

CLASS : XIIth

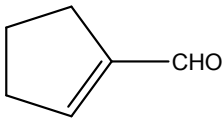
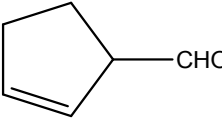
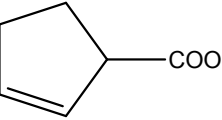
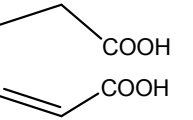
DATE :

SUBJECT : CHEMISTRY

DPP NO. : 7

Topic :-HYDROCARBONS

1. A mixture of methane and steam when passes over nickel supported on alumina catalyst at 725°C gives:
- a) CH₃OH b) CO₂ and H₂ c) CO and H₂ d) None of these
2. In which reaction addition takes place according to Markownikoff's rule?
- a) CH₃CH = CH₂ + Br₂ →
b) CH₃CH = CH₂ + HBr →
c) CH₂ = CH₂ + HBr →
d) CH₃CH = CHCH₃ + Br₂ →
3. Paraffin wax is:
- a) Ester b) Alcohol c) Unsaturated hydrocarbon d) Saturated hydrocarbon
4. Propyne when passed through a hot iron tube at 400°C produces
- a) Benzene b) Methyl benzene
c) Dimethyl benzene d) Trimethyl benzene
5. Which of the following is called Marsh gas?
- a) C₂H₄ b) C₂H₆ c) C₂H₂ d) CH₄
6. Which can be easily oxidized?
- a) Alkene b) 1-alkyne c) Alkane d) Benzene
7. *n*-butane and isobutene, which have same number of hydrogen and carbon atoms in their molecules, boil at different temperatures because:
- a) *n*-butane is much hotter
b) Their volumes are different
c) Isobutene is an alkene
d) Their atoms are not having the same carbon chain
8. Common oxidizing agents used in organic chemistry are:
- a) Fenton's reagent b) Osmium tetroxide c) Acidified KMnO₄ d) Alkaline KMnO₄

9. Acetylenic hydrocarbons are acidic because:
- Sigma electron density of C—H bond in acetylene is nearer a carbon which has 50% *s*-character
 - Acetylene has only one hydrogen atom at each carbon atom
 - Acetylene contains least number of hydrogen atoms among the possible
 - Acetylene belongs to the class of alkynes with formula C_nH_{2n-2}
10. Butene -1 may be converted to butane by the reaction with:
- Zn—Hg
 - Pd—H₂
 - Zn—HCl
 - Sn—HCl
11. Number of acidic hydrogen atom in butyne-1 is:
- 2
 - 3
 - 1
 - 4
12. Propene on reaction with methylene iodide in presence of Zn-Cu couple gives:
- Cyclopropane
 - Cyclopropene
 - Methyl cyclopropane
 - Cyclobutene
13. Addition of O₂ on ethylene in presence of Ag at 200°C forms:
- Epoxy ethane
 - Oxiranes
 - Cyclic ethers
 - All of these
14. The carbon-carbon bond distance in benzene is
- Longer than a C—C single bond
 - Longer than a C=C double bond
 - Shorter than a C=C double bond
 - Shorter than a C≡C triple bond
15. Method of converting high boiling hydrocarbons into low boiling hydrocarbons is called:
- Polymerisation
 - Isomerisation
 - Cracking
 - Condensation
16. The mechanism of Wurtz reaction involves:
- Free radical
 - Carbocation
 - Carbanion
 - None of these
17. The most important energy yielding constituent in biogas is:
- C₂H₄
 - C₂H₂
 - CH₄
 - H₂S
18. PVC is a polymer of:
- CH₂=CH₂
 - ClCH₂—CH₂Cl
 - CH₂—CHCl
 - Cl—C=C—Cl
19. Cyclohexene on ozonolysis followed by reaction with zinc dust and water gives compound *E*. Compound *E* on further treatment with aqueous KOH yields compound *F*. Compound *F* is
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20. The flash point in India is fixed at:
- 44°C
 - 35°C
 - 22.8°C
 - 30°C