CHEMISTRY

BOOKS - DISHA PUBLICATION CHEMISTRY (HINGLISH)

GENERAL PRINCIPLES AND PROCESSES OF ISOLATION OF ELEMENTS

Jee Main 5 Years At A Glance

1. In the exteraction of copper from its sulphide ore, the metal is fanally obtained by the reduction of

caprous oxide with

A. SO_2

B. Fe_2O_3

C. cu_2O

D. CO

Answer: C

Watch Video Solution

2. In the leaching method bauxite ore is digested with a concentrated solution of NaOH that produces 'X' whne CO_2 gas is passed through the aquesous

solution of 'X' a hydrated compound 'Y' is precipited

'X' and 'Y' respectively are:

A. $Na\left[AL(OH)_4\right]$ and $AI_2(CO_3)_3.xH_2O$

B. $Al(OH)_3$ and $Al_2O_3.xH_2O$

C. $NaAlO_2$ and $Al_2(CO_3)_3.XH_2O$

D. $Na\left[Al(OH)_4\right)]nadAl_2O_3.XH_2O$

Answer: D

Watch Video Solution

3. Extraction of copper by smelting uses silica as an additive to remove:

A. Cu_2O

B. FeS

C. FeO

D. Cu_2S

Answer: C

Watch Video Solution

4. Which one of the following ores is best concentrated by froth flotation method:

A. Galena

B. Malachite

C. Magnetite

D. Siderite

Answer: A

Watch Video Solution

5. In the isolation of metals, calcination process usually results in:

A. metal hydroxide

B. metal sulphide

C. metal oxide

D. metal carbonate

Answer: C

Watch Video Solution

6. Calamine is an ore of

A. zinc

B. aluminium

C. iron

D. copper

Answer: A

Watch Video Solution

7. In the correct of the Hall-Heroult process for the extraction of Al, which of the following statements is false ?

A. Al^{3+} is reduced at the cathode to form Al.

B. Na_3, AlF_6, serves as the electrolyte.

C. CO and CO_2 are produced in this process.

D. Al_2O_3 is mixed with CaF_2 which lowers the melting point of the mixture and brings

conductivity.

Answer: B

8. The form of iron obtained from blast furnace is:

A. Steel

B. Cast Iron

C. Pig Iron

D. Wrought Iron

Answer: B

Watch Video Solution

9. Which one of the following ores is known as Malachite:

A. Cu_2O

B. Cu_2S

C. $CuFeS_2$

D. $Cu(OH)_2, CuCO_3$

Answer: D

Watch Video Solution

10. The metal that cannot obtained by electrolysis of an aqueous solution of its salts is :

A. Ag

B. Ca

C. Cu

D. Cr

Answer: B

Watch Video Solution

Exercise 1 Concept Builder Topicwise

1. An example of an oxide ore is

A. Bauxite

B. Malachite

C. Zinc blende

D. Feldspar

Answer: A

View Text Solution

2. The most abundant metal in the earth crust is

A. Fe

B. Al

C. Ca

D. Na

Answer: B

Watch Video Solution

3. Which of the following is an ore of tin ?

A. Carborundum

B. Epsomite

C. Cassiterite

D. Spodumene

Answer: C

View Text Solution

4. Which of the following is chalcopyrite?

A. $CuFeS_2$

B. Fes_2

C. $KMgCl_{3.6}H_2O$

D. $Al_2O_3.2H_2O$

Answer: A

View Text Solution

5. Composition of Azurite mineral of

A. $CuSO_3CuO$

B. $Cu(HCO_3)_2.Cu(OH)_2$

C. $2CuCO_3.Cu(OH)_2$

D. $CuCO_3.2Cu(OH)_2$

Answer: C

Watch Video Solution

6. German silver is an alloy of

A. Ag and Ni

B. Cu, Zn and Ni

C. Au, Cu and Zn

D. Cu and Zn

Answer: B

Watch Video Solution

7. Steel contains carbon

A. 0.12% to 0.25%

B. 2.5% to 4.5%

C. 1 to 2%

D. 0.5 to 1.5%

Answer: D

View Text Solution

8. The method of concentrating the ore which makes use of the difference in density between ore and impurities is called

A. levigation

B. leaching

C. magnetic separation

D. liquifaction

Answer: A

Watch Video Solution

9. Magnesium is extracted electrolysing fused magnesium chloride containing $NaC1$and $CaC1_2$ using:

A. a nickel cathode and a graphite anode.

B. the iron container as anode and a nickel cathode.

C. the iron container as cathode and a graphite anode.

D. the nickel container as cathode and iron anode.

Answer: C

Watch Video Solution

10. AgCl on fusion with sodium carbonate, gives :

A. Ag_2CO_3

B. Ag_2O

C. Ag

D. Ag_2C_2

Answer: C

Watch Video Solution

11. Highly electropositive metal(s) can not be commercially extracted by carbon reduction process at high temperature because these :

A. metals combine with carbon to form covalent carbide.

B. metals combine with carbon to form ionic carbide.

C. $DetlaG_f$ of highly electropositive metal oxide is having low negative value.

D. metal oxides are not reduced by carbon.

Answer: B

Watch Video Solution

12. Choose the correct option the code regarding roasting process.

(I) It is the process of heating the ore in air in a

reverberatory furnace to obtain the oxide.

(II) It is an exothermic process.

(III) It is used for the concentration of sulphide ore.

(Iv) It removes easily oxidisable volatile impurities present in the concentrated ore.

A. I, II and III

B. I, II and IV

C. I, III and IV

D. I, II, III and IV

Answer: B

 Watch Video Solution

13. Froth floatation process used for the concentration of sulphide ore :

A. is based on the difference in wettability of different minerals.

B. Uses sodium ethyl xanthate, $C_2H_5OS_2$ Na as collector.

C. Uses NaCN as depressant in the mixture of ZnS and PbS when ZnS forms soluble complex and PbS forms froth.

D. All are correct statements.

Answer: D

Watch Video Solution

14. Which of the following processes involve the roasting process ?

A. $ZnCo_3 \rightarrow ZnO + CO_2$

B. $Fe_2O_3 + 3C \rightarrow 2Fe + 3CO$

C. $2PbS + 3O_2 \rightarrow 2PbO + 2SO_2$

D. $Al_2O_3.2H_2O \rightarrow Al_2O_3, + 2H_2O$

Answer: C

Watch Video Solution

15. In the froth flotation process for benefication of ore, the ore particles float because

A. They are light

B. Their surface is not easily wetted by water.

C. They bear electrostatic charge.

D. They are insoluble.

Answer: B

Watch Video Solution

16. Which of the following statement is correct?

A. Roasting is unneccessarily done for Fe extraction because there is no sulphide ore.

B. In the smelting step to Cu extraction, reduction of the ore takes place.

C. Ores may not be mineral.

D. Sphalerite is the ore of zinc.

Answer: D

Watch Video Solution

17. Froth floatation process is based on _____.

A. wetting properties of ore particle.

B. specific gravity of ore particles.

C. magnetic properties of ore particles.

D. electrical properties of ore particles.

Answer: A

Watch Video Solution

18. Before introducing FeO in blast furance, it is converted to Fe_2O_3 by roasting so that

A. it may not be removed as slag with silica.

B. it may not evaporate in the furnace.

C. presence of it may increase the m.pt. of charge.

D. None of these.

Answer: A

 Watch Video Solution

19. Electrolytic reduction method is used fro the extraction of

A. highly electronegative elements.

B. highly electropositive elements.

C. metalloids.

D. transition metals.

Answer: B

Watch Video Solution

20. Calcination is used in matallurgy for removal of

A. moisture

B. water and CO_2

C. CO_2 and H_2S

D. H_2O and H_2S

Answer: B

Watch Video Solution

21. Heating of pyrites in air for oxidation of sulphur is called

A. roasting

B. calcination

C. smelting

D. slagging

Answer: A

View Text Solution

22. Which one of the furnaces among the following can produce the highest temperature?

A. muffle furnace

B. blast furnace

C. reverberatory furnace

D. electric furnace

Answer: D

View Text Solution

23. Furances are lined with calcium oxide as

A. it gives off oxygen on heating.

B. it gives strong light on heating.

C. it is refractory and basic.

D. it is not affected by acids.

Answer: C

Watch Video Solution

24. Roasting is generally done in case of the

A. oxide ores

B. silicate ores

C. sulphide ores

D. carbonate ores

Answer: C

View Text Solution

25. Aluminothermic process is used for the extraction of metals, whose oxides are

A. fusible

B. not easily reduced by carbon.

C. not easily reduced by hydrogen.

D. strongly basic.

Answer: B

 Watch Video Solution

26. Frothers (used in Froth floatation process) are

A. molecules with hydrophilic head and hydrophobic tail.

B. molecules with hydrophobic head and hydrophilic tail.

C. both of the above.

D. none of these

Answer: A

View Text Solution

27. Identify x,y,z for the following metallurgical process :

metal sulphide $\xrightarrow{x}$ metal oxide $\xrightarrow{y}$ impure metal $\xrightarrow{z}$ pure metal

generally x,y and z are respectively:

A. roasting, smelting, electrolysis

B. roasting, calcination, smelting.

C. calcination, auto-reduction, bassemerisation

D. None of the above is correct

Answer: A

Watch Video Solution

28. The process of converting hydrated alumina into anhydrous alumina is called

A. roasting

B. smelting

C. dressing

D. calcination

Answer: D

Watch Video Solution

29. Furances are lined with calcium oxide as

A. it gives off oxygen on heating.

B. it gives strong light on heating.

C. it is refractory and basic.

D. it is not affected by acids.

Answer: C

Watch Video Solution

30. The substance used in the thermite process of reducing metal ores is

A. aluminium

B. thorium

C. heated Pt gauge

D. carbon

Answer: A

Watch Video Solution

Watch Video Solution

31. After partial roasting, the sulphide of copper is reduced by

A. cyanide process

B. electrolysis

C. reduction with carbon

D. self reduction

Answer: D

Watch Video Solution

32. Before introducing FeO in blast furance, it is converted to Fe_2O_3 by roasting so that

A. it may not be removed as slag with silica.

B. it may not evaporate in the furnace.

C. presence of it may increase the m.pt. of charge.

D. None of these.

Answer: A

Watch Video Solution

33. ELLINGHAM DIAGRAM

A. ΔG increases with an increase in temperature.

B. It consists of plots of $\Delta_f G^\circ$ Vs T for formation of oxides.

C. A coupling reaction can be well expressed by this diagram

D. It express the kinetics of the reduction process.

Answer: D

Watch Video Solution

34. The form of iron obtained from blast furnace is:

A. Steel

B. Cast Iron

C. Pig Iron

D. Wrought Iron

Answer: B

Watch Video Solution

35. The slag obtained during the extraction of copper from coper pyrites is composed mainly of

A. $FeSiO_3$

B. SiO_2

C. $CuSiO_3$

D. Cu_2S

Answer: A

Watch Video Solution

36. Muffle furnace is used in the metallurgy of

A. Zn

B. Sn

C. Pb

D. Cu

Answer: A

View Text Solution

37. In Hall's process, the main reagent is mixed with

A. NaF

B. Na_3AIF_6

C. AIF_3

D. none of these

Answer: B

Watch Video Solution

38. In the extraction of copper, the metal formed in the Bessemer converter is due to the reaction

A. $Cu_2S + 2Cu_2O \rightarrow 6Cu + SO_2$

B. $Cu_2S \rightarrow 2Cu + S$

C. $Fe + Cu_2O \rightarrow 2Cu + FeO$

D. $2Cu_2O \rightarrow 4Cu + O_2$

Answer: D

Watch Video Solution

39. $Ag_2S + NaCN \rightarrow (a)$

(a) $+ Zn \rightarrow (d)$

(b) is a metal. Hence (a) and (b) are

A. $Na\left[Zn(CN)_4\right], Zn$

B. $Na\left[Ag(CN)_2\right], Ag$

C. $Na_2\left[Ag(CN)_4\right], Ag$

D. $Na_3\left[Ag(CN)_4\right], Ag$

Answer: B

Watch Video Solution

40. Method used for obtaining highly pure silicon which is used as a semiconductor material, is

A. oxidation

B. electrochemical

C. crystallization

D. zone refining

Answer: D

View Text Solution

41. In the purification of impure nickel by Mond's process, metal is purified by:

A. Electrolytic reduction

B. Vapour phase thermal decomposition

C. Thermite reduction

D. Carbon reduction

Answer: B

View Text Solution

42. Incorrect match

A. Purification of Al metal : Baeyer's method

B. Polling: Reduction of Cu_2O

C. $FeCr_2O_4$ (chromite ore) :$NaOH / Na_2CO_3$

D. Ag : Mac Arthur cyanide process

Answer: A

Watch Video Solution

43. In van Arkel method, if I_2 is introduced at 1700 K over impure metal, the product will be :

A. Iodide of the metal

B. No reaction takes place

C. Impurities react with iodine

D. None of these.

Answer: A

44. Van Arkel method of purification of metals involves converting the metal to

A. volatile stable compound.

B. volatile unstable compound.

C. non volatile stable compound.

D. None of the above.

Answer: A

Watch Video Solution

45. Identify the reaction that does not take place in a blast furnace

A. $2Fe_2O + 3C \rightarrow 4Fe + 3CO_2$

B. $CO_2 + C \rightarrow 2CO$

C. $CaCO_3 \rightarrow CaO + CO_2$

D. $FeO + SiO_2 \rightarrow FeSiO_3$

Answer: B

Watch Video Solution

46. The temperature ($^\circ$C) at which $Fe_2O_3$is finally reduced to Fe in the blast furnace is

A. 993

B. 797

C. 897

D. 1597

Answer: A

View Text Solution

47. High purity copper is obtained by

A. Carbon reduction

B. Hydrogen reduction

C. Electrolytic reduction

D. Thermite reduction

Answer: C

Watch Video Solution

48. Iron is obtained on a large scale from Fe_2O_3 by

A. reduction with Na

B. reduction with Al

C. reduction with CO

D. passing H_2

Answer: C

Watch Video Solution

49. Which of the following metals is obtained by electrolytic reduction process?

A. Fe

B. Cu

C. Ag

D. Al

Answer: D

View Text Solution

50. In the extractionof iron, slag is produced. Slag is

A. CO

B. $FeSiO_3$

C. $MgSiO_3$

D. $CaSiO_3$

Answer: D

Watch Video Solution

51. Thomas slag is

A. calcium silicate

B. calcium phosphate

C. tricalcium phosphate and calcium silicate

D. calcium ammonium phosphate

Answer: C

Watch Video Solution

52. Which of the following pairs of metals uis purified by van arkel method?

A. Ga and In

B. Zr and Ti

C. Ag and Au

D. Ni and Fe

Answer: B

53. Which of the following metals is extracted by the electrometallurgical method?

A. Cu

B. Fe

C. Na

D. Ag

Answer: C

Watch Video Solution

54. The electrolytic reduction technique is used in the extraction of

A. highly electronegative elements.

B. highly electropositive elements.

C. metalloids

D. transition metals.

Answer: B

View Text Solution

55. Nickel is purified by thermal decomposition of its

A. hydride

B. chloride

C. azide

D. carbonyl

Answer: D

Watch Video Solution

56. In the electrolysis of alumina, cryolite is added to

A. Lower the melting point of alumina and to increase the electrical conductivity

B. Minimise the anode effect

C. Remove impurities from alumina

D. None of these

Answer: A

 Watch Video Solution

57. (viii) Amongest the following groups of oxides, the group containing oxides that cannot be reducing by carbon to give the respective metals is.

A. Cu_2OSnO_2

B. Fe_2O_3, ZnO

C. CaO, K_2O

D. PbO, Fe_3O_4

Answer: C

Watch Video Solution

58. The phenomenon of removing layers of basic oxides from metals before electroplating is called

A. galvanising

B. anodising

C. pickling

D. poling

Answer: C

Watch Video Solution

59. which of the following electronts is present as the impurity to the maximum extent in the pig iron?

A. Manganese

B. Carbon

C. Silicon

D. Phosphorus

Answer: B

Watch Video Solution

60. Carbon and CO gas are used to reduce which of the following pairs of metal oxides for extraction of metals?

A. FeO, SnO

B. SnO, ZnO

C. BaO, Na_2O_2

D. FeO, ZnO

Answer: D

View Text Solution

Exercise 1 Concept Applicator

1. Consider the following reactions :

$$2XS + 3O_2 \xrightarrow{\Delta} 2XO + 2SO_2$$

$$2XO + XS \xrightarrow{\Delta} 3'X' + SO_2$$

Then 'X' can not be :

A. Hg

B. Pb

C. Zn

D. Cu

Answer: C

Watch Video Solution

Watch Video Solution

2. $XCl_2(\text{excess}) + Ycl_2 \rightarrow XCl_4 + Y \downarrow$,

$YO \xrightarrow[>400^\circ]{\Delta} \frac{1}{2}O_2 + Y$, Ore of Y would be :

A. Siderite

B. Cinnabar

C. Malachite

D. Hornsilver

Answer: B

Watch Video Solution

3. All ores are minerals while all minerals are not ores because :

A. the metal can't be extracted economically from all the minerals.

B. minerals are complex compounds

C. the minerals are obtained from mines.

D. All of these are correct.

Answer: A

 Watch Video Solution

4. Consider the following reaction at $1000^\circ C$

(A)

$$Zn(s) + \frac{1}{2}O_2(g) \rightarrow ZnO(s), \Delta G^\ominus = -360kJmol^{-1}$$

(B)

$$C(s) + \frac{1}{2}O_2(g) \rightarrow OO(g), \Delta G^\ominus = -460kJmol^{-1}$$

Choose the correct statement at $1000^\circ C$

A. ZnO is more stable than CO.

B. ZnO can be reduced to Zn by C.

C. ZnO and CO are formed at equal rate.

D. ZnO can not be reduced to Zn by C

Answer: B

Watch Video Solution

5. Correct match is:

(a)	Bayer's method	-	Na_2CO_3
(b)	Matte	-	$98\%\ Cu_2S + 2\%\ FeS$
(c)	van Arkel method	-	AgI
(d)	Thomas slag	-	Raw material for cement industry

Watch Video Solution

6. Select correct statement:

A. The decomposition of an oxide into oxygen and metal vapour entropy increases.

B. Decomposition of an oxide is an endothermic change.

C. To make ΔG° negative, temperature should be high enough so that $T\Delta S^{\circ} > \Delta H^{\circ}$

D. All are correct statements.

Answer: D

Watch Video Solution

7. By which process Pb and Sn are extracted respectively are:

A. Carbon reduction, self-reduction

B. Self-reduction, carbon reduction

C. Electrolytic reduction, cyanide process

D. Cyanide process, electrolytic reduction

Answer: B

Watch Video Solution

8. Which of the following faction is of no significance for roasting sulphide ores to the oxide and not subjecting the sulphide ores in carbon reduction directly ?

A. $CO_2$is more volatile than CS_2

B. Metal sulphides are thermodynamically more stable than CS_2

C. Metal sulphides are less stable than the corresponding oxides.

D. CO_2 is thermodynamically more stable than CS_2

Answer: B

Watch Video Solution

9. When copper pyrites is roasted in excess of air, a mixture of $CuO + FeO$ is formed. FeO is present as impurity. This can be removed as slag during reduction of CuO. The flux added to form slag is

A. SiO_2, which is an acidic flux

B. Limestone, which is a basic flux

C. SiO_2 which is the basic flux

D. CaO, which is a basic flux

Answer: A

Watch Video Solution

10. Sulphide ores of metals are usually concentrated by both floatation process. Which of the following sulphide ores offers an exception and is concentrated by chemical leaching ?

A. Galena

B. Copper pyrite

C. Sphalerite

D. Argentite

Answer: D

Watch Video Solution

11. Calcination is the process in which

A. Ore is heated above its melting point to expel H_2O or CO_2, or SO_2

B. Ore is heated below its melting point to expel volatile impurities

C. Ore is heated above its melting point to remove S. As and Sb as SO_2, As_2O_3, and Sb_2O_3, respectively.

D. Ore is heated below its melting point to expel H_2O or CO_2

Answer: D

Watch Video Solution

12. Extraction of zinc from zinc blende is achieved by

A. roasting followed by self-reduction.

B. electrolytic reduction.

C. roasting followed by reduction with carbon.

D. roasting followed by reduction with another metal.

Answer: C

Watch Video Solution

13. In froth flotation process many chemicals (frother, collector, activator, and depressant) are used. Which of the folloiwng is a frother:

A. $CuSO_4$

B. $NaCN$ + alkali

C. Pineoil

D. Potassium xanthate

Answer: C

Watch Video Solution

14. In the metallurgy of Zn the Zn dust obtained from roasting and reduction of zinc sulphide contains some ZnO. It is removed by

A. absorbance of ultraviolet light and reemission of white light.

B. shock cooling by contact with a shower of molten lead.

C. X-ray method.

D. smelting

Answer: D

Watch Video Solution

15. A sulphide ore is first converted into its oxide before reduction. This is done because :

A. the enthalpy of formation of CO_2 is more than that of CS_2.

B. a metal sulphide is generally more stable than the metal oxide.

C. no reducing agent is found suitable for reducing a sulphide ore.

D. a sulphide ore cannot be reduced at all.

Answer: A

Watch Video Solution

16. Carbon and CO gas are used to reduce which of the following pairs of metal oxides for extraction of metals?

A. FeO, Sno

B. Sno, ZnO

C. BaO,Na_2O_2

D. FeO, ZnO

Answer: D

 Watch Video Solution

17. While extracting an element from its ore, the ore is grind and leached with dil KCN solution to form the soluble product potassium argentocyanide. The element is

A. Lead

B. Chromium

C. Manganese

D. Silver

Answer: D

Watch Video Solution

18. Consider the following statements -

In the aluminothermite process, aluminium acts as reducing agent.

The process of extraction of gold involves the formation of $\left[Au(CN)_2\right]^-$ and $\left[Zn(CN)_4\right]^{2-}$

In the extractive metallurgy of zinc, partial fusion of ZnO with coke is called sintering and reduction of ore to the molten metal is called smelting.

Extractive metallurgy of silver from its ore argentite involves complex formation and displacement by

more electropositive metal. Choose the correct options -

A. A and B

B. B and C

C. A, B and C

D. A, B, C and D

Answer: D

View Text Solution

19. Which statement is correct?

A. Gangues are carefully chosen to combine with the slag present in the ore to produce easily fusible flux to carry away the impurities.

B. Slags are carefully chosen to combine with the flux present in the ore to produce easily fusible gangue to carry away the impurities.

C. Gangues are carefully chosen to combine with the flux present in the ore to produce easily fusible slag to carry away the impurities.

D. Fluxes are carefully chosen to combine with the gangue present in the ore to produce easily

fusible slag to carry away the impurities.

Answer: D

Watch Video Solution

20. Aluminium is prepared in large quantities by

A. heating cryolite in a limited quantity of air

B. reducing aluminium oxide with coke.

C. reducing aluminium oxide with sodium.

D. electrolysing aluminium oxide dissolved in fused electrolyte

Answer: D

Watch Video Solution

21. The incorrect statement among the following is

A. Hydrogen is used to reduce NiO

B. Zirconium is refined by Van Arkel method.

C. The sulphide ore galena is concentrated by froth flotation.

D. In the metallurgy of iron, flux used is SiO_2 _

Answer: D

Watch Video Solution

22. Select the property which forms the basis of hydrometallurgical process that is used for extraction of gold.

A. Gold is electropositive metal

B. Gold is less reactive metal

C. Gold forms complexes that are water soluble.

D. Gold forms salts, which are water soluble.

Answer: C

Watch Video Solution

23. which of the following electronts is present as the impurity to the maximum extent in the pig iron?

A. Manganese

B. Carbon

C. Silicon

D. Phosphorus

Answer: B

Watch Video Solution

24. Which of the following pairs of metals uis purified by van arkel method?

A. Ga and In

B. Zr and Ti

C. Ag and Au

D. Ni and Fe

Answer: B

Watch Video Solution

25. The following reaction take place in the blast in the proparation of impure iron identify the reaction pertatining to the formetion of the slag

A. $Fe_2O_3(s) + 3CO(g) \rightarrow 2Fe(1) + 3CO_2(g)$

B. $CaCO_3(s) \rightarrow CaO(s) + CO_2(g)$

C. $CaO(s) + SiO_2(s)CaSiO_3(s)$

D. $2C(s) + O_2(g) \rightarrow 2CO(g)$

Answer: C

Watch Video Solution

26. Aluminium is extracted from Alumina (Al_2O_3) by electrolysis of a molten mixture of

A. $Al_2O_3 + HF + NaAlF_4$

B. $Al_2O_3 + CaF_2 + NaAlF_4$

C. $Al_2O_3 + Na_3AlF_6 + CaF_2$

D. $AI_2O_3 + KF + Na_3AIF_6$

Answer: C

Watch Video Solution

27. Which ore of the following is a mineral of iron ?

A. Malachite

B. Cassiterite

C. Pyrolusite

D. Magnetite

Answer: D

Watch Video Solution

28. In the exteraction of copper from its sulphide ore, the metal is fanally obtained by the reduction of caprous oxide with

A. Copper (I) sulphide (Cu_2S)

B. Sulphur dioxide (SO_2)

C. Iron sulphide (FeS)

D. Carbon monoxide (CO)

Answer: A

Watch Video Solution

29. 'Metals are usually not found as nitrates in their ores". Out of the following two (I and II) reasons which is//are true for the above obervation?

I.Metal nitrates are highly unstable.

II. Metal nitrates are highly soluble in water.

A. (i) and (ii) are false

B. (i) is false but (ii) is true

C. (i) is true but (ii) is false

D. (i) and (ii) are true

Answer: B

30. In the exteraction of copper from its sulphide ore, the metal is fanally obtained by the reduction of caprous oxide with

A. Iron (II) sulphide

B. Carbon monoxide

C. Copper (I) sulphide

D. Sulphur dioxide

Answer: A

Watch Video Solution

31. Aluminium is extracted from Alumina (Al_2O_3) by electrolysis of a molten mixture of

A. $Al_2O_3 + HF + NaAlF_4$

B. $Al_2O_3 + CaF_2 + NaAlF_4$

C. $Al_2O_3 + Na_3AlF_6 + CaF_2$

D. $AI_2O_3 + KF + Na_3AIF_6$

Answer: C

Watch Video Solution

32. Which ore of the following is a mineral of iron ?

A. Malachite

B. Cassiterite

C. Pyrolusite

D. Magnetite

Answer: D

Watch Video Solution

33. In the exteraction of copper from its sulphide ore, the metal is fanally obtained by the reduction of caprous oxide with

A. Copper (I) sulphide (Cu_2S)

B. Sulphur dioxide (SO_2)

C. Iron sulphide (FeS)

D. Carbon monoxide (CO)

Answer: A

Watch Video Solution

34. 'Metals are usually not found as nitrates in their ores". Out of the following two (I and II) reasons which is//are true for the above obervation?

I.Metal nitrates are highly unstable.

II. Metal nitrates are highly soluble in water.

A. (i) and (ii) are false

B. (i) is false but (ii) is true

C. (i) is true but (ii) is false

D. (i) and (ii) are true

Answer: B

35. In the exteraction of copper from its sulphide ore, the metal is fanally obtained by the reduction of caprous oxide with

A. Iron (II) sulphide

B. Carbon monoxide

C. Copper (I) sulphide

D. Sulphur dioxide

Answer: A

Watch Video Solution