CHEMISTRY

 XeF_2 reacts with SbF_5 to form 61.

1) $[XeF]^+[SbF_6]^-$ 2) $[XeF_3]^-[SbF_4]^+$ 3) $XeSbF_6$

4) XeF_4

Which of the following reactions of xenon compounds is not feasible. 62.

1) $XeO_3 + HF \rightarrow XeF_6 + 3H_2O$

2) $3XeF_4 + 6H_2O \rightarrow 2Xe + XeO_3 + 12HF + 1.5O_2$

3) $2XeF_2 + 2H_2O \rightarrow 2Xe + 4HF + O_2$ 4) $XeF_6 + RbF \rightarrow Rb[XeF_7]$

Xenon hexafluoride reacts with silica forms SiF_4 and another 63. compound (X). The oxidation state of Xe in X is

1) + 2

2) +4

3) +6

4) 0

Among the following which one has the lowest boiling point 64.

1) *Ne*

2) *He*

3) Ar

4) *Xe*

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65.	Extraction of zin	c from zinc blend	e is achieved by		
	1) Electrolytic re	eduction			
	2) Roasting follo	owed by reduction	with carbon		
	3) Roasting follo	owed by reduction	with another meta	al	
	4) Roasting follo	owed by self reduc	etion		
66.	Magnetic separa	tion is used for re	fining the ore		
	i) Magnesite	ii) haematite	iii) cassetarite	iv) Azurite	
	1) i and ii	2) ii and iv	3) ii and iii	4) iii and iv	
67.	A substance whi	ch reacts with gan	ngue to form fusible	le material is called as	\$
	1) slag	2) flux	3) ore	4) matte	
68.	The impure meta	al obtained is furth	ner purified using j	poling/ liquation/zone	refining
	or electrolysis. P	oling is used in th	ne purification of		
	1) Pb and Hg	2) Cu and Fe	3) Cu and Sn	4) Tin and Iron	
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 $Ore \xrightarrow{NaCN_{(aq)}}$ water soluble metal complex

69.

Zinc dust / stirring

 $Pure\ metal \leftarrow \underbrace{Electrolysis} \quad \text{impure metal+water solube Zn complex}$

The metal obtained this way is

- 1) Copper
- 2) Lead
- 3) Silver
- 4) Aluminimum
- 70. Which of the following metal is purified by Van-Arkel method
 - 1) Au
- 2) Ni
- 3) Ti
- 4) Al
- I_2O_4 , I_2O_5 and I_2O_7 are insoluble solids, decompose on heating. Which oxide is used in the estimation of carbon monoxide
 - 1) I_2O_4
- 2) $I_{2}O_{5}$
- 3) $I_{2}O_{7}$
- 4) None of these
- 72. In which of the following reactions chlorine is one of the products.
 - i) $KMnO_4 + conc.HCl \rightarrow$
- ii) $NaCl + MnO_2 + Conc.H_2SO_4 \rightarrow$
- iii) $MnO_2 + conc.HCl \rightarrow$
- iv) $NaCl + Br_2 \rightarrow$

- 1) i and ii
- 2) ii, iii and iv
- 3) i, ii and iii
- 4) i, iii and iv

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fluorinating agent used is i) ClF_3 ii) BrF_3 iii) HF iv) NaF 1) i and iii 2) i and ii 3) iii and iv 4) None of them 74. Hot and $conc.NaOH$ reacts with chlorine and forms chlorate. The number of of chlorine used up in the reaction according to balanced equation is 1) One 2) Two 3) Three 4) Four 75. Excess ammonia gas on reaction with chlorine forms i) NH_4Cl ii) NCl_3 iii) N_2 iv) NH_2Cl 1) i & ii 2) iii & iv 3) i & iii 4) ii & iii 76. The incorrect order is 1) $HF < HCl < HBr < HI$; Acidic strength 2) $HF > HCl > HBr > HI$; Thermal stability 3) $HF > HCl > HBr > HI$; Boiling point	fluorinating agent used is i) CIF_3 ii) BrF_3 iii) HF iv) NaF 1) i and iii 2) i and ii 3) iii and iv 4) None of them 74. Hot and $conc.NaOH$ reacts with chlorine and forms chlorate. The number of most of chlorine used up in the reaction according to balanced equation is 1) One 2) Two 3) Three 4) Four 75. Excess ammonia gas on reaction with chlorine forms i) NH_4Cl ii) NCl_3 iii) N_2 iv) NH_2Cl 1) i & ii 2) iii & iv 3) i & iii 4) ii & iii 76. The incorrect order is 1) $HF < HCl < HBr < HI$; Acidic strength 2) $HF > HCl > HBr > HI$; Thermal stability 3) $HF > HCl > HBr > HI$; Boiling point 4) $HF > HCl > HBr > HI$; Bool dissociation enthalpy.	Sri Ch	naitanya IIT Acader	ny	31-10-15_Sr.IPLCO_Je	ee-Main_RPTM-10_Q.PAPER
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1) i and iii 2) i and ii 3) iii and iv 4) None of them 74. Hot and <i>conc.NaOH</i> reacts with chlorine and forms chlorate. The number of of chlorine used up in the reaction according to balanced equation is 1) One 2) Two 3) Three 4) Four 75. Excess ammonia gas on reaction with chlorine forms i) <i>NH</i> ₄ <i>Cl</i> ii) <i>NCl</i> ₃ iii) <i>N</i> ₂ iv) <i>NH</i> ₂ <i>Cl</i> 1) i & ii 2) iii & iv 3) i & iii 4) ii & iii 76. The incorrect order is 1) <i>HF</i> < <i>HCl</i> < <i>HBr</i> < <i>HI</i> ; Acidic strength 2) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Thermal stability 3) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Boiling point	1) i and iii 2) i and ii 3) iii and iv 4) None of them 74. Hot and <i>conc.NaOH</i> reacts with chlorine and forms chlorate. The number of most of chlorine used up in the reaction according to balanced equation is 1) One 2) Two 3) Three 4) Four 75. Excess ammonia gas on reaction with chlorine forms i) <i>NH</i> ₄ <i>Cl</i> ii) <i>NCl</i> ₃ iii) <i>N</i> ₂ iv) <i>NH</i> ₂ <i>Cl</i> 1) i & ii 2) iii & iv 3) i & iii 4) ii & iii 76. The incorrect order is 1) <i>HF</i> < <i>HCl</i> < <i>HBr</i> < <i>HI</i> ; Acidic strength 2) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Thermal stability 3) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Boiling point 4) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Boiling point 4) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Bond dissociation enthalpy.		fluorinating ag	gent used is		
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 HF < HCl < HBr < HI; Acidic strength HF > HCl > HBr > HI; Thermal stability HF > HCl > HBr > HI; Boiling point 	 HF > HCl > HBr > HI; Acidic strength HF > HCl > HBr > HI; Thermal stability HF > HCl > HBr > HI; Boiling point HF > HCl > HBr > HI; Bond dissociation enthalpy. 		1) i & ii	2) iii & iv	3) i & iii	4) ii & iii
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3) <i>HF > HCl > HBr > HI</i> ; Boiling point	 3) HF > HCl > HBr > HI; Boiling point 4) HF > HCl > HBr > HI; Bond dissociation enthalpy. 		1) <i>HF</i> < <i>HCl</i> < <i>I</i>	HBr < HI; Acidic	strength	
	4) <i>HF</i> > <i>HCl</i> > <i>HBr</i> > <i>HI</i> ; Bond dissociation enthalpy.		2) <i>HF</i> > <i>HCl</i> >	HBr > HI; Therr	nal stability	
4) HF > HCl > HBr > HI; Bond dissociation enthalpy.			3) <i>HF</i> > <i>HCl</i> >	HBr > HI; Boiling	g point	
	Sr.IPLCO_JEE-MAIN_Q.P space for rough work Page		4) <i>HF</i> > <i>HCl</i> >	HBr > HI; Bond of	lissociation enthalp	oy.
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77.	Bleaching action	n of chlorine is due	e to	
	1) Reduction	2) Oxidation	3) Chlorination	4) Neutralization
78.	Which of the fol	lowing is an anticl	hlor	
	1) <i>Na</i> ₂ <i>SO</i> ₄	$2) Na_2S_2O_3$	3) Alum	4) CaOCl ₂
79.	When dry chlori	ne is passed over s	silver chlorate at 46	50K, the product obtained is
	1) <i>Cl₂O</i>	2) <i>ClO</i> ₂	3) <i>ClO</i> ₃	4) <i>ClO</i> ₄
80.	Zone refining is	used to purify		
	1) Germanium	2) Gallium	3) Silicon	4) All
81.	Brass Contains			
	1) Cu and Zn		2) Cu, Zn and Ni	
	3) Cu and Sn		4) Pb, Sn and Cu	
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82.	The xenon compounds that are iso	estructural with $IBr_2^- \& BrO_3^-$ respectively are			
	1) Bent XeF ₂ and Pyramidal XeO ₃	2) Linear XeF ₂ and pyramidal XeO ₃			
	3) Bent XeF_2 and planar XeO_3	4) linear XeF_2 and tetrahedral XeO_3			
83.	Which of the following ore is a su	lphide ore			
	1) malachite 2) magnetite	3) horn silver 4) zinc blende			
84.	In the reverbaratory furnace cop which contains	oper is produced in the form of copper matte			
	1) FeO , Cu_2S 2) Cu_2S , Fe_2O_3	3) <i>Cu</i> ₂ <i>O</i> , <i>FeS</i> 4) <i>Cu</i> ₂ <i>S</i> , <i>FeS</i>			
85.	Inter halogen compounds are more	e reactive than halogens due to			
	1) strong $X - X'$ bonding	2) more electronegativity			
	3) weaker $X - X'$ bond	4) more electron gain enthalpy			
86.	When bleaching powder is treated with CO ₂				
	1) Chlorine is evolved	2) Calcium chloride is formed			
	3) No reaction occurs	4) CO gas liberated			
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- 87. Which one is incorrect statement
 - 1) Helium is used in gas cooled nuclear reactors
 - 2) Helium is used as a cryogenic agent for carrying out experiments
 - 3) Helium is used to produce and sustain powerful super conducting magnets
 - 4) Helium is used to fill gas balloons instead of H_2 because helium is lighter and higly inflammable
- Which of the following pairs of xenon compounds and their structure are correctly 88. matched
 - i) XeF_4 Tetrahedral
- ii) XeO₃ Pyramidal
- iii) XeOF₄ Square Pyramidal
- iv) XeF, Linear

Select the correct answer

- 1) i, ii, iii and iv 2) ii, iii and iv 3) i, and ii
- 4) i, ii and iv
- By which process Pb and Sn are extracted respectively 89.
 - 1) Carbon reduction self reduction
 - 2) Self reduction carbon reduction
 - 3) Electrolytic reduction cyanide process
 - 4) Cyanide process Electrolytic reduction
- During the process of electro refining of copper some metals present as impurity 90. settle as anode mud. These are
 - 1) Sn and Ag
- 2) Pb and Cu
- 3) Ag and Au
- 4) Fe and Ni

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