ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Identify the compound formed, when ethylene combines with water in the presence of 10% sulphuric acid and $HgSO_4$as catalyst	A. Carbinol B. Methanol C. Ethanol D. Glycol
2	On passing ethane into concentrated suphuric acid the intermediate compound formed on hydrolysis with boiling water gives	A. Methyl alcohol B. Ethyl alcohol C. Ethyl hydrogen sulphate D. Methyl hydrogen sulphate
3	Identify the hydrocarbon formed, when ethyl bromide reacts with, alcoholic KOH at 100°	A. Methane B. Ethane C. Ethene D. Ethyne
4	The bond angle between hydrogen atoms and carbon in alkane is	A. 104.5° B. 107.5° C. 109.5° D. 120.5°
5	Which of the following posses linear geometry	A. Alkane B. Alkene C. Alkyne D. Benzene
6	Coal heated in the absence of air of about 500 - 1000°C is converted to	A. Coke B. Coal gas C. Coal tar D. All above
7	Peat before conversion to bituminous coal is converted to	A. Lignite B. Anthracite C. Asphalt D. None
8	Coal is obtained from dead remains of	A. Plants B. Animals C. Both a and b D. None
9	Organic compounds are soluble in all except	A. Benzene B. Petroleum C. Ether D. Water
10	Rates of organic reactions are	A. Fast B. Very fast C. Slow D. Non-reactive
11	The self linking of carbon atoms is called	A. Chelation B. Isomerism C. Catenation D. None of the above
12	Organic compounds resemble to those of inorganic compounds having same	A. Ionic properties B. Carbon forming long chain or rings C. Chemical forces D. Isomerism
13	The essential component of organic compound is	A. O B. C C. P D. N
14	Wholer prepared urea from	A. Ammonia B. NH₄CNO

		C. NH₃ D. Uric acid
15	Vital force theory was rejected by	A. Berzellius B. Kolbe C. Wholer D. Lavoiser
16	The rotation of two carbon atoms joined by double bond would happened only if	A. Pi bond is broken B. Sigma bond is broken C. Both bonds are broken D. None of above
17	Which of the following has linear shape?	A. SP B. SP² C. SP³ D. None of the above
18	Hybridzation explain the --------- of orbitals	A. Type of bonding B. Shapes C. Shape and type of bonding D. None of above
19	l-Chloropropane has two isomers, it is an example of	A. Chain isomerism B. Position isomerism C. Functional group isomerism D. Metamerism
20	The isomers due to the unequal distribution of carbon atoms on either side of the functional group belonging to the same homologous series are called	A. Functional isomers B. Position isomers C. Chain isomers D. Metamers
21	In which molecule carbon atom is sp^2hybridized	A. CH₄ B. C₂H₄ C. C₂H₂ D. None of the above
22	When a carbon atom forms single bonds with other carbon atoms, these hybrid orbitals overlap with the orbitals of hydrogen to form four bonds which are	A. Three sigma and one P_i B. Two sigma and two P_i C. One sigma and three P_i D. sigma
23	AgCl is soluble is	A. Aqua regia B. H₂SO₄ C. HCl D. NH₃
24	Which one of the following metal ions is colourless?	A. V²⁺ B. Cr³⁺ C. Zn²⁺ D. Ti³⁺
25	Which of the following has the maximum number of unpaired d-electrons?	A. Zn B. Fe²⁺ C. Ni³⁺ D. Cu⁺
26	Which of the following is a carbonate are?	A. Pyrolusite B. Malchite C. Diaspore D. cassiterite
27	Misch mental 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
28	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
29	Most common oxidation states shownby cerium are	A. +2, +4 B. +3, +4 C. +3, +5 D. +2, +3
30	Which of the following is obtained when Fe reacts with dil. HNO_3?	A. N₂O B. NO C. NO₂ D. None of these