

ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ is used to prepare	A. Transition complex B. Fehling's 'A' sol C. Fehling's 'B' sol D. Fehling's sol
4	IIB 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
5	Which element belong to 5d series	A. V B. Nb C. Pd D. Hf
6	Which element does not belong to 4d series	A. Y B. Zr C. Mo D. Zn
7	Which element does not belong to 3d transition series	A. Ti B. V C. Mn D. Te
8	In the electronic configuration of Cr one electron from 4s sub-shell is transferred to 3d sub-shell because	A. The 3rd 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
9	Which element has highest oxidation potential	A. Li B. Be C. Ba D. Ra
10	Which of the following sulphates has the highest solubility in water	A. BaSO_4 B. CaSO_4 C. MgSO_4 D. BeSO_4
11	The chemical formula of Trona is	A. $\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ B. $\text{Na}_2\text{CO}_3 \cdot 2\text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$ C. $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$ D. KCl
12	Commercial common salt becomes slight damp on storing because	A. Common salt is hygroscopic B. Common salt contains some impurity, which is hygroscopic C. Salt in efflorescent D. Salt is crystalline
13	Sodium should be stored in	A. Air free from moisture B. Air free form carbon dioxide C. Under water D. Under kerosene oil

14	Sodium is manufactured by the electrolysis of fused sodium chloride and not from an aqueous solution of sodium chloride because	A. Sodium chloride does not ionize in the water solution B. Sodium chloride is not soluble in water C. Sodium deposited at the cathode may react with water to form sodium hydroxide D. Electricity does not pass through aqueous NaCl
15	Which of the following statements is not related to Solvay's process of Na_2CO_3	A. Cheap materials B. Pure product C. Continuous process D. Harmful by-products
16	Which of the following equations represents the action of heat on NaHCO_3	
17	Some of the elements of a period show similar behavior with the elements of the next group in the next period; this is called	A. Vertical relationship B. Oblique relationship C. Diagonal relationship D. None
18	Which one of the following equations represents the reaction that occurs when calcium nitrate is heated strongly	
19	Marble is chemically	A. CaCl_2 B. CaCO_3 C. Na_2CO_3 D. NaHCO_3
20	Which salt is used for preserving food	A. BaCl_2 B. CaCl_2 C. NaCl D. Na_2SO_4
21	Which salt is used for the treatment of hyperacidity in the stomach	A. NaCl B. KCl C. NaHCO_3 D. Na_2CO_3
22	Which of the following salts is used as a purgative	A. CaSO_4 B. MgSO_4 C. BeSO_4 D. NaCl
23	The chemical formula of Epsom salt is	A. MgSO_4 B. MgCl_2 C. $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ D. $\text{MgCl}_2 \cdot 7\text{H}_2\text{O}$
24	NaHCO_3 is prepared by	A. Down's process B. Solvay's process C. Nelson's process D. None of these
25	Sodium is never found free in nature because of its	A. Chemical reactivity B. Small ionic size C. Small atomic volume D. None of these
26	Which of the following are electropositive in nature	A. Alkali metals B. Alkaline earth metals C. Halogens D. Alkali and alkaline earth metals
27	The oxidation number of each element of group II-A is	A. 0 B. +1 C. +2 D. -1
28	The oxidation number of each element of group I-A is	A. 0 B. +1 C. +2 D. -1
29	Which of the following elements is most reactive	A. Li B. Na C. K D. Cs
30	Sodium forms largely	A. Normal oxides B. Per-oxides C. Superoxides D. None of these