CHEMISTRY

BOOKS - NAVNEET PUBLICATION

METALLURGY

Solved

1. Explain the following:

What are the properties of metals and Non-metals?

Watch Video Solution

2. Answer the following in one or two sentences

What is the electronic definition of oxidation and reduction?

Watch Video Solution

3. Answer the following in one or two sentences

What is meant by corrosion?

Watch Video Solution

4. Have you observed the following things ?

Old iron bars in the buildings ?

Watch Video Solution

5. Have you observed the following things ?

Copper vessels not cleaned for a long time .

Watch Video Solution

6. Silver ornaments or idols exposed to air for a long time.

Watch Video Solution

7. Old vehicles fit to be thrown away.

Watch Video Solution

Exercise

1. _____has the highest melting point.

Watch Video Solution

2. Fill in the blanks :

Mercury and ..... are two metals in the liquid state at room temperature.

Watch Video Solution

3. _____is the hardest natural subtance.

Watch Video Solution

4. Fill in the blanks :

The natural occurring compounds of metals along with other impurities are known as .....

Watch Video Solution

5. State whether the following statements are true or false, correct the false statements.

The minerals from which the metals can be separated economically are called ores.

Watch Video Solution

6. Fill in the blanks :

An ore contains some of the impurities like soil, sand etc. These impurities are called.....

Watch Video Solution

7. Fill in the blanks :

The process of extraction of a metal from its ore is called.....

Watch Video Solution

8. Fill in the blanks :

Bauxite is a common ore of.....

Watch Video Solution

9. Fill in the blanks :

..... process is used for the purification of bauxite.

Watch Video Solution

10. Fill in the blanks :

During the electrolysis of alumina ,..... Is liberated at the anode.

Watch Video Solution

11. Fill in the blanks :

The reaction of iron oxide with aluminium is known as ..... reaction.

Watch Video Solution

12. Fill in the blanks :

The process of coating a thin layer of zinc on iron is known as.....

Watch Video Solution

13. Fill in the blanks :

The metal that produces a sound on striking a hard surface is said to be.....

Watch Video Solution

14. Fill in the blanks :

The process in which carbonate ores are changed into oxides by heating strongly in limited air is known as.....

Watch Video Solution

15. Fill in the blanks :

..... Compounds are insoluble in solvents like lerosene and petrol.

Watch Video Solution

16. Fill in the blanks :

..... Is used to obtain pure metals from impure metals.

Watch Video Solution

17. Fill in the blanks :

Corrosion can be prevented by putting a layer of ..... metal on corrosionable metal.

Watch Video Solution

18. Choose the correct alternative and write it along with its allotted alphabet :

..... is a metal.

A. Mg

B. S

C. P

D. Br

Answer:

Watch Video Solution

19. Choose the correct alternative and write it along with its allotted alphabet :

..... is a nonmetal.

A. Au

B. Hg

C. Br

D. Cu

Answer: B

 Watch Video Solution

20. Choose the correct alternative and write it along with its allotted alphabet :

..... is a metalloid.

A. Aluminium

B. Antimony

C. Zinc

D. Mercury

Answer: A

Watch Video Solution

21. Choose the correct alternative and write it along with its allotted alphabet :

Metalloids have properties of .....

A. metals

B. nonmetals

C. both metals and non metals

D. neither metals and nonmetals

Answer: A::B::D

Watch Video Solution

22. Choose the correct alternative and write it along with its allotted alphabet :

..... is a good conducter of electricity.

A. Bromine

B. Iodine

C. Graphite

D. Sulphur

Answer: A

Watch Video Solution

23. Choose the correct alternative and write it along with its allotted alphabet :

..... is a metal which is in liquid form at ordinary temperatyre and pressure.

A. Magnesium

B. Sodium

C. Scandium

D. Mercury

Answer: C

Watch Video Solution

24. Choose the correct alternative and write it along with its allotted alphabet :

..... is an amphoteric oxide.

A. Na_2O

B. MgO

C. ZnO

D. SO_2

Answer:

Watch Video Solution

25. Choose the correct alternative and write it along with its allotted alphabet :

..... is an acidic oxide.

A. Na_2O

B. CO_2

C. FeO_3

D. H_2O

Answer: B::C

Watch Video Solution

26. Choose the correct alternative and write it along with its allotted alphabet :

..... is an basic oxide.

A. CO_2

B. K_2O

C. SO_2

D. Al_2O_3

Answer: B

Watch Video Solution

27. Choose the correct alternative and write it along with its allotted alphabet :

..... is an ore of aluminium.

A. Cryolite

B. Bauxite

C. Haematite

D. Aluminium carbonate

Answer: A::B

Watch Video Solution

28. Choose the correct alternative and write it along with its allotted alphabet :

Bronze is an alloy of.....

A. copper and tin

B. copper and zinc

C. copper and iron

D. copper and nickel

Answer: A::C::D

Watch Video Solution

29. Choose the correct alternative and write it along with its allotted alphabet :

An alloy prepared from iron, nickel and chromium is known as .....

A. brass

B. bronze

C. stainless steel

D. amalgam

Answer: A

Watch Video Solution

30. Choose the correct alternative and write it along with its allotted alphabet :

..... Is an allotropic form of a nonmetal which conducts electricity.

A. Sulphur

B. Graphite

C. Chlorine

D. Iodine

Answer: A

 Watch Video Solution

31. Choose the correct alternative and write it along with its allotted alphabet :

..... has an oxide which is soluble in sodium hydroxide.

A. Calcium

B. Magnesium

C. Iron

D. Zinc

Answer: C

Watch Video Solution

32. Choose the correct alternative and write it along with its allotted alphabet :

..... prevents the rusting of iron.

A. copper

B. Zinc

C. Aluminium

D. Silver

Answer: C

Watch Video Solution

33. Choose the correct alternative and write it along with its allotted alphabet :

..... is obtained by the reduction of its oxide by carbon.

A. Zinc

B. Aluminium

C. Sodium

D. Potassium

Answer: C

Watch Video Solution

34. Choose the correct alternative and write it along with its allotted alphabet :

..... Is used as an anode during the electrolytic reduction of bauxite.

A. Sulphur

B. Graphite

C. Platinum

D. Aluminium

Answer: A

Watch Video Solution

35. Choose the correct alternative and write it along with its allotted alphabet :

Silver gets corroded due to..... in air.

A. oxygen

B. Hydrogen sulphide

C. carbon dioxide

D. nitrogen

Answer: D

Watch Video Solution

36. Choose the correct alternative and write it along with its allotted alphabet :

..... Is the hardest substance and has the highest melting and boiling points.

A. Iodine

B. Sulphur

C. diamond

D. Phosphorus

Answer: A::D

Watch Video Solution

37. Choose the correct alternative and write it along with its allotted alphabet :

Jewellery articles are gold plated.

A. to prevent corrosion

B. to prevent rusting of the base metal

C. to make article attractive

D. all of these

Answer: A::B::C::D

Watch Video Solution

38. Choose the correct alternative and write it along with its allotted alphabet :

To show that zinc is more reactive than copper , the correct procedure is to.....

Watch Video Solution

39. Choose the correct alternative and write it along with its allotted alphabet :

Iron is .....

A. more reactive than zinc

B. more reactive than aluminium

C. less reactive than copper

D. less reactive than aluminium

Answer: A::C

Watch Video Solution

40. Choose the correct alternative and write it along with its allotted alphabet :

What would be the correct order if Zn, Fe, Al

and Cu are arranged in increasing order of reactivity?

A. Cu, Fe, Zn, Al

B. Al, Cu, Fe, Zn

C. Zn, Al, Cu, Fe

D. Fe, Zn, Al, Cu

Answer: A::C

 Watch Video Solution

41. Choose the correct alternative and write it along with its allotted alphabet :

During the extraction of aluminium.....

View Text Solution

42. Choose the correct alternative and write it along with its allotted alphabet :

In the wilfley table method , the particles of gangue are separated by.....separation method.

A. magnetic

B. froth floatation

C. hydraulic

D. garvitational

Answer: A

 Watch Video Solution

43. Choose the correct alternative and write it along with its allotted alphabet :

Which of the following process is to be carried

out to avoid the formation of greenish layer on brass vessels due to corrosion?

A. Electroplating

B. Anodization

C. Tinning

D. Alloying

Answer:

Watch Video Solution

44. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Metals are known as sonar metals.

Watch Video Solution

45. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Diamond is the softest natural substance.

Watch Video Solution

46. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Electrolysis method is used to obtain pure metals from impure metals.

Watch Video Solution

47. State whether the following statements are True or False (If a statement is false,

correct it and rewrite it):

Iodine and diamond are lustrous substances.

Watch Video Solution

48. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Aquaregia is a mixture of conc. HCl and conc. HNO_3 in the ratio of $1:3$

Watch Video Solution

49. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Corrosion of metals can be stopped bt detaching the air from metals.

Watch Video Solution

50. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Due to corrosion a greenish layer forms forms on the surface of copper or brass vessel.

Watch Video Solution

51. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Ionic compounds are soluble in kerosene.

Watch Video Solution

52. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Ionic compounds in the solid state conduct electricity.

Watch Video Solution

53. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Mercury, silver and gold are very reactive metals .

Watch Video Solution

54. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

In electroplating, a metal is coated with another metal using electrolysis.

Watch Video Solution

55. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

In anodising method, the copper or aluminium article is used as anode.

Watch Video Solution

56. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Silver plated spoon, gold plated ornaments are the examples of alloying.

Watch Video Solution

57. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Silveramalgam is mainly used by dentists.

Watch Video Solution

58. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Aluminium oxide is an acidic oxide.

Watch Video Solution

59. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Copper reacts with moist carbon dioxide to form copper carbonate.

Watch Video Solution

60. State whether the following statements are True or False (If a statement is false, correct it and rewrite it):

Corrosion is degradation of a material due to reaction with its environment.

Watch Video Solution

61. Find the correlation in the given pair and rewrite the answer:

Brass : Copper and Zinc :: Bronze : .....

Watch Video Solution

62. Find the correlation in the given pair and rewrite the answer:

Tinning : Tin :: Galvanizing : .....

Watch Video Solution

63. Find the correlation in the given pair and rewrite the answer:

Pressure cooker : Anodizing :: Silver plated spoons : .....

Watch Video Solution

64. Find the correlation in the given pair and rewrite the answer:

The sulphides ores are strongly heated in air : Roasting :: The carbonates ores are strongly heated in a limited supply of air : .....

Watch Video Solution

65. Find the correlation in the given pair and rewrite the answer:

Sulphide ores : Froth floatation method :: Cassiterite ore : .....

Watch Video Solution

66. Find the odd one out :

Sodium, Potassium , Silver, Sulphur

Watch Video Solution

67. Find the odd one out :

Boron , Chlorine, Bromine , Fluorine

Watch Video Solution

68. Find the odd one out :

Copper , Iron, Mercury , Brass

Watch Video Solution

69. Find the odd one out :

Brass , Bronze, Phosphorus , Stainless steel

Watch Video Solution

70. Find the odd one out :

Magnesium chloride , Sodium chloride , Water,

Zinc chloride

Watch Video Solution

71. Find the odd one out :

Tinning , Anodization , Alloying , Froth floatation

Watch Video Solution

72. Find the odd one out :

Zinc , Iron , Phosphorus , Sodium

Watch Video Solution

73. Match the following :

(1) Column I	Column II
(1) ZnS	(a) Cuprous sulphide
(2) HgS	(b) Bauxite
	(c) Zinc blend
	(d) Cinnabar

Watch Video Solution

74. Match the following :

*(2) Column I	Column II
Substance	Property
(1) Potassium bromide	(a) Combustible
(2) Gold	(b) Soluble in water
(3) Sulphur	(c) No chemical reaction
(4) Neon	(d) High ductility

Watch Video Solution

75. Match the following :

*(3) Column I (ores)	Column II (metals)
(1) Bauxite	(a) Mercury
(2) Cassiterite	(b) Aluminium
(3) Cinnabar	(c) Tin

Watch Video Solution

76. Match the following :

(4) Column I	Column II
(1) Copper and zinc	(a) Stainless steel
(2) Copper and tin	(b) Zinc amalgam
	(c) Bronze
	(d) Brass

Watch Video Solution

77. Match the following :

(5) Column I	Column II
(1) Galvanising	(a) Pressure cooker
(2) Tinning	(b) Silver plated spoons
	(c) Coating of tin on copper
	(d) Coating of Zn on iron

Watch Video Solution

78. Write chemical equation for the following events:

When steam is passed over aluminium

Watch Video Solution

79. Translate the following statements into chemical equations and then balance them:

Extraction of copper from its sulphide ore.

Watch Video Solution

80. Translate the following statements into chemical equations and then balance them:

Thermit reaction.

Watch Video Solution

81. Translate the following statements into chemical equations and then balance them:

Magnesium reacts with hot water.

Watch Video Solution

82. Translate the following statements into chemical equations and then balance them:

What happens when aluminium oxide dissolves in aqueous sodium hydroxide?

Watch Video Solution

83. Translate the following statements into chemical equations and then balance them:

Zinc reacts with sulphuric acid.

Watch Video Solution

84. Translate the following statements into chemical equations and then balance them:

Iron reacts with sulphuric acid.

Watch Video Solution

85. Name the following :

A metal which forms an amphoteric oxide.

Watch Video Solution

86. Name the following :

An alloy of copper and Zinc.

Watch Video Solution

87. Name the following :

A compound which is added to lower the fusion temperature.

Watch Video Solution

88. A metal which does not react with cold water but reacts with steam

Watch Video Solution

89. Name the following :

A common ore of aluminium .

Watch Video Solution

90. Answer the following question in one sentence :

Name a metal which is in liquid state at ordinary temperature.

Watch Video Solution

91. Answer the following question in one sentence :

Name two metals which are malleable.

Watch Video Solution

92. Name the following :

Two metals which are ductile.

Watch Video Solution

93. Answer the following question in one sentence :

Name two metals which are good conductors of heat.

Watch Video Solution

94. Answer the following question in one sentence :

Name two metals which are good conductors of electricity.

Watch Video Solution

95. Name the following :

Two metals which are used for making cooking vessels.

Watch Video Solution

96. Name the following :

Two metals having low melting points.

Watch Video Solution

97. Name the following :

Two highly reactive metals.

Watch Video Solution

98. Answer the following question in one sentence :

name a non-metal which is an liquid state at room temperature.

Watch Video Solution

99. Name the following :

Two ionic compounds.

Watch Video Solution

100. The non-metal having electrical conductivity

Watch Video Solution

101. Name the following :

The process of heating the sulphide ore to a high temperature in the excess of air.

Watch Video Solution

102. Name the following :

The process of heating the carbonate ore to a high temperature in limited air.

Watch Video Solution

103. Name the following :

The compound formed by the reaction between aluminium oxide and sodium hydroxide.

Watch Video Solution

104. Name the following :

Two metals which are found in the free state in nature.

Watch Video Solution

105. Name the following :

A metal which has the highest melting point.

Watch Video Solution

106. Name the following :

Two nonmetals which are lustrous.

Watch Video Solution

107. Name the following :

The reagent that dissolves noble metals.

Watch Video Solution

108. The device used for grinding an ore.

Watch Video Solution

109. The oxide that froms salt and water by reacting with both acid and base

Watch Video Solution

110. Molecular formula of the common ore of aluminium

Watch Video Solution

111. Alloy of sodium with mercury.

Watch Video Solution

112. Name the following :

The reaction in which aluminium is used as a reducing agent.

Watch Video Solution

113. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the following points :

Physical state

Watch Video Solution

114. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the

following points :

Lustre

Watch Video Solution

115. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the following points :

Ductility and malleability

Watch Video Solution

116. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the following points :

Conduction of heat and electricity

 Watch Video Solution

117. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the

following points :

Hardness

Watch Video Solution

118. Answer the following questions:

Distinguish between the physical properties of metals and non metals with respect to the following points :

Melting and boiling points

Watch Video Solution

119. Answer the following questions:

Write any three physical properties of nonmetals.

Watch Video Solution

120. Answer the following questions:

Metals are good conducters of heat . Explain why.

Watch Video Solution

121. Answer the following questions:

Metals are good conducters of electricity . Explain why.

Watch Video Solution

122. Answer the following question in one sentence :

A metal can be drawn into a wire Explain why.

Watch Video Solution

123. Answer the following question in one sentence :

A metal can be hammered into a thin sheet. Explain why

Watch Video Solution

124. Answer the following questions:

How do metals react with oxygen ?

Watch Video Solution

125. Answer the following question in one sentence :

How do metals react with water? Explain with an example.

Watch Video Solution

126. Answer the following question in one sentence :

How do metals react with acid? Explain with an example.

Watch Video Solution

127. Answer the following questions:

How does a metal react with nitric acid ?

Watch Video Solution

128. Answer the following questions:

Arrange the following metals in the decreasing order of chemical reactivity: Cu, Mg, Fe,Ca, Zn, Na.

Watch Video Solution

129. Answer the following questions:

What is meant by aqua regia ?

Watch Video Solution

130. Answer the following questions:

How does a metal react with salts of other metals ?

Watch Video Solution

131. Answer the following questions:

Explain the reactivity series of the metals .

Watch Video Solution

132. Answer the following questions:

Divide the metals Cu, Zn, Ca, Mg, Fe,Na, Li in to three groups , namely , reactive metals, moderately reactive metals and less reactive metals .

Watch Video Solution

133. Answer the following questions:

Arrange the following metals in the increasing order of their activity: copper, Silver , Aluminium , Iron.

Watch Video Solution

134. Answer the following questions:

Observes the given figure of reactivity Series of metals and answer the following questions :

Name two metals which react with water.

Watch Video Solution

135. Answer the following questions:

Observes the given figure of reactivity Series of metals and answer the following questions :

Name two moderately reactive metals.

Watch Video Solution

136. Answer the following questions:

Observes the given figure of reactivity Series of metals and answer the following questions :

Name the most highly reactive metal and the most less reactive metal.

Watch Video Solution

137. Explain the following:

When a copper coin is dipped in silver nitrate solution, a glitter appears on the coin after some time, Why does this happen? Write the chemical equation.

Watch Video Solution

138. Answer the following questions:

The electronic configuration of metal 'A' is 2 , 8 , 1 and that of metal 'B' is 2, 8, 2 .Which of the two metals is more reactive ? Identify these metals . Write their reaction with dilute hydrochloric acid.

Watch Video Solution

139. Answer the following questions:

Atomic number of metal "A" is 11 , while atomic number of metal "B" is 20 . Which of the will be

more reactive? Write the chemical reaction of dilute HCl with metal "A".

Watch Video Solution

140. Answer the following questions:

How does a metal react with a nonmetal?

Watch Video Solution

141. Answer the following questions:

How do nonmetals react with oxygen?

Watch Video Solution

142. Answer the following questions:

How do nonmetals react with water?

Watch Video Solution

143. Answer the following questions:

How do nonmetals react with dilute acids?

Watch Video Solution

144. Answer the following questions:

How do nonmetals react with hydrogen?

Watch Video Solution

145. In the reaction between chlorine and HBr transformation of HBr into Br_2 takes place. Can this transformation be called oxidation? Which is the oxidant that brings about this oxidation?

Watch Video Solution

146. Answer the following questions:

What is meant by an ionic compound?

Watch Video Solution

147. Answer the following questions:

What is meant by an ionic bond?

Watch Video Solution

148. Answer the following questions:

State the general properties if ionic compounds .

Watch Video Solution

149. Answer the following questions:

Explain the following terms: Minerals

Watch Video Solution

150. Answer the following questions:

Explain the following terms: Gangue

Watch Video Solution

151. Answer the following questions:

Explain the following terms: Ores

Watch Video Solution

152. Answer the following questions:

Explain the following terms: Metallurgy

Watch Video Solution

153. Answer the following questions:

Explain the following terms: Concentration of ores

Watch Video Solution

154. Define the following:

Roasting

155. Define the following:

Calcination

156. Answer the following questions:

Explain the following terms: Refining

Watch Video Solution

157. Answer the following questions:

State two methods of concentration of ores in which the heavy particles of ores can be separated from the light gangue particles by the gravitational method .

Watch Video Solution

158. Answer the following questions:

What are the different methods used for removing gangue from ores ?

Watch Video Solution

159. Answer the following questions:

Write the five methods of concentration of ores.

Watch Video Solution

160. Answer the following questions:

Write short notes on : Wilfley table method

Watch Video Solution

161. Answer the following questions:

Write short notes on : Hydraulic separation method

Watch Video Solution

162. Answer the following questions:

Write short notes on : Magnetic separation method

Watch Video Solution

163. Answer the following questions:

Write short notes on : Froth floatation method

Watch Video Solution

164. Answer the following questions:

Write short notes on : Leaching method

Watch Video Solution

165. Answer the following questions:

Draw a neat labelled diagram of the arrangement of the equipment used in: Wilfley table method

Watch Video Solution

166. Answer the following questions:

Draw a neat labelled diagram of the arrangement of the equipment used in: Hydraulic separation method

Watch Video Solution

167. Answer the following questions:

Draw a neat labelled diagram of the arrangement of the equipment used in: Magnetic separation method

Watch Video Solution

168. Answer the following questions:

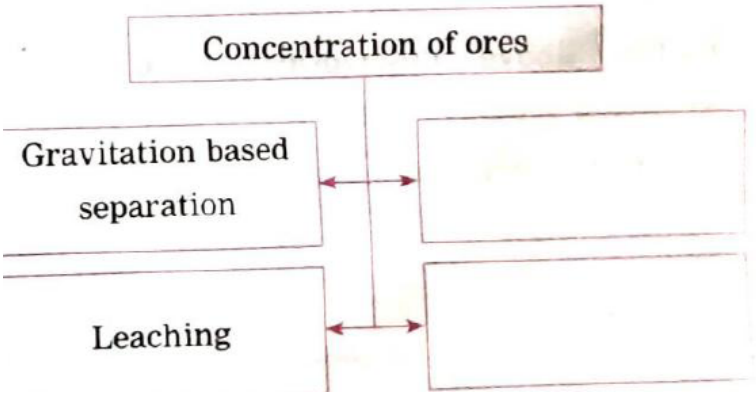
Draw a neat labelled diagram of the arrangement of the equipment used in: Froth floatation method

Watch Video Solution

169. Answer the following questions:

Complete the following flow chart and answer the question below : Explain that method of

concentration in brief ?



Watch Video Solution

170. Answer the following questions:

A tapping vessel opens in a tank like container that is tapering on the lower side .The tank has an outlet for water on the upper side a water inlet on the lower side. Finely ground

ore is released in the tank. A forceful jet of water is introduced in the tank from lower side and gangue particles and pure ore are separated by this method.

The above description is of which gravitation separation method ?

Watch Video Solution

171. Answer the following questions:

A tapping vessel opens in a tank like container that is tapering on the lower side .The tank

has an outlet for water on the upper side a water inlet on the lower side. Finely ground ore is released in the tank. A forceful jet of water is introduced in the tank from lower side and gangue particles and pure ore are separated by this method.

Draw labelled diagram of this method.

Watch Video Solution

172. Answer the following questions:

How are sodium , magnesium and potassium

obtained from their molten chloride salts ?

Watch Video Solution

173. Answer the following questions:

Write the electrode reaction for electrolysis of molten magnesium chloride and calcium chloride .

Watch Video Solution

174. Name the following :

A common ore of aluminium .

Watch Video Solution

175. Answer the following questions:

What is bauxite? What are the main impurities found in this ore ?

Watch Video Solution

176. Answer the following questions:

From which ore is aluminium extracted? What are the stages in its extraction (give only names)?

Watch Video Solution

177. Answer the following questions:

Describe Bayer's process for concentration of bauxite.

Watch Video Solution

178. Answer the following questions:

Describe Hall's process for concentration of bauxite.

Watch Video Solution

179. Answer the following questions:

Describe the process of preparation of aluminium by the electrolysis of alumina.

Watch Video Solution

180. Answer the following questions:

Draw and label the diagram of electrolysis of alumina and explain the electrolytic reduction of alumina.

Watch Video Solution

181. Answer the following questions:

Draw and label the diagram of electrolysis of alumina and explain the electrolytic reduction of alumina.

Watch Video Solution

182. Answer the following in one or two sentences

In the extraction of aluminium,name the process of concentratin of Bauxite.

Watch Video Solution

183. Answer the following in one or two sentences

Write the cathode reaction in electrolytic reduction of alumina

Watch Video Solution

184. Answer the following questions:

In the extraction of aluminium: Write the function and formula of cryolite in the extraction of aluminium .

Watch Video Solution

185. Answer the following in one or two sentences

Write an equation for the action of heat on aluminium hydroxide

Watch Video Solution

186. Answer the following questions:

In the extraction of aluminium : Draw the diagram of extraction of aluminium.

Watch Video Solution

187. Answer the following questions:

In the extraction of aluminium : Write the anode reaction in electrolytic reduction of alumina.

Watch Video Solution

188. Answer the following questions:

In the extraction of aluminium : Write the cathode reaction in electrolytic reduction of alumina.

Watch Video Solution

189. Give scientific reasons:

During electrolytic reduction of alumina, cryolite (Na_3AlF_6) and flu or $spar(CaF_2)$ are added to the electrolytic mixture containing pure alumina

Watch Video Solution

190. Answer the following questions:

What happens when aluminium ore is heated with caustic soda? Write the balanced chemical equation for the same.

Watch Video Solution

191. Answer the following questions:

How in zinc extracted from its ore zinc sulphide or zinc carbonate ?

Watch Video Solution

192. Answer the following questions:

$3MnO_2 + 4Al \rightarrow 3Mn + 2Al_2O_3 +$ heat .

Identify the substances undergone oxidation and reduction reactions.

Watch Video Solution

193. Answer the following questions:

How is copper extracted from its sulphide ore ?

Watch Video Solution

194. Answer the following questions:

How is mercury extracted from cinnabar?

 Watch Video Solution

195. Answer the following questions:

Extraction of mercury from its ore cinnabar and write the corresponding chemical reaction

.

 Watch Video Solution

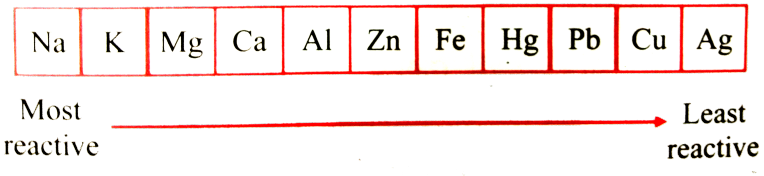
196. Answer the following questions:

Show the steps involved in the extraction of moderately reactive metals from their sulphide ores .

Watch Video Solution

197. In the given reactivity series, some metals are misplaced. Rearrange these metals in the

decreasing order of their reactivity.



Watch Video Solution

198. Answer the following questions:

Explain the term corrosion with a suitable example.

Watch Video Solution

199. Answer the following questions:

What is corrosion?

Watch Video Solution

200. Answer the following questions:

Explain the different methods to prevent corossion of metals?

Watch Video Solution

201. Answer the following questions:

Write three methods of preventing rusting of iron?

Watch Video Solution

202. Explain the following:

Why do silver articles turn balckish while copper vessels turn greenish on keeping in air for a long time?

Watch Video Solution

203. Answer the following questions:

Why do pure gold and platinum always glitter?

Watch Video Solution

204. Answer the following in one or two sentences

Which measures would you suggest to stop the corrosion of metallic articles or not to allow the corrosion to start?

Watch Video Solution

205. Answer the following questions:

What is done so to prevent rusting of iron windows and iron doors of your house?

Watch Video Solution

206. Explain the following:

Can we permanently prevent the rusting of an iron article by applying a layer of paint on its surface?

Watch Video Solution

207. Answer the following questions:

Why do new iron sheets appear shiny?

Watch Video Solution

208. Answer the following questions:

What is meant by an alloy? Give two examples with chemical composition .

Watch Video Solution

209. Answer the following questions:

Write short notes on the following:

Galvanizing

Watch Video Solution

210. Answer the following questions:

Write short notes on the following: Tinning

Watch Video Solution

211. Answer the following questions:

Write short notes on the following:

Electroplating

Watch Video Solution

212. Answer the following questions:

Write short notes on the following: Anodizing

Watch Video Solution

213. Answer the following questions:

Write short notes on the following: Alloying

Watch Video Solution

214. Answer the following questions:

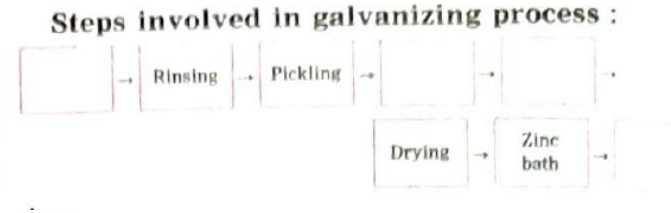
In two methods of control of corrosion of aluminium , either a layer of aluminium oxide is formed or a silver plating is done on the surface. State to which electrode the

aluminium article is attached in these methods respectively.

Watch Video Solution

215. Answer the following questions:

Complete the flow chart : steps involved in galvanizing process:



Watch Video Solution

216. Answer the following questions:

What are the various alloys used in daily life?

Where are those used?

Watch Video Solution

217. What are the properties that the alloy used for minting coins should have?

Watch Video Solution

218. Distinguish between:

Metals and Nonmetals .

Watch Video Solution

219. Give scientific reasons for the following:

Sodium is always kept in kerosene.

Watch Video Solution

220. Give scientific reasons for the following:

Sodium is always kept in kerosene.

Watch Video Solution

221. Give scientific reasons for the following:

Calcium floats on water during the reactionwith water.

Watch Video Solution

222. Give scientific reasons for the following:

Common salt has high melting and boiling points .

Watch Video Solution

223. Give scientific reasons for the following:

Generally the ionic compounds have high melting points .

Watch Video Solution

224. Give scientific reasons:

Lemon or tamarind is used for cleaning copper vessels turned greenish

Watch Video Solution

225. Give scientific reasons:

Metals are good conductors of electricity while non-metlas are bad conductors of electricity.

Watch Video Solution

226. Give scientific reasons:

Sodium is more reactive than aluminium

Watch Video Solution

227. Give scientific reasons for the following:

When zinc granules are added to copper sulphate solution, the blue coloured solution turns colourless.

Watch Video Solution

228. Give scientific reasons for the following:

When an iron nail is dipped into a copper solution , a shiny coat of copper is formed on the nail.

Watch Video Solution

229. Give scientific reasons:

During electrolytic reduction of alumina, cryolite (Na_3AlF_6) and flu or $spar(CaF_2)$ are added to the electrolytic mixture containing pure alumina

Watch Video Solution

230. Give scientific reasons for the following:

Pine oil is used in the froth floatation process.

Watch Video Solution

231. Give scientific reasons for the following:

Air is bubbled through the mixture in froth floatation process

Watch Video Solution

232. Give scientific reasons for the following:

Anodes need to be replaced from time to time during the electrolysis of alumina.

Watch Video Solution

233. Give scientific reasons for the following:

Silver amalgam is used for filling dental cavities.

Watch Video Solution

234. Give scientific reasons for the following:

Copper vessels turn greenish and silver articles turn blackish when kept open in air for a long time.

Watch Video Solution

235. Explain the following reactions with the help of balanced equations:

Out of sodium and sulphur which is a metal? Explain its reaction with oxygen.

Watch Video Solution

236. Explain the following reactions with the help of balanced equations:

Magnesium burns in air .

Watch Video Solution

237. Explain the following reactions with the help of balanced equations:

Copper reacts with air.

Watch Video Solution

238. Explain the following reactions with the help of balanced equations:

Aluminium is exposed to air.

Watch Video Solution

239. Explain the following reactions with the help of balanced equations:

Sodium reacts with water

Watch Video Solution

240. Explain the following reactions with the help of balanced equations:

Calcium reacts with water.

Watch Video Solution

241. Explain the following reactions with the help of balanced equations:

Steam is passed over aluminium.

Watch Video Solution

242. Explain the following reactions with the help of balanced equations:

Steam is passed over iron .

Watch Video Solution

243. Explain the following reactions with the help of balanced equations:

Magnesium reacts with dilute HCL

Watch Video Solution

244. Explain the following reactions giving their balanced chemical equations:

Aluminium is treated with dil. hydrochloric acid.

Watch Video Solution

245. Explain the following reactions with the help of balanced equations:

Zinc reacts with dil. hydrochloric acid.

Watch Video Solution

246. Explain the following reactions with the help of balanced equations:

Iron is treated with dil. hydrochloric acid.

Watch Video Solution

247. Explain the following reactions with the help of balanced equations:

Copper is reacted with conc. nitric acid.

Watch Video Solution

248. Explain the following reactions with the help of balanced equations:

Copper is reacted with dil. nitric acid.

Watch Video Solution

249. Explain the following reactions with the help of balanced equations:

Iron fillings are dropped in aqueous solution of copper sulphate.

Watch Video Solution

250. Explain the following reactions with the help of balanced equations:

Sodium metal is reacted chlorine gas.

Watch Video Solution

251. Explain the following reactions with the help of balanced equations:

Sulphur burns in air.

Watch Video Solution

252. Explain the following reactions with the help of balanced equations:

Chlorine dissolves in water.

Watch Video Solution

253. Explain the following reactions with the help of balanced equations:

Chlorine is treated with hydrobromine acid.

Watch Video Solution

254. Explain the following reactions with the help of balanced equations:

Hydrogen gas is passed over boiling sulphur.

Watch Video Solution

255. Explain the following reactions with the help of balanced equations:

Sodium aluminate is treated with water.

Watch Video Solution

256. Explain the following reactions with the help of balanced equations:

Dry aluminium hydroxide is ignited at 1000 ^{0}C.

Watch Video Solution

257. Explain the following reactions with the help of balanced equations:

Zinc sulphide is heated strongly in excess of air.

Watch Video Solution

258. Explain the following reactions with the help of balanced equations:

Zinc carbonate is heated strongly in a limited supply of air.

Watch Video Solution

259. Explain the following reactions with the help of balanced equations:

Zinc oxide is treated with carbon.

Watch Video Solution

260. Explain the following reactions with the help of balanced equations:

Magnese dioxide is heated with aluminium .

Watch Video Solution

261. Explain the following reactions with the help of balanced equations:

Iron (III) oxide (ferrous oxide) is heated with aluminium .

Watch Video Solution

262. Explain the following reactions with the help of balanced equations:

Cinnabar is heated in air.

Watch Video Solution

263. Explain the following reactions with the help of balanced equations:

Cuprous sulphide is heated in air.

Watch Video Solution

264. Explain the following reactions with the help of balanced equations:

Electrolysis of alumina is done.

Watch Video Solution

265. Explain the following reactions with the help of balanced equations:

Zinc oxide is dissolved in dilute hydrochloric acid.

Watch Video Solution