

CLASS: XIIth

DATE:

SOLUTION

SUBJECT: CHEMISTRY

DPP NO.: 8

Topic:-HYDROCARBONS

1 (a)

Aromatic compounds have delocalised π -electrons.

Out of given choices cyclohexane, CH_4 , C_2H_6 and benzene, only benzene is aromatic compound.

Benzene has six delocalised π -electrons.

2 **(c)**

Trivial name is allyl.

3 **(d)**

These are all facts.

4 (a

The reactivity order for sulphonation of H-atom in alkane:

3°>2°>1°.

5 **(a)**

As the -CH₃ group increases boiling point decrease

7 **(b**)

Alcoholic KOH is a dehydrohalogenating reagent, so when *n*-propyl bromide is treated with alcoholic KOH, propene is obtained.

 $CH_3CH_2CH_2Br + alc KOH$

n-propyl bromide

$$\rightarrow$$
CH₃CH = CH₂ +HBr

propene

8 **(b)**

Knowing the number and arrangement of carbon atoms in aldehydes and ketones the structure of the original alkene can be worked out.

$$CH_3$$
 CH_2 = CH - C = CH - CH_3 O_3
 Zn/CH_3COOH

$$CH_3-C=O + O=C-H + CH_3COCHO$$

9 **(a**

A method used during II world war.

10 **(d**)

Ozonolysis of these two produces different products.

12 **(c)**

For simplest alkyne n=2; thus, alkyne is C_nH_{2n-2} or C_2H_2 .

14 (d)

Alkene is $CH_3CH = CHCH_3$, a symmetrical alkene and therefore alcohol is,

CH₃CH₂CHCH₃ which will give alkene-2 as major product.

15 **(b)**

Cyclodecapentaene and Cyclooctatetraene both are nonaromatic. Cyclobutadiene is antiaromatic while benzene having 6π -electrons is aromatic

16 **(d)**

CH₃CH₂CH₂CH₂CH₂CH₃;

$$(CH3)2CHCH2CH2CH3;$$

 $CH_3CH_2CH(CH_3)CH_2CH_3$;

 $(CH_3)_3CCH_2CH_3; (CH_3)_2CHCH(CH_3)_2$

17 **(f)**

These are facts about alkanes.

18 **(c)**

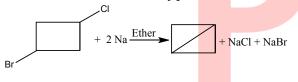
Due to resonance, benzene is quite stable and inspite of three double bonds does not decolourise B r_2 water.

19 **(c)**

Follow peroxide effect.

20 **(d)**

The reaction is Wurtz's type reaction.



ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	С	D	A	A	С	В	В	A	D
Q.	11	12	13	14	15	16	17	18	19	20
A.	В	С	С	D	В	D	D	С	С	D

