	Chapter.No-7				
	p-block elements.				
	Q.No. 7.20.21.22=.1+3+3+3=10M				
	O.No-7 (1 mark)				
1	What is the general electronic configuration of noble gases except helium.				
Ans:	ns ² np ⁶				
2	Name the radioactive element of noble gas.				
Ans:	Radon				
3	Name the noble gas element not present in the atmospheric air.				
Ans:	Radon				
4	What is the main source for noble gases.				
Ans:	Atmospheric air				
5	Name the most abundant noble gas in the atmosphere.				
Ans:	Argon				
6	Name the first noble gas compound prepared by neil Bartlett.				
Ans:	Xenon hexafluoroplatinate(v)				
/	Who prepared the first noble gas compound?				
AIIS.	Neil Bartlett				
Δns [.]	Xenon				
9	Why noble gases are chemically inert?				
Ans:	Inertness of noble gases mainly due to i) high ionization enthalpy.				
	ii) octet(stable)electroni (Cafiguration.				
	tosalu				
10	Noble gases have zero electron gain enthing v 73 has, give reason?				
Ans:	Due to stable electronic (ns ² np ⁶) con its n ation.				
11	Why noble gases have very low boining points?				
Ans:	Noble gases are not a omic and have werk dispersion forces .				
12	What is in percentage of non erg soon the atmospheric air?				
Ans:	1%				
13	Name the noble gas which has lowest boiling point .				
14	$P_{\alpha}^{226} > P_{\alpha}^{222}$				
 	Complete the following reaction: $Ka_{88} \rightarrow Ka_{86} + \dots$				
Ans:	He_2^+				
15	Complete the following reaction : $XeF_6 + 3H_2O \rightarrow \dots + 6HF$				
Ans:	XeO ₃				
16	Complete the following reaction : $XeF_4 + O_2F_2 \rightarrow \dots + O_2$				
Ans:	XeF ₆				
17	Complete the following reaction : $XeF_6 + 2H_2O \rightarrow \dots + 4HF$				
Ans:	XeO_2F_2				
18	Complete the following reaction : $Xe + 3F_2 \xrightarrow{573K}$				
Ans:	XeF ₆				
19	Complete the following reaction : $XeF_6 + H_2O \rightarrow \dots + 2HF$				
Ans:	$XeOF_4$				

	Explanation: $2Fe^{3+} + 2I^- \rightarrow 2Fe^{2+} + I_2$,			
	$2Fe^{2+} + S_2O_8^{2-} \rightarrow 2Fe^{3+} + 2SO_4^{2-}$			
4	What are interstitial compounds ?Mention its properties.			
Ans:	Compounds in which small atoms like carbon ,hydrogen ,nitrogen are trapped into the cavities of the ctrystal lattices of metals ,such sompounds are called interstitial compounds . Ex.TiC, Mn ₄ C, Fe ₂ H. VH _{0.56} etc. i) They have high melting points . ii) They are very hard. iii) They are chemically inert			
5	What is lanthanide contraction ?Write its two consequences?			
Ans:	The gradual decrease of atomic and ionic radii with increase of atomic number of lanthanides is called lanthanide contraction. Consequences: 1.Second transition series and third transition series elements have almost same atomic size (Zr and Hf) 2.It is difficult to separate lanthanides.3. Basicity decreases La to Lu.			
6	Write the differences between lanthanides and actinides.			
Ans:	Lanthanides	Actinidses		
	1.4f orbitals are progressively filled.	1.5f orbitals are progressively filled.		
	2.Only Pm radioactive	2.All are radioactive		
	3.They are less reactive.	3.They are more reactive .		
	4.They show common oxidation state +3.	4.They show variable oxidation states +3, +2, +4, +5,+6, +7.		
7	Calculate the magnetic moment of the follo	wing 1 Mat Cost 2 Fo2t	214	
Ans:	1. $Mn^{2+}[Ar]3d^54S^0$ $\mu = \sqrt{n(n+2)}$. $\mu = \sqrt{55 \cdot 2} = 5.87$ BM. 2. $Sc^{3+}[Ar]3d^64S^0$ $\mu = \sqrt{n(n+2)}$ $\mu = \sqrt{0(0+2)} = 0$ BM 3. $Fe^{2+}[Ar]3d^64S^0$ $\mu = \sqrt{n(n+2)}$ $\mu = \sqrt{4(4+2)} = 4.9$ BM			
8	White doi goond isostruc Day velk MnO4?			
Ans:	KClO ₄			
9	Name the metal of the first row transition series that has i) Highest value for magnetic moment . ii Zero spin only magnetic moment in its +2 oxidation state . iii) Zero spin only magnetic moment in its +1 oxidation state.			
Ans:	1) Manganese 11) Zinc. 111) Copper.			
10	Among MnO_4^- and MnO_4^{2-} which is diamagnetic? Why?			
Ans:	MnO_4^{2-} is diamagnetic due to paired electrons and is green . MnO_4^{-} is paramagnetic with			
11	one unpaired electron and is purple in colour.			
Δης·	How discretion reacts in alkaline medium and acidic medium.			
7 (13.	Basic medium: $Cr_2O_7 + 2OH \rightarrow 2CrO_4^- + H_2O$ Acidic medium: $2CrO_4^{2-} + 2H^+ \rightarrow Cr_2O_7^{2-} + H_2O$.			
12	Why transition elements form coloured compounds?			
Ans:	Colour of transition elements due to d-d transitions . It depends upon i) Nature of ligand. ii)Oxidation state of the metal ion .			
13	Why transition elements form complex compounds? 3			
Ans;	Transition elements have ability to form complex compounds due to:			