MDCAT Chemistry Chapter 13 Fundamental principles of organic chemistry Online Test

Sr	Questions	Answers Choice
1	Ethene can give all of the following reactions except	A. Addition B. Free radical substitution C. Hydrohalogenation D. Hydration
2	The reaction of alkyl halide in the presence of alcoholic KOH is	A. Substitution B. Addition C. Acid-base D. Elimination
3	Tertiary alcohols are the easiest to dehydrate because	A. They form stable carbocation B. They have less hydrogen C. They have bigger size D. They are polar
4	C-H bond length in the benzene is	A. 0.99A° B. 1.09A° C. 1.12A° D. 1.34A°
5	Which af the following compound reacts slower than benzene in the electrophilic substitution.	A. Phenol B. Nitrobenzene C. Toluene D. Aniline
6	Active sulphonating agent during sulphonation of benzene is	A. SO2 B. SO3 C. SO3H D. SO3+
7	Which of the following is electrophile for alkylation?	A. NO+2 B. SO3 C. R+ D. Both a & b
8	Ethylene polymerizes at 100 atm pressure and 400 °C to give	A. Polybenzene B. Polypropylene C. Polyalcohol D. Polyethylene
9	The angle between the unhybridized 2pz orbital and the three sp2 hybrid orbitals in ethene is	A. 180° B. 120° C. 90° D. 60°
10	Benzene reacts with Ethyl chloride in presence of AlCls to give	A. Benzalchloride B. Benzyl chloride C. Ethyl benzene D. Benzotrichloride
11	Ethene is produced from ethyl chloride by reacting with alcoholic KOH. The process is called	A. Hydrogenation B. Dehydrogenation C. Dehydrohalogenation D. Oxidation
12	2,5-dimethyl-1-hexene has	A. Two sp2 hybridized carbons B. Six sp2 hybrid carbons C. Two double bonds D. Four pi electrons
13	Benzene in the presence of AlCl3 produces acetophenone when reacts with	A. Acetyl chloride B. Ethyl benzene C. Acetic acid D. Ethanoic acic
14	Acetylide can give back ethyne upon treatment with	A. water B. strong base C. dil. Acid D. weak base
15	Addition of unsymmetrical reagent to an unsymmetrical alkene is governed by	A. Cannizzaro's Reaction B. Aldol Condensation C. Kirchhoff Rule D. Markownikov's Rule

16	Which one of the following is a powerful electrophile used to attack on the electrons of benzene ring?	A. FeCl2 B. Cl+ C. FeCl-4 D. Cl2
17	Which of the following is not an electrophilic substitutional reaction of benzene?	A. Free radical chlorination of benzene B. Friedel Craft alkylation C. Sulphonation D. Nitration
18	Ethane when completely halogenated in excess of chiorine can form	A. Hexachloroethane B. Dichloroethane C. Pentachloroethane D. 1.1.2.2-terachloroethane
19	The substitution of a'-H' by '-NO2' group in benzene is called	A. Nitration B. Sulphonation C. Ammunolusis D. Reduction of benzene
20	Naphthalene has two fused aromatic ring of carbon atom the molecular formula	A. C10H8 B. C10H14 C. C10H10 D. C12H12
21	Which of the following tests helps to distinguish between alkyne and alkene?	A. Lucas test B. Tollen's reagent test C. Baeyer's test D. Fehling's solution test
22	Which group activates the benzene ring	A. -COOH B. -COR C. -CHO D. -OH
23	A compound that has a nucleophilic carbon?	A. C2H2 B. C2H4 C. C3H8 D. C6H6
24	Ethyl and methyl groups are equidistant in a chain, the preference is given to?	A. Ethyl B. methyl C. both ethyl and methyl D. methyl mostly
25	The heat of hydrogenation of most of the alkene is about	A. 120 kJ/mol B. 100 kJ/mol C. 140 kJ/mol D. 105 kJ/mol
26	The reaction that generates an ionic bond is	A. Halogenation of ethene B. polymerization of ethene C. Hydrogenation of ethyne D. Reaction of ethyne withs sodamide
27	Among the following the polycyclic aromatic compound is	A. Styrene B. Naphthalene C. Toluene D. Acetophenone
28	Aniline is the derivative of the benzene containing the	A. Hydroxyl group B. Amino group C. Amido group D. Imido group
29	The origin ofacidic nature of alkyne is?	A. small size of C B. Small size of H C. polarity of triple bond D. sp hybridization
30	The compound used to distinguish the ethyne and ethene is	A. Alkaline KMnO4 B. Ammonical AgNO3 C. Bromine water D. Tollen's Reagent
31	Baever's reagent is misture of	A. HCl& ZnCl B. Ageous bromine C. Alkaline KMn4 D. Mix of Br2&KMnO4
32	Substituted phenyl group are called	A. Arene groups B. Alkyl groups C. Aryl groups D. Acyl groups
		A. 13 B. 10

33	The pi-electrons in the styrene are	C. 8 D. 6
34	When 1-butene reacts with bromine, the product formed will be	A. 1, 3-dihydroxy butane B. But-1, 2-diol C. 1, 3-dihydroxy butan-diol D. 1,2-dibromo butane
35	Benzene has pi electron	A. 2 B. 4 C. 6 D. 8
36	Glyoxal molecule has?	A. two carbonyl groups B. One aldehydic and one carbonyl group C. Two aldehydic groups D. Two carboxyl group
37	Dehydrohalogenation of alkyl halides happens in the presence of	A. Pd B. Ni C. Zn D. KOH/alcohol
38	Benzene cannot undergo the ------- directly	A. Substitution reaction B. Addition reaction C. Oxidation reaction D. Elimination reaction
39	Hydration of ethene is an example of	A. Electrophilic addition B. Electrophilic substitution C. Nucleophilic addition D. Nucleophilic substitution
40	The addition of HCl to ethene gives?	A. Chloroethane B. 1,2-dichloroethane C. 1.1-dichloroethane D. 2-chloroethane
41	2-Propenol, on rearrangement, yields	A. Propanal B. Propanone C. 2-propano D. Both A and B
42	During the nitration of benzene the nitrating agent is	A. NO3 B. NO2+ C. NO2- D. HNO3