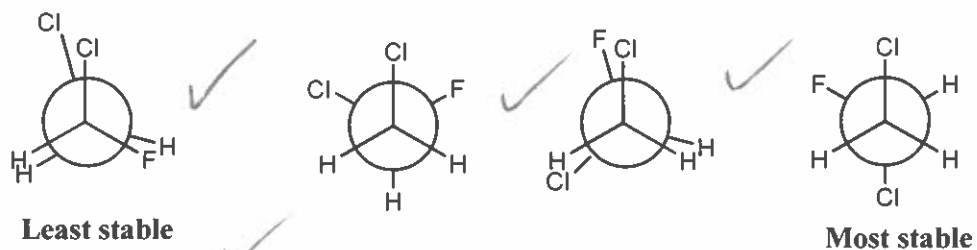


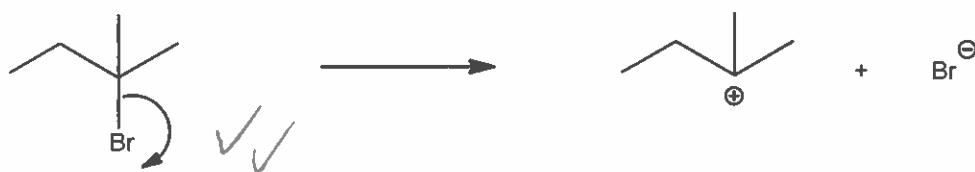
SECTION B

Question 1

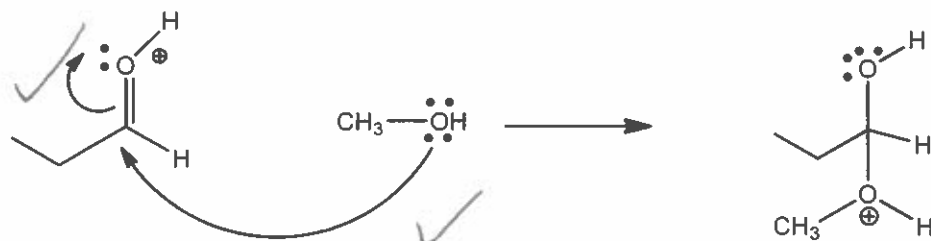
(a) Newman projections of 1,2-dichloro-1-fluoropropane:



(b) (i)



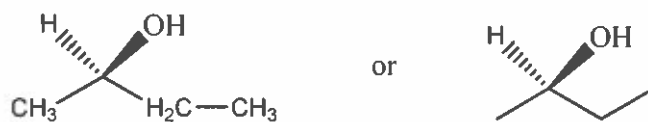
(ii)



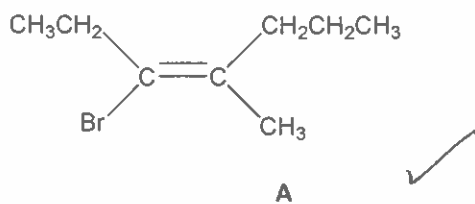
(4)

Question 2

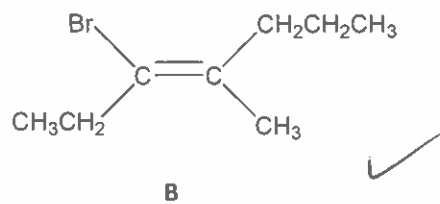
(a) The 3-dimensional structure of R-2-butanol:



(b) Geometric isomers:

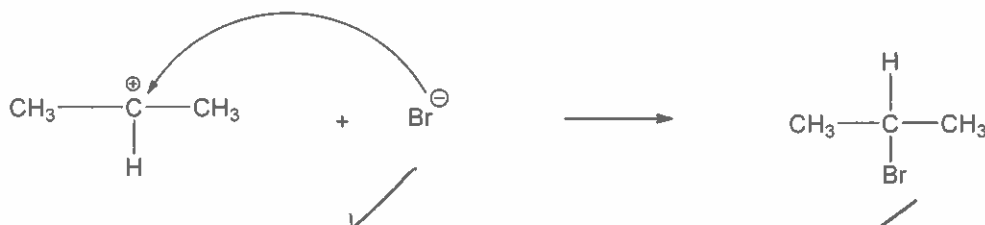
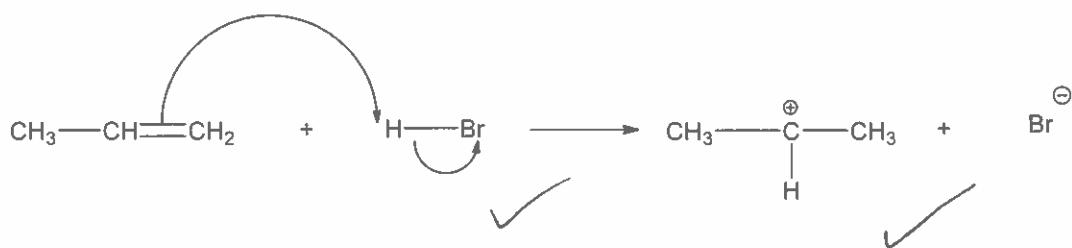


(E) -3-bromo-4-methylhept-3-ene ✓



(Z) -3-bromo-4-methylhept-3-ene ✓ (4)

(c) The reaction mechanism of the reaction of HBr with $\text{CH}_3\text{CH}=\text{CH}_2$ is:



(4)

✓ { IF 10 carbocation & incorrect product (10 alkyl halide) is given