

# **CHEMISTRY**

# **BOOKS - R SHARMA CHEMISTRY (HINGLISH)**

# GENERAL PRINCIPALS AND ISOLATION OF ELEMENTS

Flow Up Test 1

**1.** Which of the following statements is incorrect in the contect of minerals ?

- A. All ores are minerals but all minerals are not ores
- B. Minerals form which can be convenienly and rsomonically extracted are know as ores
- C. Minerrals are always a single compounds and have a defnite composition
- D. Naturally occurring crystal bodies consisting of compounds of metals which are formed as a result of physical and chemical processes are called minerals

#### Answer: c

2. Which of the following statements is correct?(i)The s-blocks metals occut as chlorides, slicates and carbonates

(ii)The d- and p- block metals and found as oxides and salphides and axcept for the group 3 metals which occure as phophates, and the platimum group metals and gold which occut in uncombined form (iii)There is no minetral source of technetium (Tc), is radinactive element that is made in nucles reactors (iv) All the laothanides (Ce to lu) occur as phophates

A. (i), (iv)
B. (i),(iii),(iv)
C. (i),(ii),(iii)
D. (i),(ii),(iii)(iv)
Answer: d
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3. Which of the following metals is found in nature as
carnonate?
A. Sr

B. Ca						
C. B						
D. Os						
Answer: a						
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4. The impurties present in a mineral are called						
A. naggets						
B. flux						
C. gangue						

D. froth

#### Answer: c



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**5.** The entire scientific and techlolgical process used for isolation of the metal from its orea is known as

A. metamerism

B. metallury

C. meteoseology

D. metallography

#### Answer: b



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- 6. Calamine is an ore of
  - A. lead
  - B. calcium
  - C. zine
  - D. magnesium

#### Answer: c



# **7.** Which of the following is a sulphide ore? A. Willemite B. cryolite C. Cerussite D. Argentite Answer: d **Watch Video Solution**

**8.** The ore of calcium which contains phosphorus is

A. fluorapatite							
B. asheston							
C. talc							
D. gypsum							
Answer: a							
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9. Among the following the most abundent metal in							
the carith's crust is							
A. $Ca$							

- $\mathsf{B.}\,Na$
- $\mathsf{C}.\,Al$
- D. Fe

#### Answer: c



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# Flow Up Test 2

**1.** The process of removing light gangue particles by washing in a current of water is called

A. levigation

- B. gravity separation
- C. hydraulic washing
- D. all of these

#### Answer: d



- **2.** which of the following ores can be connected by forth magnetic sepuration method?
- (i)Haematite (ii)magnetite(iii)siderite(iv)Fool's gold
  - A. (i),(ii),(iii),(iv)
  - B. (i),(ii),(iii)

- C. (i),(ii),(iii)
- D. (ii),(iii)

#### Answer: a



- **3.** Name three ores which are concentrated by froth flotation process. What is a depresent ?
  - A. Halide ores
  - B. Phosphate ores
  - C. Native ores

D. Sulphide ores

#### Answer: d



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**4.** Which of the following is useed as a depressent in forth floatation process ?

- A. Copper sulphate
- B. Xanthate
- C. Potessium cyanide
- D. Pine oil

#### Answer: c



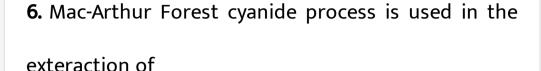
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- **5.** The signifificance of leaching in the extraction of aluminume is
  - A. to prepate pure alumina from the bauxite ore
  - B. to refine aluminum
  - C. to extract aluminium
  - D. to readuce  $Al_2O_3$

#### Answer: a



.........



(i) Cu (ii) Ag (iii) Au (iv)Pt

A. (ii) and (iii)

B. (i),(ii),(iii)

C. (i),(ii) (iii),(iv)

D. (i) and (iv)

#### Answer: a



## Flow Up Test 3

**1.** Calcination of ores involves heating the ore below its fusion temperature in

A. presence of superheated steam

B. absence of air or limited supply of air

C. an atmosphare of nirogen

D. presence of air

#### **Answer: b**



- 2. Roasting of ores is done in
  - A. Presence of an execess of air or oxygen
  - B. Presence of superheated steam
  - C. Absence of air
  - D. Presence of a limited supply of air

#### Answer: a



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**3.** By which of the following processes is an oxide ore readuced to the free metal ?

A. Calcination

B. Leaching

C. Smelting

D. Roasting

#### Answer: c



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**4.** A flux is often added to remove impurities from a concentrated ore. In the reaction

$$CaO + SiO_2 
ightarrow CaSiO_3$$

the slag and the flux are

- A.  $SiO_2$  and  $CaSiO_3$
- B. CaO and  $SiO_2$
- $C. CaSiSO_2$  and CaO
- D. both (1) and (3)

#### Answer: a



**5.** Extraction of copper is done using copper pyrites. After roasting, the ore is mixed with silica and coke and then smelted in a blast furnace. The matte obtained from the blast furnace is charged into a

silica-lined converter. Some silica is also added, and a hot air blast is blown into the mixture to obtain

blister copper, which is purified by electrorefining.

Matte is a mixture of

A. 
$$Ca_2S + FeO$$

B. 
$$Cu_2S_FeS$$

C. 
$$Ca_2 + FeS$$

D. 
$$Cu_2O+FeO$$

#### Answer: b



**6.** which of the following metals can's be extracted by the the carbon reduction precess ?

- A. Zn
- $B.\,Fe$
- $\mathsf{C}.\,W$
- D. So

Answer: c



**7.** Which of the following represents the thermite reaction?

A. 
$$Fe_2O_3+CO o Fe+CO_2$$

B. 
$$CaCO_3Cu(OH)_2 
ightarrow CaO + CO_3 + H_2O$$

C. 
$$Cu_2S+Cu_2O o Cu+SO_2$$

D. 
$$Ma_2O_3+AJ o Mn+Al_2O_3$$

Answer: d



**1.** Ellngham diagram are plotwe of ...... as a function of temprecture

A. 
$$\Delta_r U^{\,\Theta}$$

B. 
$$\Delta_r H^{\Theta}$$

C. 
$$\Delta_r G^{\,\Theta}$$

D. 
$$\Delta_r S^{\,\Theta}$$

#### Answer: c



- 2. Which of the following observations made from the Ellingham diagram is wrong?
  - A. The slope of the curves of the formation of metal oxides is negative
  - B. Each curve is straight line except when some change takes place in phase  $(S-1 \ {
    m or} \ 1 
    ightarrow g)$
  - C. In the case of less reactive (or less electroposities metal like Ag and  $Hg, \Delta G^\Theta$  become positive at relatively low temperatures .
  - D. Any matel oxide with lower value of  $\Delta G^{\Theta}$  is more stable than a metal oxide with higher

$$\Delta G^{\Theta}$$

Answer: a



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**3.** Consider the following reaction at  $1000^{\circ}\,C$ 

$$Zn(s)+rac{1}{2}O_2(g)
ightarrow ZnO(s), \Delta G^{m{\Theta}}= \,-\,360kJmol^{-1}$$

(B)

$$C(s) + rac{1}{2}O_2(g) o OO(g), \Delta G^{\,\Theta} = \, -\, 460 k J mol^{-1}$$

Choose the correct statement at  $1000^{\circ}\,C$ 

A. "Zinc" can be oxidized by CO

B. "Zine"oxide can be readuced by  ${\cal C}$ 

C. Both (1) and (2) are true

D. Both (1) and (2) are false

#### Answer: b



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**4.**  $\Delta G^{\Theta}$  vs T plot in Ellingham diagram slopes downward for the reaction .

A. 
$$2CO(g)O_2(g) o 2CO_2g$$

B. 
$$C(s) + O_2(g) o CO_2(g)$$

$$\mathsf{C.}\,2C(s) + O_2(g) o 2CO(g)$$

D. Both (2) and (3)

#### Answer: c



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**5.** 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. Metal sulphides are less stable thas the corresponding oxide

B.  $CO_2$  is thermodlynamically more stable than  $CS_2$ 

C.  $CO_2$  is more volatile than  $CS_2$ 

D. Metal suphides are thermodynamically more stable than  $CS_2$ 

#### Answer: c



**6.** Although thermodynamically feasible, in practices, magnesium metal are used for the reduction of almunia in the metallurgy of Al becauese.

B. the tempature required is high C. there are side reaction D. magneaium oxide decmposes Answer: b **Watch Video Solution** 7. The reduction of a metal oxide if the metals formed is in state at the temperature of readuction A. solid

A. reaction is slow

- B. liquid
- C. gascous
- D. Both (2) and (3)

#### Answer: d



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8. Which of the following statement is not correct?

A. The reaction  $Or_2O_3+2Al o Al_2O_3+2Cr$  is

thermodynamically feasible as is apparent from

the Gibbs energy value but it does not take place at room temperature.

- B. Under certains conditions, Mg can reduce  $SiO_2$  and Si can rection MgO.
- C. Out of C and CO,C is a better reduction agent than CO below 673K but CO is a more effective reducing agent than C above 673K.
- D. Out of C and Co,C is a better readucing equal than CO the reduction of ZnO is Zn

#### Answer: c



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A. siderine

B. haematite

C. magnetite

D. limotite

### **Answer:** b



10. Iron is extracted on a commercial scale from  $Fe_2O_3$  by reduction with  $Pe_2O_3$  in a blast furnase

- A. *CO*
- $\mathsf{B.}\,C$
- $\mathsf{C}.\,Al$
- D. Mg

Answer: a



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**11.** (c) \_\_\_iron is the purest form of iron.

- A. Steel
- B. Wrought iron
- C. Cast iron
- D. Pig iron

#### **Answer: b**



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12. When hard steel is heated to bright reduce reduce and then allowed to cool slowly, Its hurdness harthess decreases and softwere increases ,The process is called

B. quenching

C. tempering

D. hadening

#### Answer: a



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# **13.** Which of the following is malachile?

A.  $Cu_2S$ 

B.  $CuFeS_2$ 

C.  $Cu(CH)_2$ ,  $2CaCO_3$ 

D.  $Cu(OH)_2 CaCO_2$ 

#### Answer: d



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**14.** Which of the following reaction is involved in the extraction of copper by the besemer process?

A. 
$$Cu_2O+Zn o ZnO+2Cu$$

B. 
$$Cu_2O+C o CO+2Cu$$

C. 
$$Cu_2S+O_2 o SO_2+2Cu$$

D. 
$$Cu_2S+2Cu_2O o SO_2+6Cu$$

Answer: d



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15. (xii) Which is known as 'blister copper'?

A. an slop of copper

B. copper containing  $1 o 2\,\%$  impurity

C. an ore of copper

D. pure copper

Answer: b

# 16. The flex in the smelting of copper is

- A.  $P_2O_3$
- B. CaO
- C.  $SiO_2$
- D. MnO

### Answer: c



17. The main ore of zine is

A. willemile  $(Zn_2SiO_4)$ 

B. zincite (ZnO)

C. calamine  $(ZnCO_3)$ 

D. zine blends (ZnS)

### Answer: d



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18. Zine is used in

A. shera	ardcing		
B. dry b	atteries		
C. hot g	galvanizing		
D. all of	these		
Answer: d	ch Video Solution		
Flow Up Tes	t 5		
<b>1.</b> Sodium	metal is made	by the electro	olysis of a
molten	mixture	of	about

 $40\ \%\ NaCI$  and  $67\ \%\ CaCI_2$  in a

A. mercury cathode cell

B. solvay cell

C. downs cell

D. Diaphragm cell

#### Answer: c



**2.** During the electrolytic production of aluminium, the carbon anodes are replaced from time to time because

A. carbon convents  $Al_2O_3$  to Al

B. oxygen librated at the carbon anode reacts  $\label{eq:carbon} \mbox{with anodes to form } CO_2$ 

C. the carbon perevents atmosphere oxygen from coming in corbon with aluminum

D. the xcarbon anode get decayed

# Answer: b



**3.** Electrolytic reduction of alumina to aluminum by the Hall-Heroult process is carried out

A. in the presence of cryolin which forms a melt at hight temprature process is carride out

- B. In the presents of NaCI
- C. In the presence of thaorite
- D. in the presence of cryyolte which a mell at lower temprature and increases the electrical conductivity.

#### Answer: d



- **4.** Which of the following statement is incorrect?
  - A. The zone reflining process for parification of metal is based on the difference in solubitities of the impparties in the moles and solid state of the metal
    - B. Utrapure sillicon, used to make semiconductores, is obtained by the zone refkling process
    - C. The van Arkel method for purication of metals levolves the consversion of the metal into a hnotivoltiel stable compound

D. The dissillation process (under reduced presure) is used for the partication of Hg

### Answer: c



- **5.** Which of the following statement is not correct?
  - A. Ti is refined by the van Ackel precess
  - B. Impure Ni is purified by the zone- refining process

- C. Desilverization of lead may be cerried out using the parkes process
- D. Matel Ag is parified by the capellation process

## Answer: b



- **6.** Which of the following statement are correct?
- (i)The liquation process is used for the purifiction of so
- (ii) $Ca \ \mathrm{and} \ Mg$  are extracted by electroloytie reduction

(iii)The amalganation method is used in the parification of  ${\cal A} g$ 

(iv)The electrometallagical process (electrolysis of fased salts) is employed in extract sodium

A. (i)(ii),(iii),(iv)

B. (ii),(iii),(iv)

C. (i),(iii)

D. (iii),(ii),(iv)

#### Answer: a



# **Question Bank**

1.	Which	of	the	following	processes	causes	are
рс	ollution	?					

- A. Roasting
- B. Calctration
- C. Froth floatation
- D. Both (1) and (2)

#### Answer: a



<b>2.</b> Which of the following group $13$ element ocurre in
nature as oxide ?
A. $Ti$
B. $In$
C. $AI$
D. $B$
Answer: c
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**3.** Which of the group 14 element accure in nature as oxide?

A. $Sn$
B. $Pb$
C. $Ge$
D. $Si$
Answer: b
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<b>4.</b> Which of the group $15$ element accure in nature as
phophatates ?
A. $N$ .

- B. Y
- $\mathsf{C}.\,As$
- $\mathsf{D}.\,Sb$

## Answer: d



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# 5. Major nature source of the balogens are

- A. sulphutes
- B. oxdes
- C. carbonates

D. halides

### Answer: d



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# 6. The mineral carallite contain

A. Ca and Mg

B. Ag and K

 $\mathsf{C}.\,Ca$  and K

D. Mg and Na

# Answer: b

**7.** Wolframite  $(FeWO_2)$  present as an inpurity in cassiteric  $(SaO_2)$  can be removed by the process of

A. zone refining

B. gravity separation

C. electromagnetic separation

D. froth flotation separation

Answer: c



8.	In	the	manufacture	of	iron	from	haematile,	the
lin	nes	tone	acts as a					

- A. reducing agent
- B. matria
- C. flux
- D. slag

### Answer: c



**9.** All FeC alloys containing less than  $2\,\%$  carbon are called

A. steel

B. wrought iron

C. spongy iron

D. Pig iron

Answer: a



10. In the centext of the hall-heroul process for the extraction of AI , which of the following statement is false?

A.  $AI_2O_3$  is mixed with  $CaF_3$  which lower the melting point of the mixture and brings conductivity

B.  $AI^{2\,+}$  is reduced at the cathod to from AI

C.  $NaAIF_6$  serves as the electrolyte

D. CO and  $CO_2$  are produced in the process

## Answer: b



**11.** The metal that can't be obtained by electrolysis of an aquencous solution of in salts is

A. Cu

B. Cr

C. Ag

D. Ca

Answer: d



**12.** Which method of parification is represented by the following equation ?

$$Ti(s)+2I_{\cdot}(2)(g)
ightarrow TiI_{4}(g)
ightarrow Ti(s)+2I_{2}(g)$$

- A. van arkel
- B. poling
- C. Cupellation
- D. zone reflation

#### Answer: a



**13.** Oxidation state of the metal in the mineral heamatic and magnerite respectively are

A.  $+2, \,\,+3$  in hematite and +3 in magnetite

B.  $+2, \ +3$  in hematite and +2 in magnetite

 $\mathsf{C.} + 2, \,\, \mathsf{in} \,\, \mathsf{hematite} \,\, \mathsf{and} \,\, + 2, \,\, + 3 \,\, \mathsf{in} \,\, \mathsf{magnetite}$ 

D. +3 in hematite and  $+2, \,\, +3$  in magnetite

#### Answer: d



**14.** The chemical composition of slag formed during the smelting process in the extraction of copper is

A. 
$$Cu_2O + FeS$$

- $\mathsf{B.}\, FeSiO_3$
- C.  $CuFeS_2$
- D.  $Cu_2S + 2FeS + SO_2$

#### Answer: b



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15. partial masting of chalcopyries produces

- A.  $Cu_2S$  and FeO
- $B. Cu_2O$  and FeO
- C. CuS and  $Fe_2O_3$
- D.  $Cu_2O$  and  $Fe_2O_3$

### Answer: b



- **16.** Iron is removed from cahalcopyrite as
  - A. FeO
  - B. FeS

C.  $Fe_2O_3$ 

D.  $FeSiO_3$ 

## Answer: d



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17. In self -reduction used in extraction of copper, the reducing agent is

A. S

B.  $O_{2-}$ 

 $\mathsf{C}.\,S_2$ 

D.  $SO_2$ 

#### Answer: c



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18. Native silver metel froms a water solube, complexx with a dilute aqueous wsolution of NaCN in the presence of

- A. Niteroges
- B. Oxygen
- C. carbo dixoide
- D. argons

## Answer: b



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**19.** which are contins bothiron and copper?

A. couprite

B. chalcocite

C. chalcopyrite

D. malachite

#### Answer: c



**20.** The method chiefly used for the extraction of lead and tin from there oras are respectrively .

- A. self-redoction and carbon reduction
- B. self-redoction and electrolytic reduction
- C. carbon reduction self reduction
- D. cyanide process and carbon reduction

#### Answer: a



21.	Which	of	the	following	alkai	metals	occurs	in
nat	ure is s	ilict	?					
	A. Li							

B. Na

C. K

D. Rb

Answer: a



<b>22.</b> Which	of the	following	alken	earth	metals	accurs
in nature a	as oxide	es and silic	cates ?	•		

- A. Ba
- B. Sr
- C. Ca
- D. Be

## Answer: d



**23.** Near the top of the blast furnace, iron oxides are reduced to ..... by carbon monoxide .

- A. pig iron
- B. cast iron
- C. spongy iron
- D. wroght iron

Answer: c



- A. impureCu
- B. impure Zn
- C. impure Fe
- D. impureAl

## Answer: b



- **25.** Copper is purified by electrolytic refining of blister copper .The corrent statement about this process is (are):
- (i) impure Custrip is used as cathode

(ii)acidified aqueous $CuSO_4$  is used as electrolyte

(iii) pure  ${\it Cu}$  deposits at cathode

(iv) impurities settle as anode -mud

A. (i),(ii),(iii),(iv)

B. (1),(ii),(iv)

C. (1),(ii),(iii)

D. (ii),(iii),(iv)

#### Answer: d



**26.** Upon hetaing with  $Cu_2S$  the regants that give copper metel are

(i) 
$$CuFeS_2$$
 (ii)  $CuO$ 

(iii) 
$$Cu_2O$$
(iv)  $CuSO_4$ 

A. `(ii),(iii),(iv)

B. (ii),(iii)

C. (i),(ii),(iii),(iv)

D. (ii),(iv)

#### Answer: a



**27.** The carbon reduction method is not used for the

extarection of

- (i) Tin from  $SuO_2$
- (ii) Iron from  $Fe_2O_3$
- (iii) aluminium for  $Al_2O_3$

(iv) megnesium from  $MgCO_3$ .  $CaCO_3$ 

- A. (i),(ii)
- B. (iii),(iv)
- C. (i),(iv)
- D. (ii),(iv)

**Answer:** b

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**28.** Ibn the cyanide extraction process of silver form aragetite are ,oxidizing and reduction agents used are action .

- A.  $HNO_3$  and CO respectively
- B.  $HNO_3$  and Zn respectively
- C.  $O_2$  and Zn dust respectively
- D.  $O_2$  and CO respectively

#### Answer: c



**29.** Extraction of metal fron the ore cassiterlate involves

(i) carbon reduction of an oxide are self reduction of a sulphide or

(iii) removal of copper imputiry

(iv) removel of iron inpurity

A. (i),(ii),(iii),(iv)

B. (ii),(iii),(iv)

C. (i),(iv)

D. (i),(iii) and (iv)

Answer: d

**30.** Which of the following faction is of no significence for reasting suplhide ores to the oxide and not subjection the sulphide ores carbon rediuction direction?

- A. Metal sulphides are thermodynamically more stable than  $CS_2$
- B.  $CO_2$  is thermonically more stable than  $CS_2$
- C. Metal sulphides are less stable thas the corresponding oxide
- D.  $CO_2$  is more volatile than  $CS_2$

#### Answer: a



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- 31. Extraction of iron from zine blende is achieved by
  - A. electrolytic reduction
  - B. roasting followed by self reductiion
  - C. roasting followed by reductiion with another metal
  - D. roasting followed by reductiion with carbon

Answer: d

# 32. Steel is manufactured from cast iron by

(i) bessemer process (ii) open hearth process

(iii) oxygen tip-blowing (iv) electric are process

A. (i),(ii),(iii)

B. (i),(ii),(iii),(iv)

C. (ii),(iii),(iv)

D.

#### Answer: b



**33.** When hard steel is heated to bright reduce reduce and then allowed to cool slowly, Its hurdness harthess decreases and softwere increases ,The process is called

- A. case hundening
- B. tempering
- C. quenching
- D. nitriding

## Answer: d



**1.** Zine can be coated on iron to produce galvanize3d iron but the reverse is not possible it is because

A. zine is lighter than iron

B. zine has lower mething point than iron

C. zine has lower negative electrode potential

than iron

D. zine has higher negative electrode potential than iron

Answer: c

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

A. copper (1) sulphide

B. sulphide dioxiode

C. iron(II) salphide

D. carbon monoxide

Answer: a



3. Metals are ususally not found as nitates in the ores" Out of the following two (a and b) reaction which is ..are true for the above abservation?

Metal nitrates are bighly unstable

Metal nitrates are bighly soluble in water

A. a is true b is false

B. a and b are true

C. a and b are false

D. a is false b is true

# Answer: d



**4.** Roasting of sulphides given the gas X as a by producet. This is a colortess gas with choking smell of burnt and causes great dumage to respiratory is acidic, act as a resulting agent and in acid never been isolated .The gas X is

A.  $So_2$ 

B.  $CO_2$ 

 $\mathsf{C}.\,SO_3$ 

D.  $H_2S$ 

Answer: a

**5.** Aluminum is exteracted from alumine  $AI_2O_3$  by electrolysis of a molten mixture of :

A. 
$$AI_2O_3 + HF + NaIF_4$$

$$\mathsf{B.}\,AI_2O_3 + CaF_2 + NaAIF_4$$

C. 
$$AI_2O_3 + Na_3AIF_6 + CaF_2$$

D. 
$$AI_2O_3+KF+Na_3Al_4^2$$

### Answer: c



B. Cassiterile
C. Pycolosite Magnetite
D. Magnetite
Answer: d
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7. Identify the alloy containing a non metal as a constitunt in it

**6.** Whih of the following is a mineral of iron?

A. Malachite

A. Invar
B. Steel
C. Bell metal
D. Bronce
Answer: a,b
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8. Which of the following pairs of metals uis purified by van arkel method?
A. $Ni$ and $Fe$

- B. Ca and In
- $\mathsf{C}.\,Zr$  and Ti
- $\mathsf{D}.\,Ag \,\,\mathrm{and}\,\,Au$

#### Answer: c



- **9.** which of the following electronts is present as the impurity to the maximum extent in the pig iron?
  - A. Phosphorus
  - B. Manganese

C. Carbon

D. Silicon

# Answer: c



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10. 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. 
$$2C(s) + O_2(g) o 2CO(g)$$

B. 
$$Fe_2O_3(s)+3CO(g)
ightarrow 2Fe(i)+3CO_2(g)$$

$$\mathsf{C.}\,CaCO_3(s) 
ightarrow CaO(s) + CO_2(s)$$

D. 
$$CaO(s) + SiO_2(s) o CuSiO_3(s)$$

#### Answer: d



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11. Sulphide ore of metal are usually concentrated by froth flotation process .Which one of the following sulphide3 ores after an exception and is contrated by electrical leaching?

A. Copper pyete

B. Sphalerite

C. Argenuite

D. Calcon

#### Answer: c



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**12.** Which of the following srtatement above the advantage of masting of sulphide are before reduction is not true?

- A. The  $\Delta_T G$  is negative for reaction of selphide one its oxide
- B. Reasoting of the salphide to the oxide thernmidyasically feasible

C. Carbon and hydrogen are sy=utable reduction agent for metal sulphide

D. The s $\Delta_T G$  of the suplhide is grate than from for  $Cs_2$  and  $H_2 S$ 

### Answer: c



**13.** The method of zone relining of metal is based on the principle of AIFMIT-2003)

- A. greatermothilly of the pure metal from that of the impurity
- B. Higher melting poibnt of the impurity then that of the pure metel
- C. greaternoble churactior of the solid metal than that of the impurity
- D. greater solubilly of the impurity in the molten state then the solid

#### Answer: d



A. Ma
B. Ni
C. Sb
D. SO
Answer: d
Watch Video Solution
<b>15.</b> Purification of aluminum by electroysic refiering is
known as

**14.** Cassiterite is an ore of

B. baryor's process C. Hoope's process D. Sepeck's process Answer: c **Watch Video Solution 16.** Elemental Si in to be used as a semicondictor is parified by A. heating under vacume

A. Hall's process

- B. flotatio
- C. zione refining
- D. electrolyate

### Answer: c

