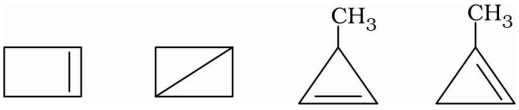
91.(4)

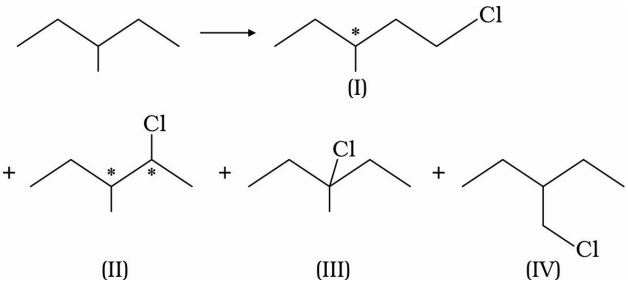


92.(C) 2-butene is symmetrical alkene

$$CH_3 - CH = CH - CH_3 \xrightarrow[Zn/H_2O]{O_3} 2CH_3CHO$$

Molar mass of CH_3CHO is 44g.

93.(8)



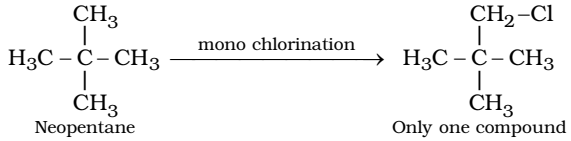
I has one chiral carbon = two stereo isomers

II has two chiral carbons and no symmetry = four stereo isomers

III and IV have no chiral carbon, no stereo isomers

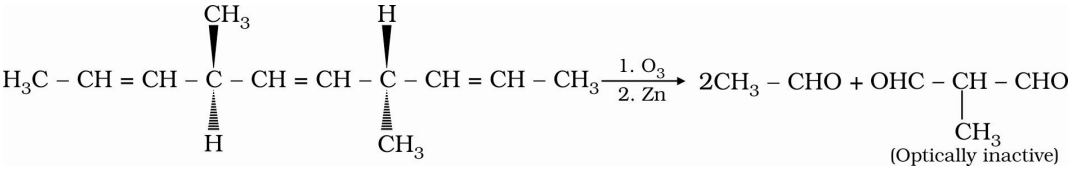
94.(A) Vinyl group on ozonolysis give formaldehyde $\left(CH_2 \doteq CH -\right)$

95.(B)



Neopentane — Only one compound

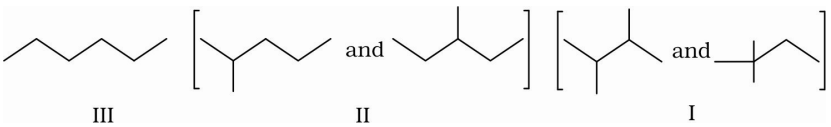
96.(A) Ozonolysis of the given triene occur as follows :



(Optically inactive)

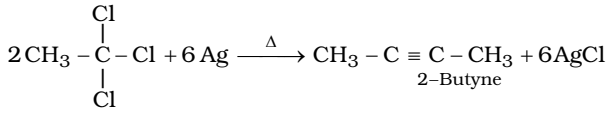
Since, none of the above dial is chiral, so no optically active product is obtained

97.(B) This problem is based on boiling point of isomeric alkanes. As we know more the branching in an alkane, lesser will be its surface area and lesser will be the boiling point.

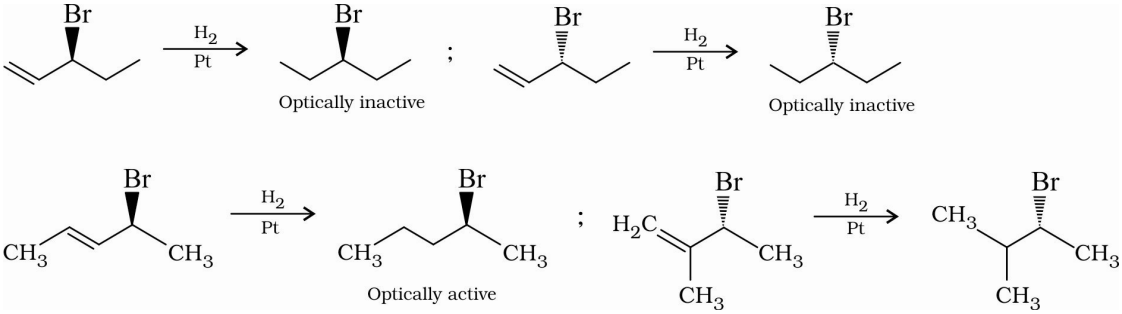


On moving left to right (III to I)

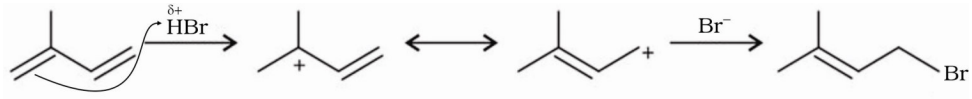
- branching increases
- surface area decreases
- boiling point decreases

98.(D) 

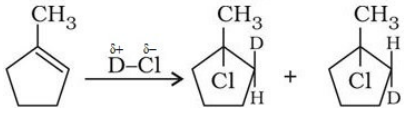
99.(ABC) It is due to steric effect of both t-butyl group and halogen i.e. iodine and bromine. Hydroxyl group is ortho and para directing.

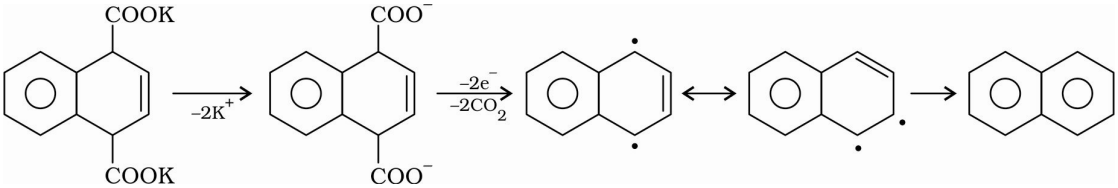
100.(BD) 

101.(D) It is 1, 4-addition of H-Br

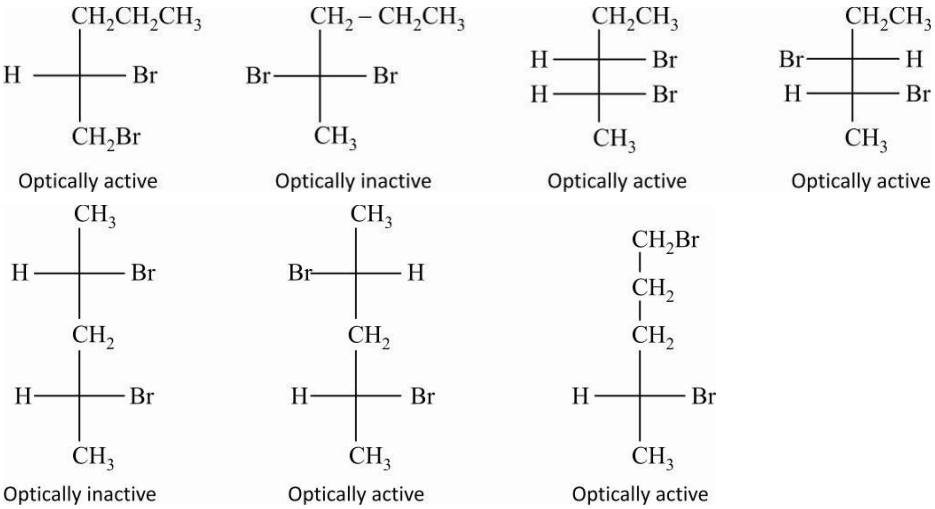


102.(AB) According to Markovnikov's addition

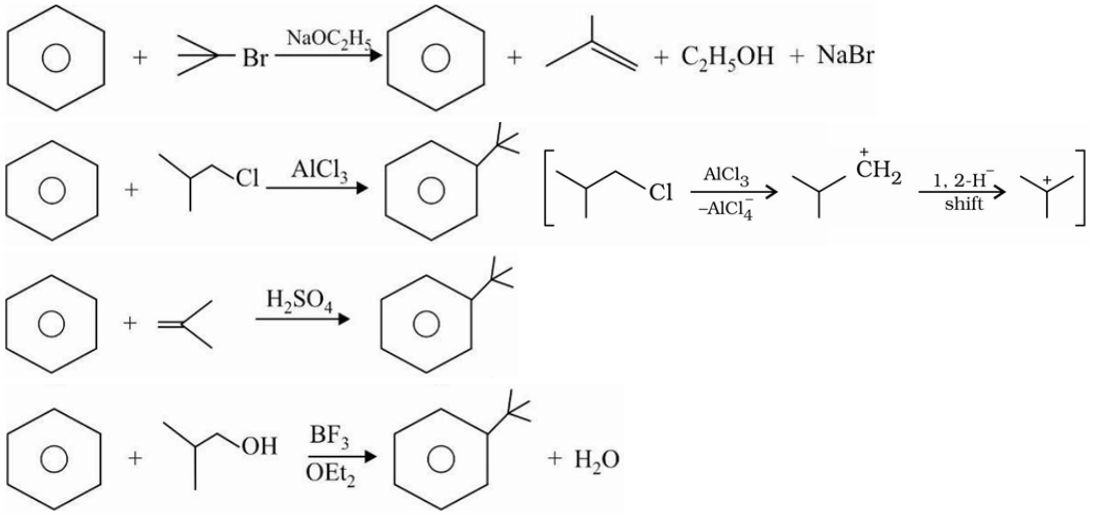


103.(B) 

104.(5) Total five products are formed.



105.(BCD)


NaOC2H5
Br
+ C2H5OH + NaBr
AlCl3
Cl
AlCl3
−AlCl4−
CH2
1, 2-H−
shift
H2SO4
OH
BF3
OEt2
+ H2O