

ECAT Chemistry Chapter 18 Fundamental Principles of Organic Chemistry Online Test

Sr	Questions	Answers Choice
1	The state of hybridization of carbon atom in methane is:	A. sp^3 B. sp^2 C. sp D. dsp^2
2	The compounds which have any atom other than Carbon atom, in rings are called as	A. Monocyclic B. Heterocyclic C. Homocyclic D. None of the above
3	The open chain organic compounds are called	A. Linear compounds B. Aromatic C. Aliphatic D. Both A and B
4	Normal by product of cracking is	A. Ethane B. Butane C. Benzene D. All of them
5	In alkynes the bonds between carbon atoms are	A. All sigma bonds B. All pi bonds C. One is sigma and two are pi bonds D. One is pi and two are sigma bonds
6	The general formula for alkenes is	A. C_nH_{2n+1} B. C_nH_{2n+2} C. C_nH_{2n} D. C_nH_{2n-2}
7	In sp^2 type hybridization the three equivalent sp^2 orbitals lie in the same plane and at angle of	A. 0° B. 60° C. 120° D. 180°
8	sp^3 hybridization occurs when carbon is bound to	A. Four other atoms B. Three other atoms C. Two other atoms D. One other atoms
9	Hydrocarbons contain	A. C and S only B. C and H only C. C, H, and O only D. C, H, O and N only
10	Unsaturated hydrocarbon containing a double bond are called	A. paraffin B. Alkanes C. Olefins D. Acetylene
11	The characteristic reactions of alkanes are	A. Addition reactions B. Substitution reactions C. Condensation reactions D. Polymerization reactions
12	Which of the following compounds contains a triple bond?	A. Alkane B. Alkene C. Alkyne D. Benzene
13	Which of the following gases is used for illuminating purpose?	A. Methane B. Ethane C. Propane D. Butane

14	The next homologue of $C_{10}H_{22}$ will be	A. C_9H_{20} B. $C_{12}H_{26}$ C. $C_{11}H_{24}$ D. $C_{13}H_{28}$
15	Compounds of carbon and hydrogen in which the tetra valency of carbon is fully satisfied are called,	A. Saturated B. Un-saturated C. Magnetic D. Para-magnetic
16	Identify the compound which has a bond angle of 109.5°	A. Ethyne B. Ethere C. Methane D. Benzene
17	The active part in a molecule is called	A. Homologous series B. Functional group C. Chemical bonding D. Ionic complex
18	When a compound X is passed through a dilute alkaline solution of $KMnO_4$ the pink colour of solution is discharged. The compound X is possibly	A. Methane B. Ethane C. Ethene D. Benzene
19	Which of the following contains single bonds	A. Benzene B. Alkyne C. Alkene D. Alkane
20	The process in which one s and two p orbitals mix up with each other is called	A. sp -hybridization B. sp^2 -hybridization C. sp^3 -hybridization D. dsp^2 -hybridization
21	The process in which orbitals of different energies and shapes mix up with each other to give equivalent is called,	A. Hybridization B. Polymerization C. Isomerisation D. Carbonization
22	The structure of benzene is	A. Hexagonal B. Pyramidal C. Square planer D. Tetrahedral
23	Which is a mixture of low boiling hydrocarbon	A. Natural gas B. Petroleum C. Wood D. Graphite
24	Which of the following is complex?	A. $CaSO_4 \cdot 0.5H_2O$ B. $(C_6H_{10}O_5)_n$ C. $C_6H_{12}O_6$ D. CH_4
25	Polythene is a polymer of	A. Ethane B. Ethene C. Acetone D. Propylene
26	Acetylene had a characteristic ethereal smell resembling that of	A. Ginger B. Vinegar C. Garlic D. Onion
27	Replacement of hydrogen atom by $-SO_3H$ group in benzene is called	A. Nitration B. Alkylation C. Sulphonation D. Acylation
28	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
29	On passing ethane into concentrated sulphuric 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
30	Identify the hydrocarbon formed, when ethyl bromide reacts with, alcoholic KOH at 100°	A. Methane B. Ethane C. Ethene D. Ethyne

