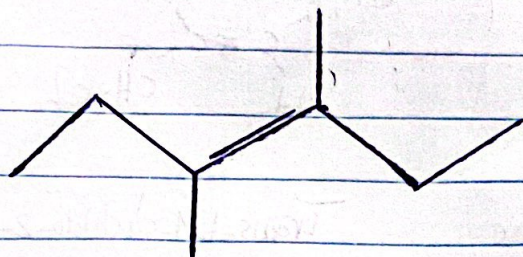


Name the following compounds:-

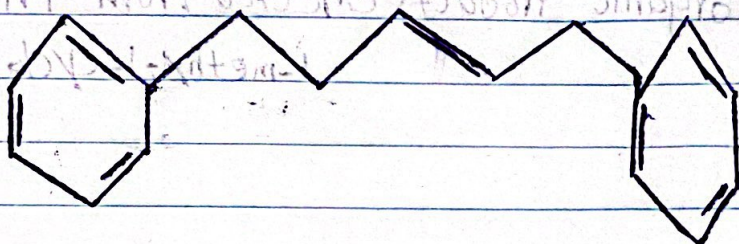
محمد عمار محمد

a)



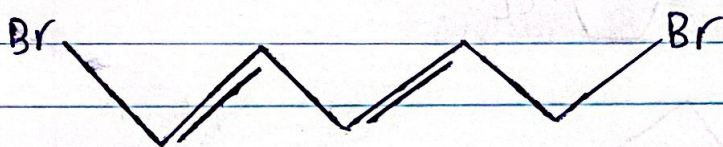
Trans-3,4-dimethyl-3-hexene

b)



1,5-diphenyl-2-pentene

c)

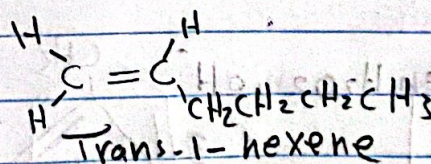
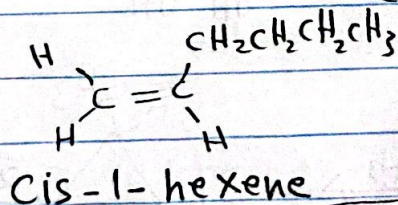
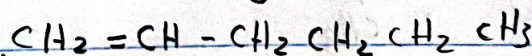


1,5-dibromo-1,3-pentadiene

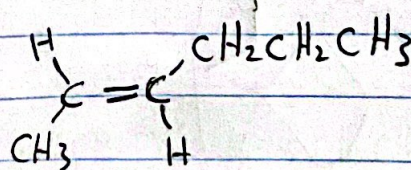
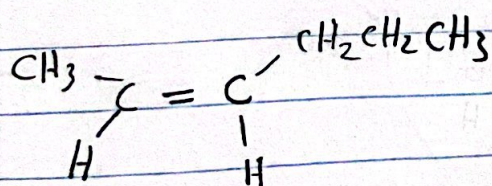
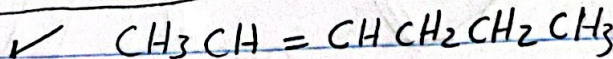
Indicate which of the following compounds show (cis-trans) isomerism and draw the isomeric structures

a) 1-hexene

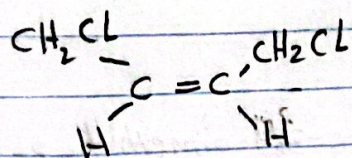
Cis-Trans



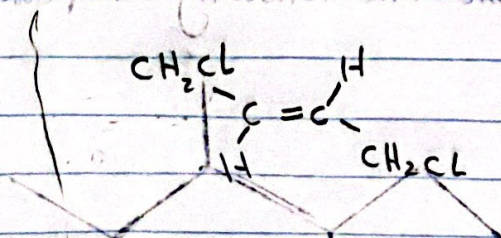
b) 2-hexene



c) 1,4-dichloro-2-butene ✓

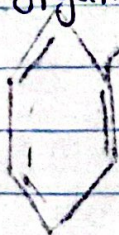


Cis-1,4-dichloro-2-butene



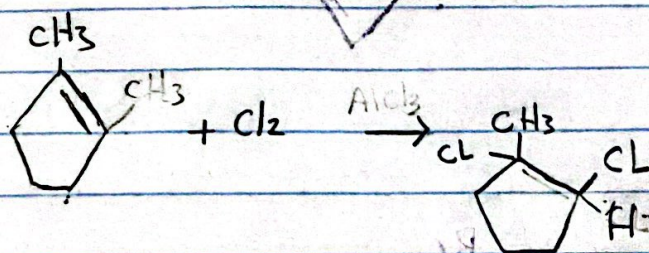
Trans-1,4-dichloro-2-butene

Give the structure of organic products expected from the reaction of 1-methyl-1-cyclopentene with

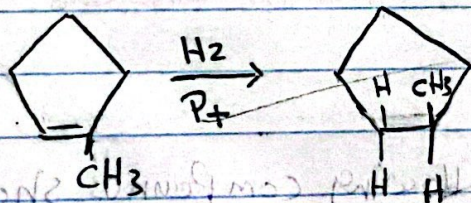


1-methyl-1-cyclopentene

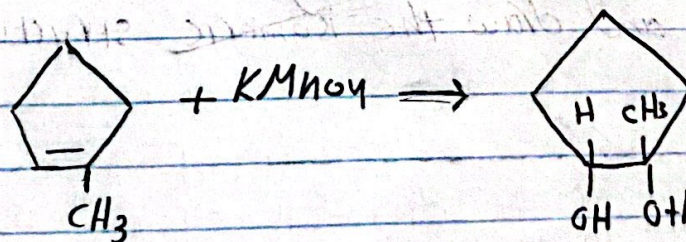
a) Cl_2



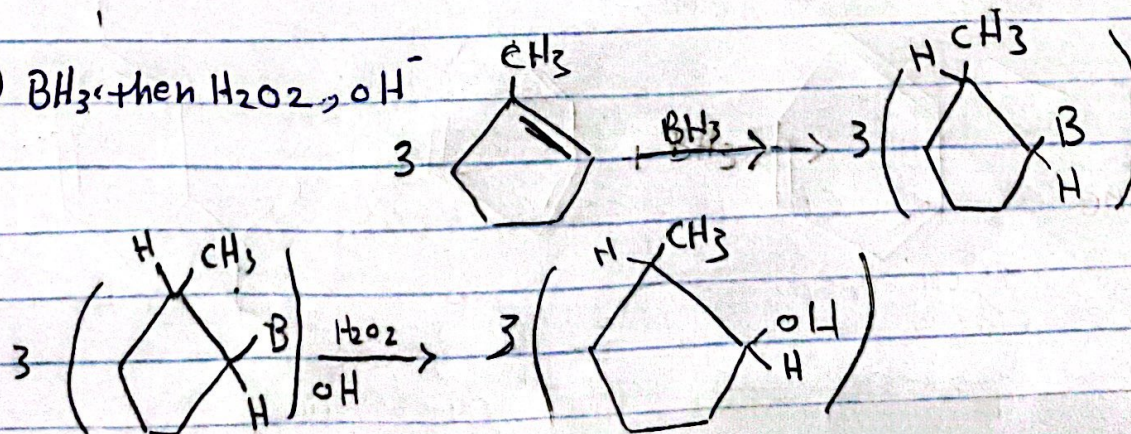
b) H_2, Pt



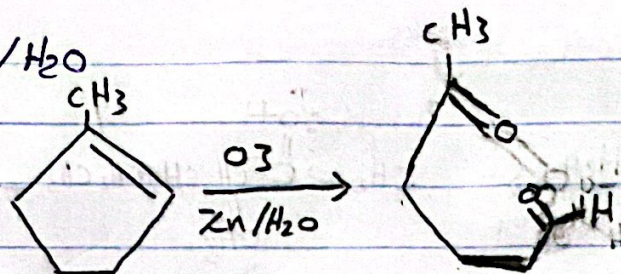
c) KMnO_4



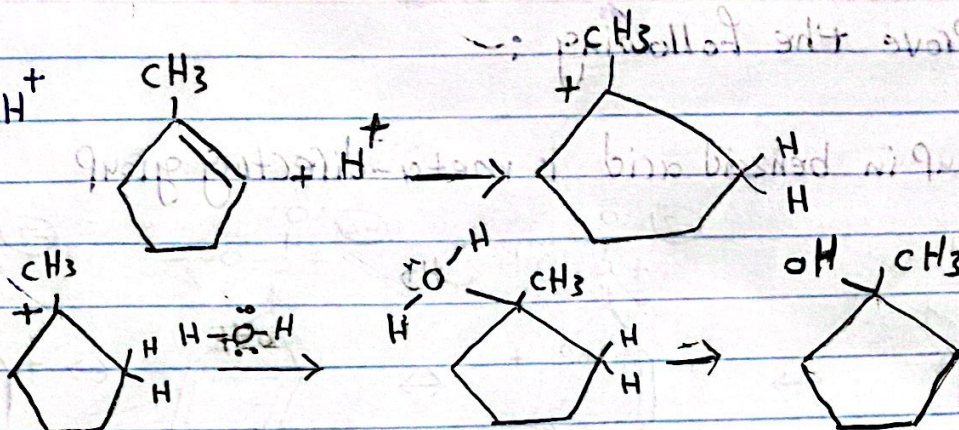
d) BH_3 , then $\text{H}_2\text{O}_2, \text{OH}^-$



e) O_3 then Zn/H_2O

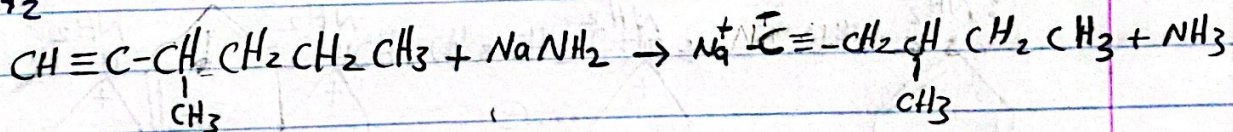


f) H_2O, H^+

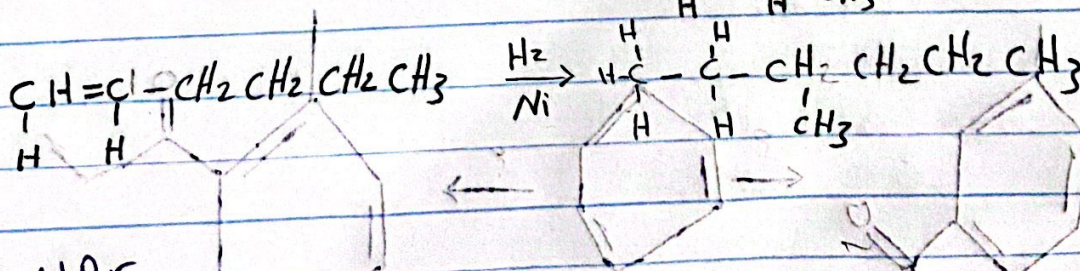
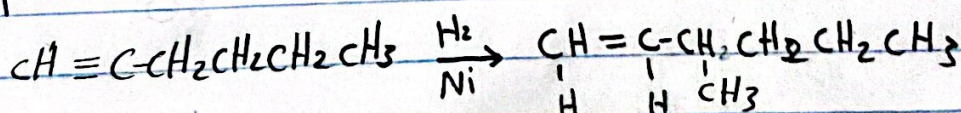


4. Give the structure of the organic Product(s) expected from the reaction of the 3-methyl-1-hexyne

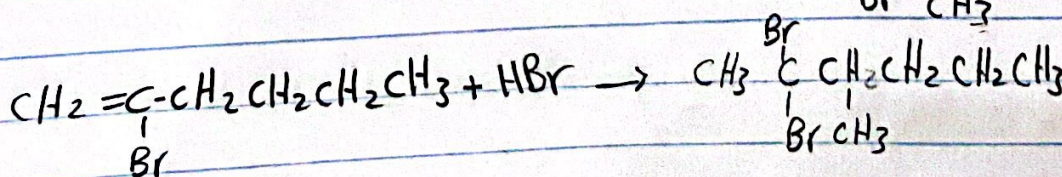
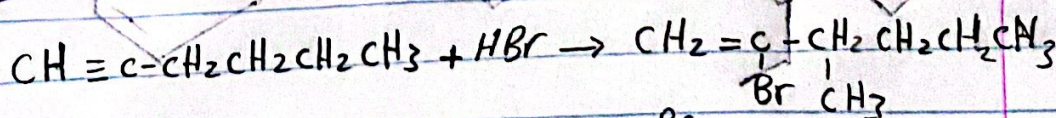
a) $NaNH_2$



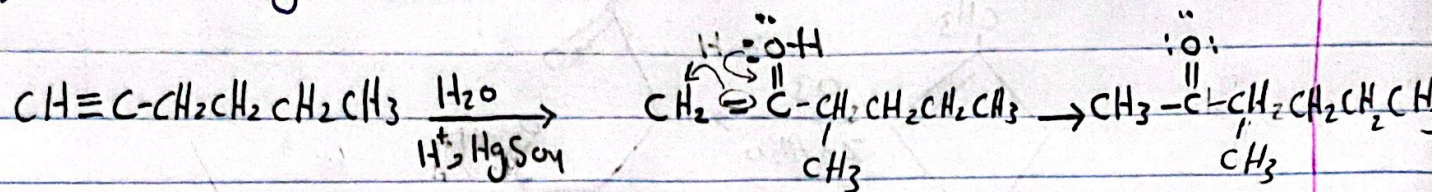
b) 2 mole H_2, Ni



c) 2 mole HBr

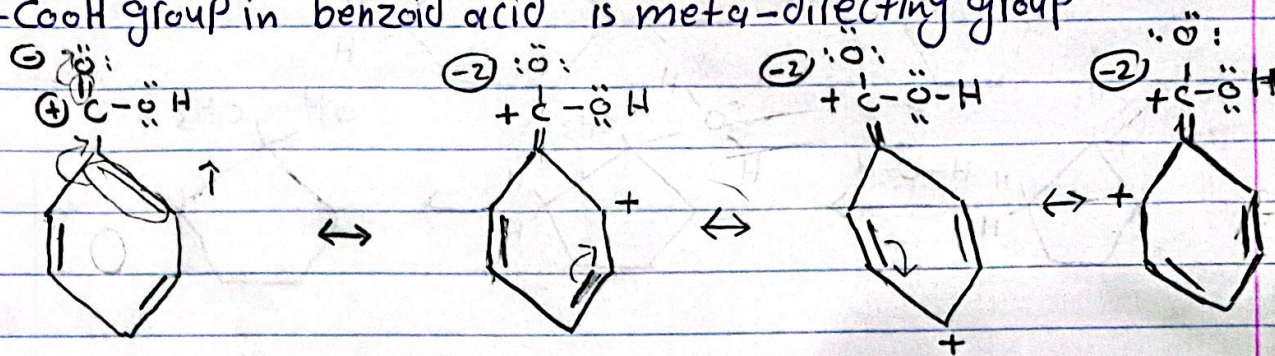


d) $H_2O, H^+, HgSO_4$ $CH_3-CH_2-CH_2-CH_2-CH_3$ $CH_3-CH_2-CH_2-CH_2-CH_3$ (9)

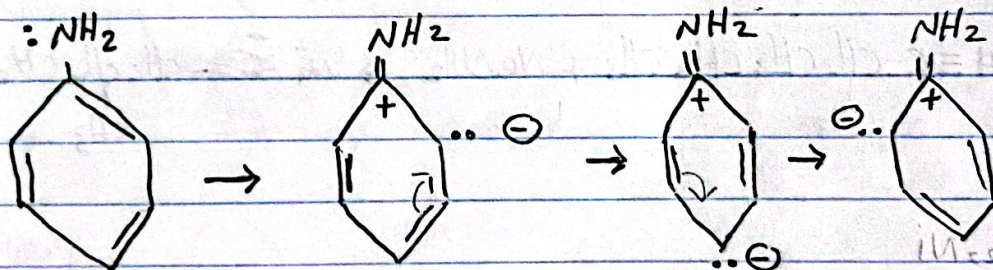


5- Prove the following :-

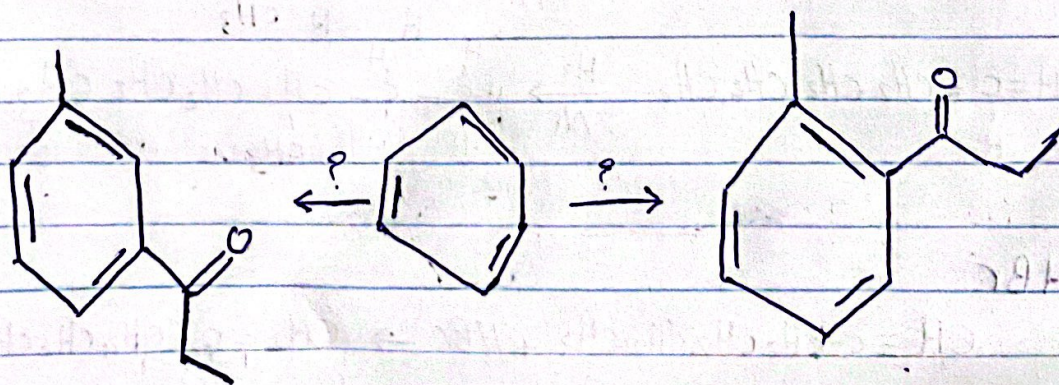
a) -COOH group in benzoic acid is meta-directing group



-NH₂ group in aniline is ortho, para directing group



6-



التاريخ : / /

اليوم :

الدرس :

