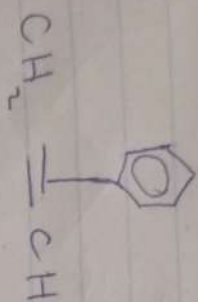
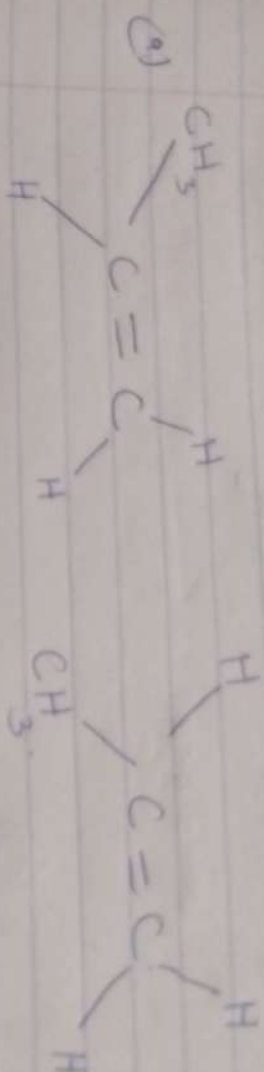


butadiene.

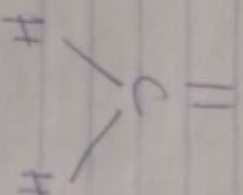
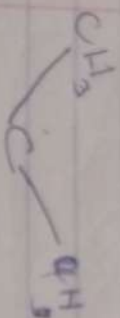


styrene.

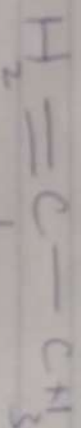
Question 4:



2, methylbutene

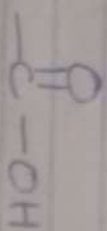


propene

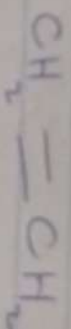


H

b)

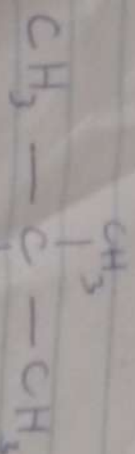
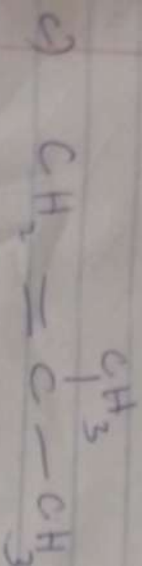


aldehyde

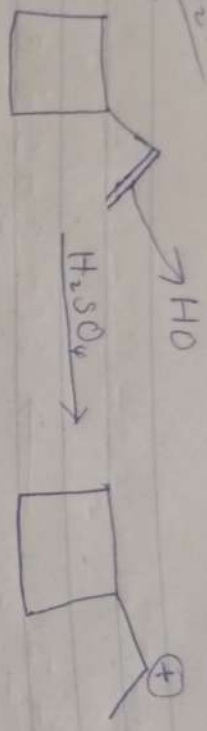


2,3-dimethylbutene

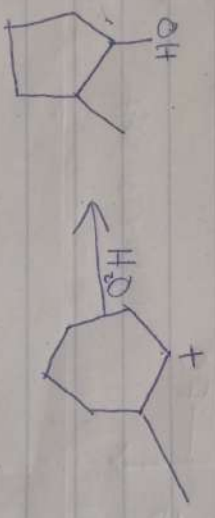
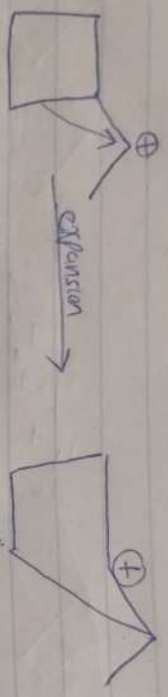
carboxyl



50. 102.



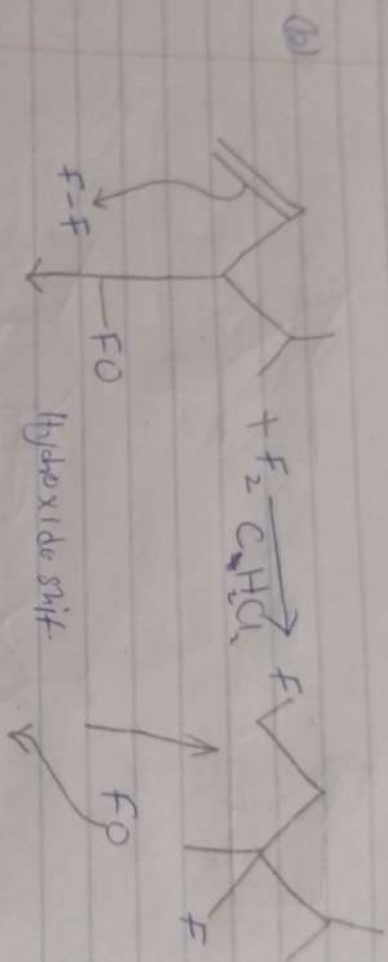
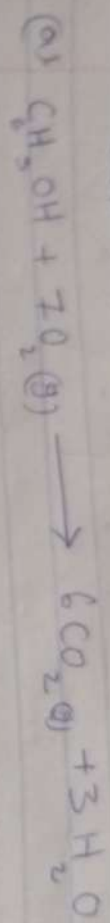
here expansion takes place.



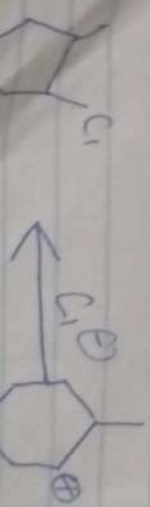
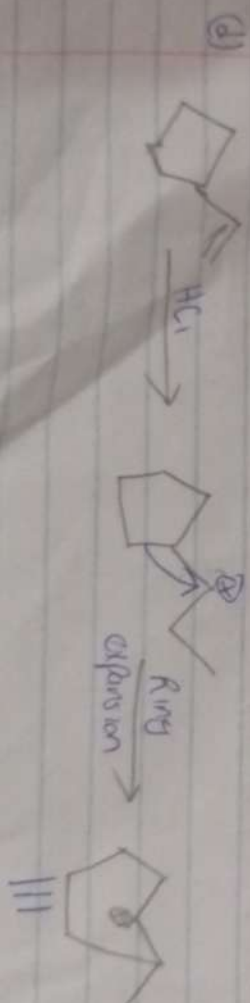
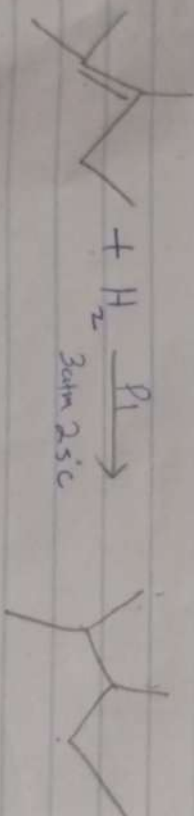
Question 5.

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Combustion of Phenol



(c) Hydrogenation of Alkenes into alkanes.



6.

a) Both of them are made of carbon and hydrogen.

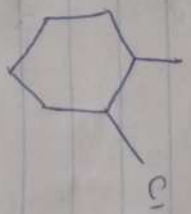
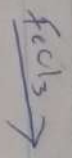
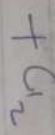
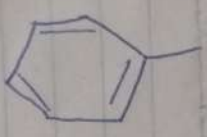
Both are non-polar in nature.

b) Alkanes can be in either form while alkenes must be in cyclic molecules.
Alkenes are very stable compared to alkanes because alkenes exhibit energy losing resonance property.

(c) Both are comprised of hydrogen and carbons.
Both have pi bonds.

d) Alkenes are stable unlike alkanes due to energy ^{losing} resonance property of alkene.
Alkenes must be cyclic molecules but alkanes can be in either form.

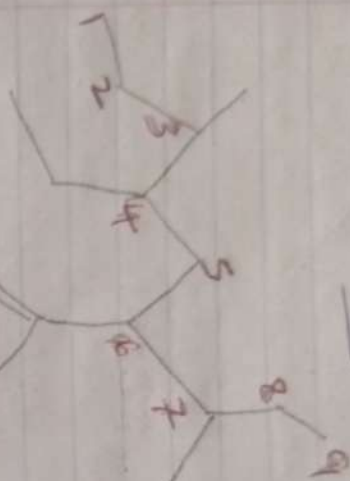
e.



1, Chlorocyclohexane

Question 7

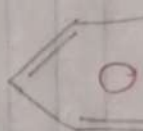
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parent chain: Nonene

side chains:

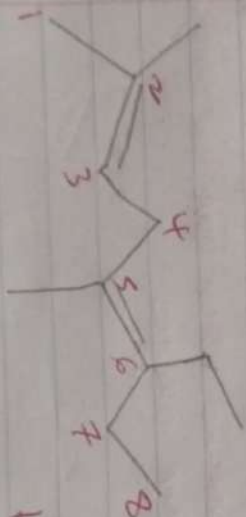
- 1) methyl
- 2) ethyl
- 3) phenyl



IUPAC name

4-ethyl-3,7-dimethyl-6-phenyl-1-nonene

nonene



parent chain

side chains: methyl
ethyl

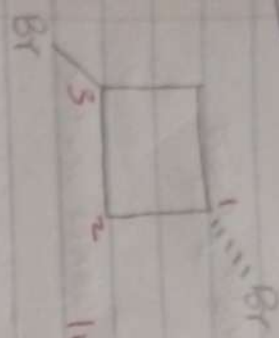
IUPAC name: 2,5-octadiene
6-ethyl-2,5-



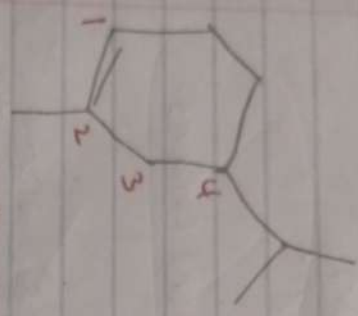
parent chain: Propyne

side chain: chloride

IUPAC name: 1-chlorobut-1-ene

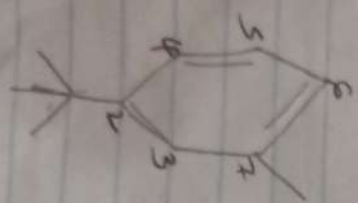


parent chain: cyclobutane
side chain: bromine
IUPAC name: 1,3-dibromocyclobutane



parent chain: cyclohexene
side chain: methyl
iso-propyl

IUPAC name: 4-iso-propyl-2-methylcyclohexene



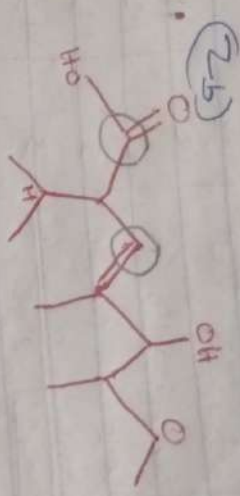
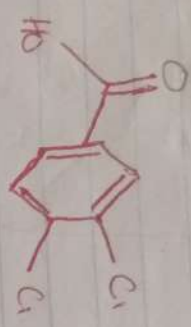
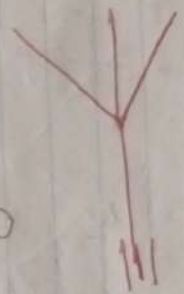
parent chain: pentachlorohexane
side chains: methyl
butyl

IUPAC name

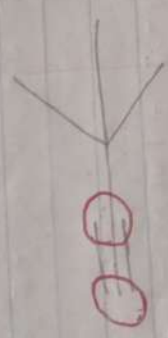
6-1-butyl-2-methyl-1-pentachlorohexane

2

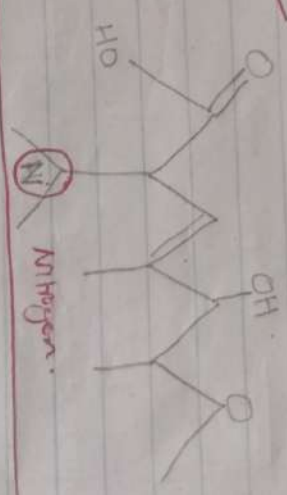
(b)



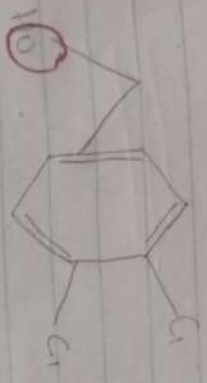
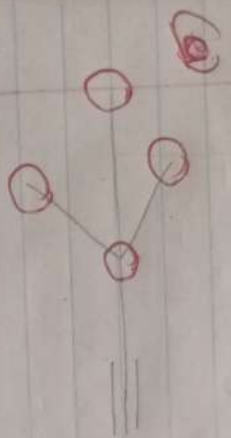
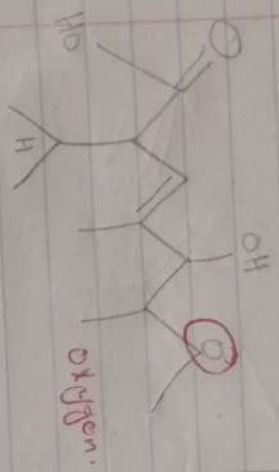
d



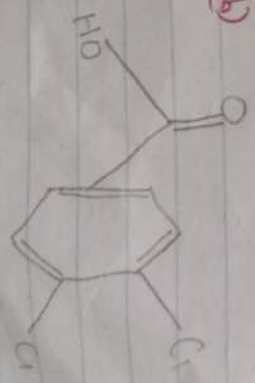
c



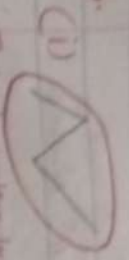
(e)



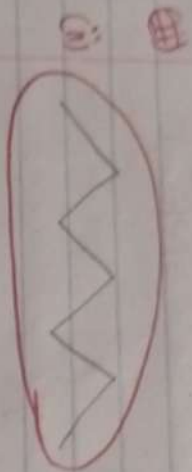
(b)



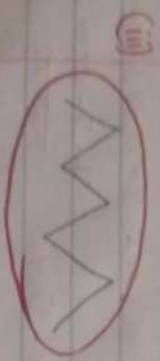
3.



This has the lowest melting point because of its ^{branched} ~~linear~~ structure in C-melting point ~~it decreases~~.



This has the lowest melting point ~~with~~ because it has low branching which reduces its melting point.



it has the lowest melting point because it is an alkane which have low melting point than alkenes.