

ECAT Chemistry Chapter 17 Transition Elements Online Test

Sr	Questions	Answers Choice
1	The colour of a transition metal complex is due to d-d transition. The colour of the complex is the complementary of the colour absorbed. Thus $[\text{Ti}(\text{H}_2\text{O}_6)]^{3+}$ absorbs yellow light and transmits blue and red colours therefore the solution of titanium complex appears	A. Blue B. Red C. Yellow D. Mixture of blue and red or violet
2	All 3d series elements show variable oxidation states. The one shown by all 3d elements is	A. +2 B. +3 C. +4 D. +5
3	Fe^{3+} and Mn^{2+} are strong paramagnetic because the number of unpaired electrons in each is	A. 4 B. 5 C. 6 D. 7
4	d-block elements closely resemble in their physical and chemical properties. Which statement is incorrect	A. They show variable valency B. Their ions and compounds are coloured C. They are good conductors of heat and electricity D. Their compounds are diamagnetic
5	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ is used to prepare	A. Transition complex B. Fehling's 'A' sol C. Fehling's 'B' sol D. Fehling's sol
6	II B elements (Zn, Cd, Hg) and III B elements (Sc, Y and La) are	A. Non typical transition element B. Typical transition element C. Normal elements D. Inner transition element
7	Which element belongs to 5d series	A. V B. Nb C. Pd D. Hf
8	Which element does not belong to 4d series	A. Y B. Zr C. Mo D. Zn
9	Which element does not belong to 3d transition series	A. Ti B. V C. Mn D. Te
10	In the electronic configuration of Cr one electron from 4s sub-shell is transferred to 3d sub-shell because	A. The 3d orbital is of lower energy than 4s B. The 4s orbital is of equal energy to 3d orbital C. The half filled d-subshell is more stable than incomplete d-sub shell D. 6 unpaired electrons make Cr more paramagnetic