Structural and stereo isomerism

141. Which one of the following pairs represents stereoisomerism

(a) Chain isomerism and rotational isomerism

(b) Structural isomerism and geometric isomerism

(c) Linkage isomerism and geometric isomerism

(d) Optical isomerism and geometric isomerism

142. When isomers have the same structural formula but differ in relative arrangement of atoms or groups are called

(a) Mesomers

(b) Stereoisomers

(c) Optical isomers

(d) Geometrical mesomers

143. $CH_3CH_2CH=CH_2$ and $CH_3-CH=CH-CH_3$ show

(a) Chain isomerism

(b) Position isomerism

(c) Functional isomerism

(d) Metamerism

144. The number of possible isomers of butene are

(a) 3 (b) 2

(c) 4 (d) 5

(e) 6

145. Which of the following show geometrical isomerism

(a) C_2H_5Br

(b) $(CH_2)(COOH)_2$

(c) $(CH)_2(COOH)_2$

(d) C_2H_6

146. Among the following the most stable compound is

(a) $cis-1,2-cyclohexanediol$

(b) $trans-1,2-cyclohexanediol$

(c) $cis-1,3-cyclohexanediol$

(d) $trans-1,3-cyclohexanediol$

147. Chirality of carbon compound is because of its

(a) Tetrahedral nature of carbon

(b) Monovalent nature of carbon

(c) Divalent nature of carbon

(d) Trivalent nature of carbon

148. Which kind of isomerism is possible for 1-chloro-2-nitroethene

(a) Functional group isomerism

(b) Position isomerism

(c) E/Z isomerism

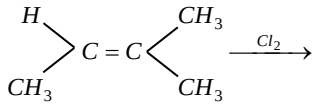
(d) Optical isomerism

149. Which will give chiral molecule

(a) $CH_3COCl \xrightarrow{LiAlH_4}$

(b) $C_2H_5CHO \xrightarrow[H^+/H_2O]{CH_3MgBr}$

(c) $(CH_3)_2CHC_2H_5 \xrightarrow{Cu}$

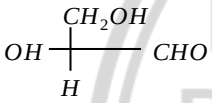
(d) 

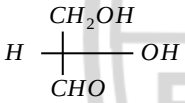
150. Which of the following will be chiral

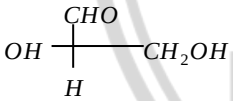
(a) CH_3CHCl_2 (b) $CH_3CHBrCl$

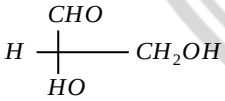
(c) CD_2Cl_2 (d) CH_2ClBr

151. Which of the following fischer projection formula is same as D - Glyceraldehyde

(a) 

(b) 

(c) 

(d) 

(e)