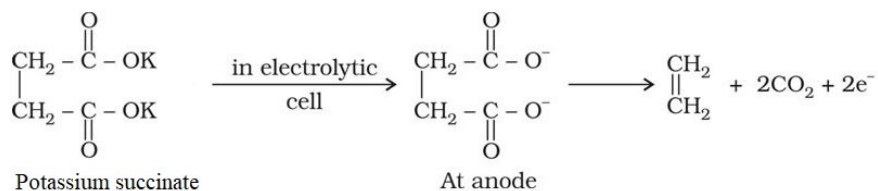
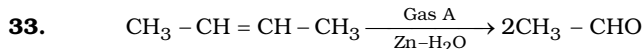
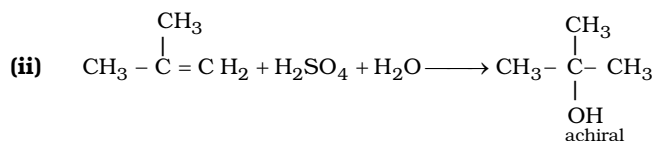
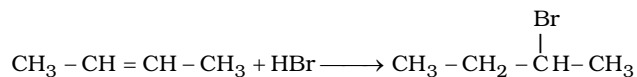
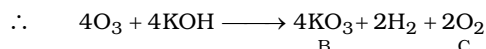
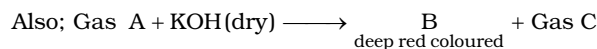


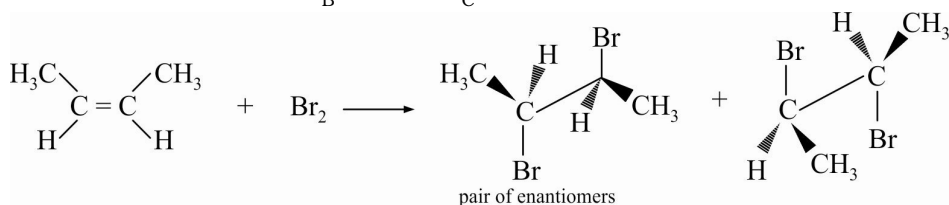
31. Ethene



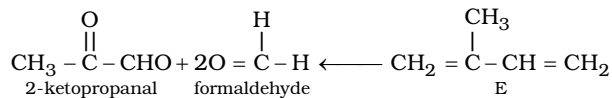
32. (i) A must be a symmetrical alkene :

 $\therefore$ Gas A is ozone (O_3)

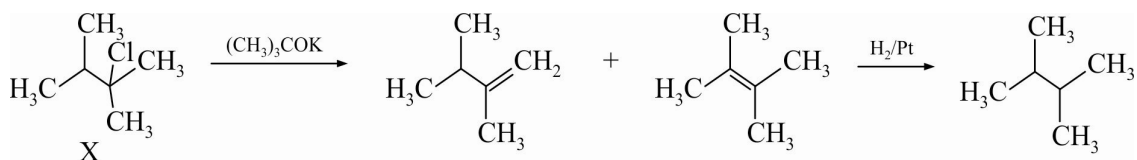
34.



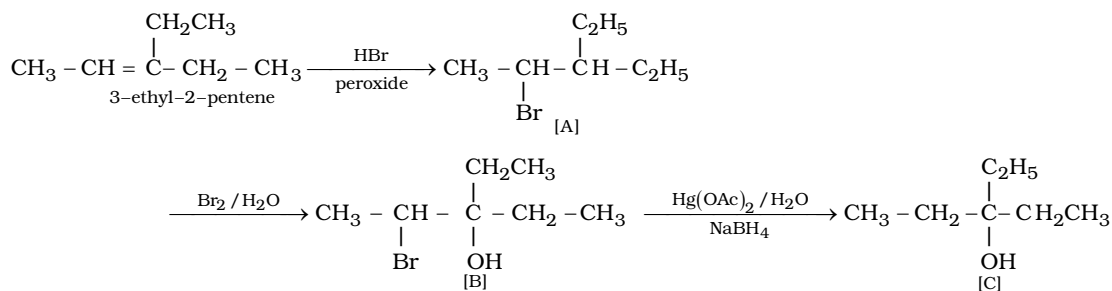
35.

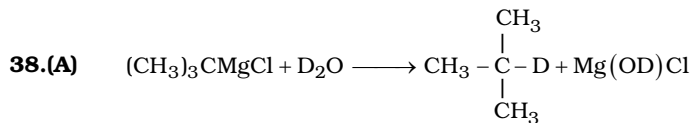


36.



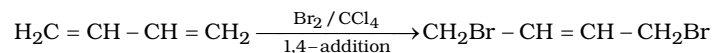
37.



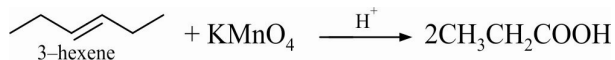


39.(D) Alkenes are all less dense than water, so floats over water

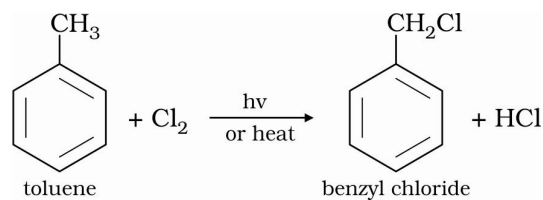
40. 1,4-dibromo-2-butene is formed on 1, 4 addition.



41. Oxidation product indicates that alkene is symmetrical:



42.(C) Toluene on treatment with Cl_2 in the presence of heat or light undergo free-radical chlorination at benzylic position, giving benzyl chloride



43.(C) Electrophilic addition on $\text{C} = \text{C}$ is governed by stability of carbocation :

