involved in the extraction of lead from galena by self-reduction process. (1979)
- Match the following extraction processes with the appropriate metals listed below : (1979)

Column I	Column II
(A) Silver	(P) Fused salt electrolysis
(B) Calcium	(Q) Carbon reduction
(C) Zinc	(R) Carbon monoxide reduction
(D) Iron	(S) Amalgamation
(E) Copper	(S) Self reduction
- In the aluminothermic process, aluminium acts as : (1981)

(A) an oxidising agent	(B) a flux
(C) a reducing agent	(D) a solder
- Give reasons for the following : (1984)
 - Metals can be recovered from their ores by chemical methods.
 - High purity metals can be obtained by zone refining method.
- Hydrogen gas will not reduce : (1985)

(A) heated cupric oxide	(B) heated ferric oxide
(C) heated stannic oxide	(D) heated aluminium oxide
- Why is sodium chloride added during electrolysis of fused anhydrous magnesium chloride ? (1987)
- Why is chalcocite roasted and not calcinated during recovery of copper ? (1987)
- Give the equations for the recovery of lead from galena by air reduction. (1987)
- Of the following, the metals that cannot be obtained by electrolysis of the aqueous solution of their salts are : (1990)

(A) Ag	(B) Mg	(C) Cu	(D) Al
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- Among the following statements, the incorrect one is : (1997)

(A) calamine and siderite are carbonates
(B) argentite and cuprite are oxides
(C) zinc blende and pyrites are sulphides
(D) malachite and azurite are ores of copper
- The chemical composition of 'slag' formed during the smelting process in the extraction of copper is : (2001)

(A) $\text{Cu}_2\text{O} + \text{FeS}$	(B) FeSiO_3
(C) CuFeS_2	(D) $\text{Cu}_2\text{S} + \text{FeO}$
- Which of the following processes is used in the extractive metallurgy of magnesium ? (2002)

(A) Fused salt electrolysis	(B) Self reduction
(C) Aqueous solution electrolysis	(D) Thermite reduction

13. Which one contains both iron and copper ? (2005)
(A) Cuprite (B) Chalcocite (C) Chalcopyrite (D) Malachite
14. Match the extraction process listed in column I with metals listed in column II. (2006)
- | Column I | Column II |
|---|------------|
| (A) Self reduction | (P) Lead |
| (B) Carbon reduction | (Q) Silver |
| (C) Complex formation and displacement by metal | (R) Copper |
| (D) Electrolytic reduction | (S) Sodium |
15. Extraction of zinc from zinc blende is achieved by : (2007)
- (A) electrolytic reduction
(B) roasting followed by reduction with carbon
(C) roasting followed by reduction with another metal
(D) roasting followed by self-reduction