

## ECAT Chemistry Chapter 17 Transition Elements

Sr	Questions	Answers Choice
1	Which of the following element is responsible for oxidation of water to O <sub>2</sub> in biological process?	A. Fe B. Mn C. Cu D. Mo
2	The colour of transition metal complexes is due to:	A. d-d transitions of electrons B. Paramagnetic nature of transition C. Ionization D. Loss of s-electrons
3	Which of the following is a transition element	A. Sr B. Sn C. Cr D. Pb
4	Interstitial compounds have	A. Half formula B. Fixed formula C. Indefinite formula D. None
5	Which of the following is a carbonate are?	A. Pyrolusite B. Malchite C. Diaspore D. cassiterite
6	Which of the following is not related to transition metals	A. They have a high tensile strength B. They are ductile C. They are malleable D. They have low melting points
7	Oxalic acid oxidizes to:	A. CO B. CO <sub>2</sub> C. Oxalates D. None of these
8	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
9	4-d series is in the period:	A. 4th B. 5th C. 6th D. 7th
10	Coordination number of Pt in [PtCl (NO <sub>2</sub> ) (NH <sub>3</sub> ) <sub>4</sub> ] <sup>2-</sup>	A. 2 B. 4 C. 1 D. 6
11	The Mn <sup>3+</sup> has _____ color	A. Violet B. Green C. Red/brown D. No color
12	The total number of d-block transition element is	A. 10 B. 14 C. 40 D. 30
13	Out of 110 known elements, transition elements are	A. 40 B. 60 C. 50 D. 80
14	Which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
15	Which of the following transition metal ions will have definite value of magnetic moment?	A. Se <sup>3+</sup> B. Ti <sup>3+</sup> C. Cu <sup>+</sup>

D.  $\text{Zn}^{2+}$

16 In an octahedral crystal field splitting, the number of orbitals pushed down in energy is

- A. 3
- B. 2
- C. 5
- D. Zero

17 Which is used to identify  $\text{Cu}^{2+}$  ions

- A. Nitric acid
- B. Sulfuric acid
- C. NaOH
- D. HCl

18 f-block elements are called :

- A. Alkali metal
- B. Alkaline earth metals
- C. Transition elements
- D. Electron deficient elements

19 What are alloys

- A. A homogenous mixture of two or more elements
- B. A homogenous mixture of metal and a non-metal
- C. A homogenous mixture of two or more metals
- D. None of the above

20 All 3d series elements show variable oxidation states. The one shown by all 3d elements is

- A. +2
- B. +3
- C. +4
- D. +5