

## ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Cuprous ore among the following is	A. Chalcopyrites B. Azurite C. Cuprite D. Malachitre
2	Which of the following elements does not show variable oxidation states?	A. Copper B. Iron C. Zinc D. Titanium
3	In an octahedral crystal field splitting, the number of orbitals pushed down in energy is	A. 3 B. 2 C. 5 D. Zero
4	How many mole of acidified $\text{FeSO}_4$ solution can be completely oxidized by one mole of $\text{KMNO}_4$ ?	A. 10 B. 5 C. 6 D. 2
5	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
6	Which of the following is not an element?	A. Graphite B. Diamond C. 22-Carat gold D. Rhombic sulphur
7	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
8	What is the shape of $\text{Fe}(\text{CO})_5$ molecule?	A. Tetrahedral B. Octahedral C. Trigonal bipyramidal D. Square pyramidal
9	Transition metals mostly are	A. Diamagnetic B. Paramagnetic C. Neither diamagnetic nor paramagnetic D. Both diamagnetic and paramagnetic
10	The iron obtained from blast furnace is	A. Pig iron B. Wrought iron C. Soft iron D. Steel
11	In the extraction of iron, slag is produced which is	A. CO B. $\text{FeSiO}_3$ C. $\text{MgSiO}_3$ D. $\text{CaSiO}_3$
12	The number of unpaired electrons in $\text{Fe}^{3+}$ (Z = 26) are	A. 5 B. 6 C. 3 D. 4
13	The number of unpaired electrons in $\text{Mn}^{2+}$ is	A. 5 B. 4 C. 3 D. 2
14	Which of the following metals is sometimes found in native state in nature?	A. Al B. Cu C. Fe D. Mg
15	Besides Zn and Cu, German silver contains the metal	A. Sn B. Ag C. Ni D. ...

		D. Mg
16	What is wrong about transition metals?	A. Diamagnetic B. Paramagnetic C. Form complexes D. Shows variable oxidation state
17	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
18	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
19	The total number of inner transition elements in the periodic table is	A. 10 B. 14 C. 28 D. 30
20	The equivalent weight of KMnO <sub>4</sub> (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
21	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
22	Stainless steel contains iron and carbon along with	A. Ni and Cr B. Cr and Co C. Co and Mn D. Mn and Ni
23	Which of the following compounds gives red precipitate with AgNO <sub>3</sub> ?	A. KI B. $K_2CrO_4$ C. NaBr D. $NaNO_3$
24	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
25	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
26	Turnbull's blue is a compound called?	A. Ferricyanide B. Ferrous ferricyanide C. Ferrous cyanide D. Ferri - Ferro cyanide
27	Corrosion of iron can be prevented by coating the surface with	A. Zn B. Sn C. Ni D. Any of the above
28	The total number of rare earth elements is	A. 8 B. 32 C. 14 D. 10
29	Among the lanthanides the one obtained by synthetic method is	A. Lu B. Pm C. Pr D. Gd
30	Non-formation of meniscus by Hg in presence of O <sub>2</sub> is due to the formation of	A. Mercuric oxide B. Mercurous oxide C. Mercuric chloride D. Mercurous chloride

