

CLASS : XII<sup>th</sup>

DATE :

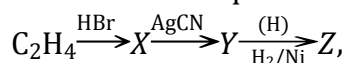
SUBJECT : CHEMISTRY

DPP NO. : 2

## Topic :-HYDROCARBONS

1. A mixture of nitrogen and acetylene, on passing electric spark through it gives:
- a) Hydrogen and carbon    b) Hydrogen cyanide    c) Nitromethane  
d) Nitroethane

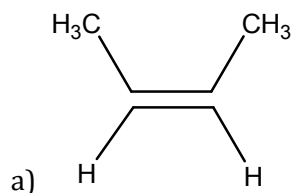
2. In the sequence of reactions,



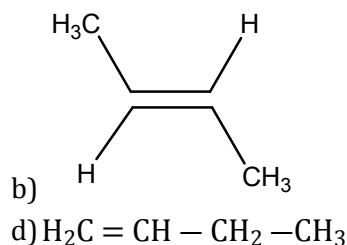
Compound Z is

- a) N-methyl ethanamine                      b) N-propylamine  
c) N, N-dimethylamine                      d) Ethyl cyanide
3. Which one of these is not true for benzene?
- a) It forms only one type of monosubstituted product.  
b) There are three carbon-carbon single bonds and three carbon-carbon double bonds  
c) The heat of hydrogenation of benzene is less than the theoretical value.  
d) The bond angle between the carbon-carbon bonds is 120°.
4. Presence of a nitro group in a benzene ring
- a) Activates the ring towards electrophilic substitution  
b) Renders the ring basic  
c) Deactivates the ring towards nucleophilic substitution  
d) Deactivates the ring towards electrophilic substitution

5. The major product in the reaction of 2-butyne with Li/liq. NH<sub>3</sub> is



- c) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>



6. Hydrocarbon liquid at STP is:
- a) Ethane                      b) Propane                      c) Butane                      d) Pentane

7. Chlorination of benzene is not possible in the following reaction  
 a)  $C_6H_6 + Cl_2 \xrightarrow{FeCl_3}$     b)  $C_6H_6 + HOCl \xrightarrow{H^+}$     c)  $C_6H_6 + I - Cl \xrightarrow{ZnCl_2}$     d)  $C_6H_6 + Cl_2 \xrightarrow{AlCl_3}$

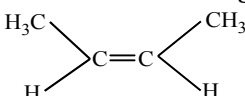
8. In the series, ethane, ethene and ethyne, the C-H bond energy is  
 a) Same in all the three compounds    b) Greatest in ethane  
 c) Greatest in ethene    d) Greatest in ethyne

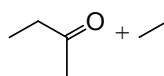
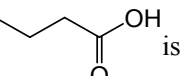
9. The shape of 2-butene is:  
 a) Linear    b) Planar    c) Tetrahedral    d) Pyramidal

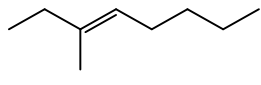
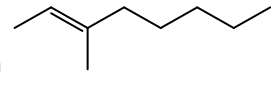
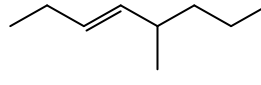
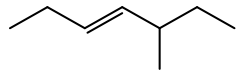
10. The substance used as an anti-knock compound is:  
 a) Tetraethyl lead    b) Lead tetrachloride    c) Lead acetate    d) Ethyl acetate

11. Petroleum refining is:  
 a) Obtaining aromatic compounds from aliphatic compounds in petroleum    b) Cracking of petroleum to get gaseous hydrocarbons    c) Purification of petroleum  
 d) Distillation of petroleum to get different fractions

12. Zinc-copper couple that can be used as a reducing agent is obtained by:  
 a) Mixing zinc dust and copper gauze  
 b) Zinc coated with copper  
 c) Copper coated with zinc  
 d) Zinc and copper wires welded together

13. Which of the following hydrocarbons has the lowest dipole moment?  
 a)     b)  $CH_3C \equiv CCH_3$     c)  $CH_3CH_2C \equiv CH$     d)  $CH_2 = CH - C \equiv CH$

14. Alkene (A)  $\xrightarrow[\Delta]{KMnO_4}$   +  is

a)     b)     c)   
 d) 

15. A solution of sodium salt of fatty acid was electrolysed during Kolbe's reaction. The solution left after electrolysis is:  
 a) Richer in NaOH    b) Richer in  $H_2SO_4$     c) Richer in sodium salt    d) All of these

