

Transition Elements

Sr	Questions	Answers Choice
1	Which of the following is a transition element	A. Sr B. Sn C. Cr D. Pb
2	During oxidation in k ₂ Cr ₂ O ₇ , Cr M changes to :	A. I B. II C. III D. IV
3	The oxidation state of Fe in [Fe(CN) ₆] ³⁻ is	A. +2 B. +3 C. +4 D3
4	Which element belong to 5d series	A. V B. Nb C. Pd D. Hf
5	The color of Cr ³⁺ ion is	A. Violet B. Blue C. Pink D. Green
6	Choose the correct answer of transition elements?	A. Transition elements have low melting points B. Transition elements do not have catalytic activity C. Transition elements exhibit variable oxidation states D. Transition elements exhibit inert pair effect
7	Steel may be manufacture by two processes which two are correct	A. Open hearth process and besemer process B. Open hearth process and Haber process C. Bassemer process and Haber process D. Contact process and Haber process
8	The compound which gives oxygen on moderate heating is	A. Zinc oxide B. Mercuric oxide C. Aluminium oxide D. Ferric oxide
9	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
10	Which of the following element is responsible for oxidation of water to O_2 in biological process?	A. Fe B. Mn C. Cu D. Mo
11	Group VIB of transition elements contains	A. Zn, Cd, Hg B. Fe, Ru, Os C. Cr, Mo, W D. Mn, Te, Re
12	Which of the following transition metal ions will have definite value of magnetic moment?	A. Se ³⁺ B. Ti ³⁺ C. Cu ⁺ D. Zn ²⁺
13	Potassium chromate has formula	A. KClO ₃ B. K ₂ CO ₃ C. K ₂ CrO ₄ D. K ₂ Cr ₂ O ₇
14	Elements in which f-orbitals are in the process of completion are called	A. Outer transition element B. Inner transition elements C. Non-transition elements D. Radioactive elements

15	f-block elements are called :	A. Alkali metal B. Alkakline earth metals C. Transition elements D. Electron deficient elements
16	Which is used to identify Cu ²⁺ ions	A. Nitric acid B. Sulfuric acid C. NaOH D. HCI
17	Coordination sphere may be:	A. Cationic B. Anionic C. Neutral D. All above
18	The equivalent weight of $KMnO_4$ (formula weight = M) when it is used as an oxidant in neutral medium is	A. M B. M/2 C. M/3 D. M/5
19	Which is the formula of tetra-ammine chloronitro platinum (VI) sulphate?	A. [Pt(NH ₃) ₄ (NO ₂)]SO ₄ B. [PtNO ₂ Ci(NH ₃) ₄) C. [PtCl(NO ₂)(NH ₃) ₄]SO ₄ C. [PtCl(NO ₂)(NH ₃) ₄]SO ₄ D. [Pt(NH ₃) ₄ (NO ₂)CI]SO ₄
20	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 ${\rm [Ti(H_2O_6]^{3^+}}$ abosrbs 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