

ECAT Chemistry Chapter 17 Transition Elements Online Test

Sr	Questions	Answers Choice
1	Which of the following has the maximum number of unpaired d-electrons?	A. Zn B. Fe^{2+} C. Ni^{3+} D. Cu^{+}
2	Which of the following is a carbonate ore?	A. Pyrolusite B. Malchite C. Diaspore D. cassiterite
3	Misch metal is	A. An alloy of Aluminium B. A mixture of chromium and lead chromate C. An alloy of lanthanoid metals D. An alloy of copper
4	An element in +3 oxidation state has the electronic configuration (Ar) $3d^3$. Its atomic number is	A. 24 B. 23 C. 22 D. 21
5	Most common oxidation states shown by cerium are	A. +2, +4 B. +3, +4 C. +3, +5 D. +2, +3
6	Which of the following is obtained when Fe reacts with dil. HNO_3 ?	A. N_2O B. NO C. NO_2 D. None of these
7	Cuprous ore among the following is	A. Chalcopyrites B. Azurite C. Cuprite D. Malachite
8	Which of the following elements does not show variable oxidation states?	A. Copper B. Iron C. Zinc D. Titanium
9	In an octahedral crystal field splitting, the number of orbitals pushed down in energy is	A. 3 B. 2 C. 5 D. Zero
10	How many mole of acidified FeSO_4 solution can be completely oxidized by one mole of KMnO_4 ?	A. 10 B. 5 C. 6 D. 2
11	Across the lanthanide series, the basicity of the lanthanide hydroxides	A. Increases B. Decreases C. First increases and then decreases D. First decreases and then increases
12	Which of the following is not an element?	A. Graphite B. Diamond C. 22-Carat gold D. Rhombic sulphur
13	The protection of steel by chrome plating is due to	A. Cathodic protection B. Anodic protection C. Covering of steel surface D. Formation of alloy with iron
14	What is the shape of $\text{Fe}(\text{CO})_5$ molecule?	A. Tetrahedral B. Octahedral C. Trigonal bipyramidal D. Square pyramidal
15	Transition metals mostly are	A. Diamagnetic B. Paramagnetic C. Neither diamagnetic nor

		paramagnetic D. Both diamagnetic and paramagnetic
16	The iron obtained from blast furnace is	A. Pig iron B. Wrought iron C. Soft iron D. Steel
17	In the extraction of iron, slag is produced which is	A. CO B. FeSiO_3 C. MgSiO_3 D. CaSiO_3
18	The number of unpaired electrons in Fe^{3+} (Z = 26) are	A. 5 B. 6 C. 3 D. 4
19	The number of unpaired electrons in Mn^{2+} is	A. 5 B. 4 C. 3 D. 2
20	Which of the following metals is sometimes found in native state in nature?	A. Al B. Cu C. Fe D. Mg
21	Besides Zn and Cu, German silver contains the metal	A. Sn B. Ag C. Ni D. Mg
22	What is wrong about transition metals?	A. Diamagnetic B. Paramagnetic C. Form complexes D. Shows variable oxidation state
23	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
24	The lanthanides contraction is responsible for the fact that	A. Zr and Y have about the same radius B. Zr and Nb have similar oxidation state C. Zr and Hf have about the same radius D. Zr and Zn have the same oxidation state
25	The total number of inner transition elements in the periodic table is	A. 10 B. 14 C. 28 D. 30
26	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. $M/5$
27	Which of the following is not correct about transition metals?	A. Their melting and boiling points are high B. Their compounds are generally coloured C. They can form ionic or covalent compounds D. They do not exhibit variable valency
28	Stainless steel contains iron and carbon along with	A. Ni and Cr B. Cr and Co C. Co and Mn D. Mn and Ni
29	Which of the following compounds gives red precipitate with AgNO_3 ?	A. KI B. K_2CrO_4 C. NaBr D. NaNO_3
30	Mercury is the only metal which is liquid at 0°C . This is due to its	A. Very high ionization energy and weak metallic bond B. Low ionization potential C. High atomic weight D. High vapour pressure

