

## ECAT Chemistry Chapter 19 Aliphatic Hydrocarbons Online Test

Sr	Questions	Answers Choice
1	When alkyl is treated with chlorine in the presence of sunlight	A. 1,3 dichloroproduct is formed B. 1,4 dichloro product is formed C. 1,3,5 trichloro product is formed D. Only alkyl group is substituted
2	Which one does not decolorized $\text{KMnO}_4$	A. Alkenes B. Alkynes C. Benzene D. All above
3	Substitution of halogen in the benzene ring requires catalyst	A. $\text{AlCl}_3$ B. $\text{FeCl}_3$ C. $\text{SiO}_2$ D. Organo - nickel
4	All are ortho & Para directing except	A. X B. OH C. $\text{NR}_3$ D. $\text{NH}_2$
5	The difference between amount of heat actually released and that of calculated is called	A. Bonding energy B. Activation energy C. Resonance energy D. Transition energy
6	The three alternate single and double bonds in the benzene ring are called	A. Conjugate bonds B. Resonating bonds C. Both A and B D. None of above
7	The nitration of benzene takes place when it is heated with a mixture of conc. $\text{HNO}_3$ and conc. $\text{H}_2\text{SO}_4$ at $50^\circ\text{C}$ in ratio of	A. 1 : 2 B. 1 : 1 C. 1 : 3 D. 2 : 1
8	The electrophile in aromatic sulphonation is	A. $\text{H}_2\text{SO}_4$ B. $\text{HSO}_4^-$ C. $\text{SO}_3$ D. $\text{SO}_3 \cdot \text{H}^+$
9	Which one of the following is (m-xylene)	A. 1,2 dimethyl benzene B. 1,3 dimethyl benzene C. 1,5 dimethyl benzene D. 1,4 dimethyl benzene
10	Benzene has a ----- structure	A. Pentagonal B. Hexagonal C. Heptagonal D. Tetragonal
11	Which of the following acid can be used as a catalyst in Friedel Craft's reactions	A. $\text{AlCl}_3$ B. $\text{HNO}_3$ C. $\text{BeCl}_2$ D. NaCl
12	Benzene does not undergo polymerization and it is also resistant to	A. Reduction B. Oxidation C. Alkylation D. Ozonolysis
13	Which class of compound is more reactive	A. Alkane B. Alkene C. Alkyne D. None
14	Meta directing group decreased the ----- of benzene ring	A. Physical activity B. Chemical reactivity C. Density D. None
15	The electron releasing effect of methyl group is significant and it makes ring a good	A. Electrophilic B. Nucleophilic C. Nucleophobic D. Hydrophobic

16	How many isomeric disubstituted products are obtained by the introducing of second group in the ring	A. Two B. Three C. Four D. None
17	Alkyl benzenes are readily oxidized by acidified	A. $\text{KMnO}_4$ B. $\text{K}_2\text{CO}_3$ C. $\text{MnO}_4^-$ D. $\text{H}_2\text{SO}_4$
18	Benzene reacts with ozone and gives	A. Glycerin B. Glyoxal C. Maleic anhydride D. Benzoic acid
19	When benzene is burnt in free supply of air, it is completely oxidized to	A. CO B. $\text{CO}_2 + \text{H}_2\text{O}$ C. $\text{H}_2\text{CO}_3$ D. None
20	Sulphuric acid generates nitronium ion by reacting with	A. Nitric acid B. Nitrogen gas C. Nitrous acid D. Potassium nitrate
21	Which reaction is too vigorous to control	A. Chlorination B. Bromination C. Iodination D. Fluorination
22	Benzene is obtained from benzene sulphonic acid by treating with	A. HCl B. NaOH C. $\text{H}_2\text{O}$ D. $\text{NaHCO}_3$
23	Benzene is not prepared from	A. Acetylene B. Phenol C. Benzoic acid D. Bromo benzene
24	The stability of aromatic compounds decreases with ----- in the no. of its resonance structure	A. Decrease B. Increase C. Remain constant D. Partially decreases
25	Hybridization of each carbon atom in benzene ring is	A. sp hybridized B. $\text{sp}^2$ hybridized C. $\text{sp}^3$ D. $\text{dsp}^2$
26	A six membered ring containing one double bond called	A. Cyclohexene B. Cyclohexane C. Cyclohexadiene D. None
27	All C - H bond lengths of benzene ring is	A. $1.07\text{\AA}$ B. $1.09\text{\AA}$ C. $1.08\text{\AA}$ D. None
28	The C-C bond angles in benzene ring are	A. $119^\circ$ B. $120^\circ$ C. $121^\circ$ D. None
29	How many molecules of chlorine adds in benzene in the presence of sunlight	A. One B. Two C. Three D. Four
30	The empirical formula of benzene is determined by	A. IR spectra B. U.V C. Elemental analysis D. NMR spectra

