

## MDCAT Chemistry Chapter 13 Fundamental principles of organic chemistry Online Test

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | Benzene cannot undergo the ----- directly   | A. Substitution reaction<br>B. Addition reaction<br>C. Oxidation reaction<br>D. Elimination reaction  |
| 2  | Which of the following tests helps to distinguish between alkyne and alkene?                  | A. Lucas test<br>B. Tollen's reagent test<br>C. Baeyer's test<br>D. Fehling's solution test   |
| 3  | When 1-butene reacts with bromine, the product formed will be                                 | A. 1, 3-dihydroxy butane<br>B. But-1, 2-diol<br>C. 1, 3-dihydroxy butan-diol<br>D. 1,2-dibromo butane   |
| 4  | 2-Propenol, on rearrangement, yields  | A. Propanal<br>B. Propanone<br>C. 2-propano<br>D. Both A and B  |
| 5  | Ethene is produced from ethyl chloride by reacting with alcoholic KOH. The process is called  | A. Hydrogenation<br>B. Dehydrogenation<br>C. Dehydrohalogenation<br>D. Oxidation  |
| 6  | Which of the following is electrophile for alkylation?  | A. NO <sub>2</sub> <sup>+</sup><br>B. SO <sub>3</sub><br>C. R <sup>+</sup><br>D. Both a & b   |
| 7  | Addition of unsymmetrical reagent to an unsymmetrical alkene is governed by                   | A. Cannizzaro's Reaction<br>B. Aldol Condensation<br>C. Kirchhoff Rule<br>D. Markownikov's Rule   |
| 8  | The substitution of a'-H' by '-NO <sub>2</sub> ' group in benzene is called                   | A. Nitration<br>B. Sulphonation<br>C. Ammunolusis<br>D. Reduction of benzene  |
| 9  | Benzene in the presence of AlCl <sub>3</sub> produces acetophenone when reacts with           | A. Acetyl chloride<br>B. Ethyl benzene<br>C. Acetic acid<br>D. Ethanoic acic  |
| 10 | Benzene has pi electron   | A. 2<br>B. 4<br>C. 6<br>D. 8  |
| 11 | Among the following the polycyclic aromatic compound is                                       | A. Styrene<br>B. Naphthalene<br>C. Toluene<br>D. Acetophenone   |
| 12 | Which af the following compound reacts slower than benzene in the electrophilic substitution. | A. Phenol<br>B. Nitrobenzene<br>C. Toluene<br>D. Aniline  |
| 13 | Naphthalene has two fused aromatic ring of carbon atom the molecular formula                  | A. C <sub>10</sub> H <sub>8</sub><br>B. C <sub>10</sub> H <sub>14</sub><br>C. C <sub>10</sub> H <sub>10</sub><br>D. C <sub>12</sub> H <sub>12</sub> |
| 14 | The pi-electrons in the styrene are   | A. 13<br>B. 10<br>C. 8<br>D. 6  |
| 15 | C-H bond length in the benzene is   | A. 0.99Å<br>B. 1.09Å<br>C. 1.12Å<br>D. 1.34Å  |

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| 16 | During the nitration of benzene the nitrating agent is          | A. $\text{NO}_3$<br>B. $\text{NO}_2^+$<br>C. $\text{NO}_2^-$<br>D. $\text{HNO}_3$   |
| 17 | Ethylene polymerizes at 100 atm pressure and 400 °C to give     | A. Polybenzene<br>B. Polypropylene<br>C. Polyalcohol<br>D. Polyethylene   |
| 18 | The compound used to distinguish the ethyne and ethene is       | A. Alkaline $\text{KMnO}_4$<br>B. Ammonical $\text{AgNO}_3$<br>C. Bromine water<br>D. Tollen's Reagent                            |
| 19 | Baeyer's reagent is mixture of                                  | A. $\text{HCl}$ & $\text{ZnCl}$<br>B. Aqueous bromine<br>C. Alkaline $\text{KMnO}_4$<br>D. Mix of $\text{Br}_2$ & $\text{KMnO}_4$ |
| 20 | Dehydrohalogenation of alkyl halides happens in the presence of | A. Pd<br>B. Ni<br>C. Zn<br>D. $\text{KOH}$ /alcohol   |