

CLASS : XIIth
DATE :

SUBJECT : CHEMISTRY
DPP NO. : 7

Topic :-HYDROCARBONS

- Lindlar's catalyst is:
 - Pd- CaCO₃ deactivated by lead acetate
 - Pd – BaSO₄
 - Pd
 - None of the above
- The energy of π-bond in kcal is about :
 - 36
 - 50
 - 74
 - 140
- Ozonolysis (O₃,H₂O) of,

CH₃—CH—C≡C—CH₃ gives:

|
CH₃

CH₃—CHCOOH + CH₃COOH

 - |
CH₃

CH₃—CHCHO + CH₃CHO
 - |
CH₃

CH₃—CHCHO + CH₃COOH
 - |
CH₃
 - None of the above
- What is the end product of the following sequences of operations?

$$\text{CaC}_2 \xrightarrow{\text{H}_2\text{O}} \text{A} \xrightarrow[\text{Hg}^{2+}]{\text{Dil.H}_2\text{SO}_4} \text{B} \xrightarrow[\text{H}_2]{\text{Ni}} \text{C}$$
 - Methyl alcohol
 - Acetaldehyde
 - C₂H₅OH
 - C₂H₄
- The order of relative acidic strengths of water, ethyne and propyne is:
 - Water>propyne>ethyne
 - Propyne>ethyne>water
 - Water>ethyne>propyne
 - Ethyne>water>propyne

6. Reaction of *trans*-2-phenyl-1-bromocyclopentane on reaction with alcoholic KOH produces:
a) 4-phenylcyclopentene
b) 2-phenylcyclopentene
c) 1-phenylcyclopentene
d) 3-phenylcyclopentene
7. Ethylene reacts with sulphur monochloride to give:
a) Phosgene b) Mustard gas c) Ethylene chloride d) None of these
8. The dihalogen derivative 'X' of a hydrocarbon with three carbon atoms reacts with alcoholic KOH and produces another hydrocarbon which forms a red precipitate with ammoniacal Cu_2Cl_2 . 'X' gives an aldehyde on reaction with aqueous KOH. The compound 'X' is
a) 1,3-dichloropropane b) 1,2-dichloropropane
c) 2,2-dichloropropane d) 1,1-dichloropropane
9. Ethylene may be prepared by the dehydration of:
a) Ethyl alcohol b) Methyl alcohol c) Acetic acid d) Oxalic acid
10. Petroleum is formed by the chemical changes in:
a) Inorganic matter b) Vegetable matter c) Animal matter d) Both (b) and (c)
11. Common dehydrating agents for alkanes are:
a) H_2SO_4 b) Al_2O_3 c) ZnCl_2 d) All of the above
12. The most stable conformation of butane is:
a) Skew b) Staggered c) Gauche d) Eclipsed
13. A cyclic hydrocarbon molecule has all the carbon and hydrogen in a single plane. All the carbon-carbon bonds are of same length, less than 1.54\AA , but more than 1.34\AA . The C-c bond angle will be
a) $109^\circ 28'$ b) 100° c) 180° d) 120°
14. The product of acid catalysed hydration of 2-phenyl propene is:
a) 3-phenyl-2-propanol b) 1-phenyl-2-propanol c) 2-phenyl-2-propanol d) 2-phenyl-1-propanol
15. When C_2H_5 , CH_4 and C_2H_4 passes through a test tube which have ammoniacal Cu_2Cl_2 , find out which gas comes out unaffected from test tube?
a) C_2H_2 and CH_4 b) C_2H_2 and C_2H_4 c) C_2H_4 and CH_4 d) C_2H_2
16. Benzene reacts with chlorine in sunlight to give a final product
a) CCl_4 b) $\text{C}_6\text{H}_6\text{Cl}_6$ c) C_6Cl_6 d) $\text{C}_6\text{H}_5\text{Cl}$

17. When 2-butyne is treated with Pd – BaSO₄; the product formed will be
a) *cis*-2-butene b) *trans*-2-butene c) 1-butene d) 2-hydroxy butane
18. The overlapping of orbitals in benzene is of the type
a) *sp* – *sp* b) *p* – *p* c) *sp*² – *sp*² d) *sp*³*sp*³
19. The product obtained when methyl magnesium bromide reacts with methyl alcohol is:
a) Acetone b) Alcohol c) Methane d) Ethane
20. The treatment of benzene with benzoyl chloride in the presence of AlCl₃ gives
a) Benzaldehyde b) Benzophenone c) Diphenyl d) Cyclohexane

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