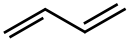

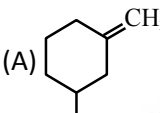
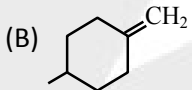
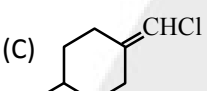
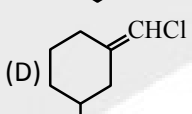
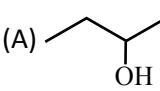
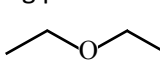
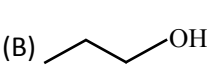
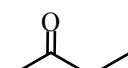
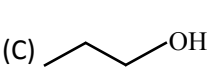
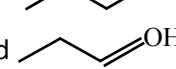
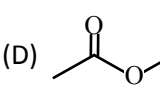
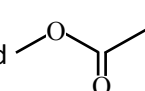


NEET CHEMISTRY

Topic: Isomerism

- Q.1**  &  show isomerism –
- (A) Chain (B) Position
 (C) Functional (D) None of these
- Q.2** Which of the following does not show functional group isomerism –
- (A) C₂H₆O (B) C₃H₈O
 (C) C₄H₁₀ (D) C₄H₁₀O
- Q.3** Ethylethanoate and α – methyl propionic acid are –
- (A) Chain isomers
 (B) Functional isomers
 (C) Geometrical isomers
 (D) Optical isomers
- Q.4** CH₃ - CH₂ - CHO & CH₂ = CH - CH₂OH are –
- (A) Functional (B) Tautomers
 (C) Position (D) Metameres
- Q.5** Which of the following compounds will exhibit geometrical isomerism –
- (A) 1-Phenyl-2-butene
 (B) 3-Phenyl-1-butene
 (C) 2-Phenyl-1-butene
 (D) 1,1-Diphenyl-1-propene
- Q.6** The number of isomers possible for the compound with the structure –
 CH₃CH = CH – CH = CH – CH₂CHOHCH₃ is –
- (A) 2 (B) 4 (C) 6 (D) 8

- Q.7** Which of the following will show geometrical isomerism –
- (A) $\text{CH}_3\text{CH} = \text{CH}_2$
- (B) $\text{CH}_3 - \overset{\text{CH}_3}{\underset{|}{\text{C}}} = \overset{\text{Br}}{\underset{|}{\text{C}}} - \text{CH}_2\text{CH}_3$
- (C) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH} = \text{CHCH}_3$
- (D) $\text{CH}_2 = \text{CH} - \text{CH}_2 - \text{CH}_3$
- Q.8** How many optically active forms are possible for a compound of rational formula - $\text{CH}_2\text{OH} \cdot \text{CHOH} \cdot \text{CHOH} \cdot \text{CHOH} \cdot \text{CHO}$
- (A) 2 (B) 3 (C) 4 (D) 8
- Q.9** Which of the following compounds can exist as geometrical isomers –
- (A) CH_2Cl_2 (B) $\text{CH}_2\text{Cl} - \text{CH}_2\text{Cl}$
- (C) $\text{CHBr} = \text{CHCl}$ (D) $\text{CH}_2\text{Cl} - \text{CH}_2\text{Br}$
- Q.10** Which of the following has Z-configuration -
- (A) $\begin{array}{c} \text{H}_3\text{C} \\ \diagdown \\ \text{C} = \text{C} \\ \diagup \\ \text{H} \end{array} \begin{array}{c} \text{C}_2\text{H}_5 \\ \diagup \\ \text{C} = \text{C} \\ \diagdown \\ \text{H} \end{array}$
- (B) $\begin{array}{c} \text{Br} \\ \diagdown \\ \text{C} = \text{C} \\ \diagup \\ \text{HOCH}_2 \end{array} \begin{array}{c} \text{CH}(\text{CH}_3)_2 \\ \diagup \\ \text{C} = \text{C} \\ \diagdown \\ \text{CH}_2 - \text{CH}_3 \end{array}$
- (C) $\begin{array}{c} \text{Cl} \\ \diagdown \\ \text{C} = \text{C} \\ \diagup \\ \text{Br} \end{array} \begin{array}{c} \text{H} \\ \diagup \\ \text{C} = \text{C} \\ \diagdown \\ \text{D} \end{array}$
- (D) All the above
- Q.11** The total number of structural isomers possible for hydrocarbon C_4H_8 is –
- (A) 3 (B) 4 (C) 5 (D) 6
- Q.12** The number of isomers of nitro phenol is –
- (A) No isomerism (only one compound is possible.)
- (B) Two isomers
- (C) Three isomers
- (D) Four isomers
- Q.13** In trans 1,2– dichloroethene –
- (A) There are 6 sigma bonds
- (B) The two H atoms are adjacent to each other
- (C) There is free rotation about the C – C bond
- (D) All the atoms lie in the same plane

- Q.14** Which of the following pairs of compounds are chain isomers -
 (A) n-Propyl alcohol and isopropyl alcohol
 (B) isobutyl alcohol and t-butyl alcohol
 (C) s-Butyl alcohol and t-butyl alcohol
 (D) n-Butyl alcohol and s-butyl alcohol
- Q.15** Which of the following pairs of compounds are position isomers -
 (A) isobutyl alcohol and s-butyl alcohol
 (B) isobutyl alcohol and t-butyl alcohol
 (C) isopentyl alcohol and neopentyl alcohol
 (D) ethyl alcohol and ethylene glycol
- Q.16** Which of the following pairs of compounds are not isomers -
 (A) Propyne and cyclopropene
 (B) Propyne and propadiene
 (C) Propene and cyclopropene
 (D) 1-Propanol and methoxyethane
- Q.17** Which of the following is not an isomer of allyl alcohol -
 (A) Acetone (B) 1-Propanol
 (C) 2-Methyloxirane (D) Cyclopropanol
- Q.18** The total number of cyclic compounds (neglecting stereoisomers) with the molecular formula C_5H_{10} is -
 (A) 4 (B) 5 (C) 6 (D) 7
- Q.19** Geometrical isomerism shows -
- (A)  (B) 
- (C)  (D) 
- Q.20** Which of the following pairs of compounds are functional isomers -
- (A)  and 
- (B)  and 
- (C)  and 
- (D)  and 

Q.21 Which of the following compounds does not have geometrical isomers -

- (A) 2-Pentenoic acid (B) 2-Butenoic acid
(C) 3-Pentenoic acid (D) 3-Butenoic acid

Q.22 Among the following compounds, the one which does not show geometrical isomerism is -

- (A) $C_6H_5N=NC_6H_5$ (B) $C_6H_5CH=CHC_6H_5$
(C) $C_6H_5-\underset{\text{CH}_3}{\text{C}}=N-OH$ (D) $C_6H_5-\underset{\text{C}_6H_5}{\text{C}}=N-CH_3$

Q.23 Which of the following compounds has no geometrical isomer -

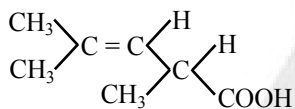
- (A) 1-Phenylpropene
(B) 1, 2-Diphenylethene
(C) 1, 2-Diphenylpropene
(D) 1,1-Diphenylpropene

Q.24 The number of geometrical isomers in the following compound,

$CH_3 - CH = CH - CH = CH - C_2H_5$ is -

- (A) 4 (B) 3 (C) 2 (D) 5

Q.25 The following compound can exhibit -



- (A) Geometrical isomerism
(B) Geometrical and optical isomerisms
(C) Optical isomerism
(D) Tautomerism

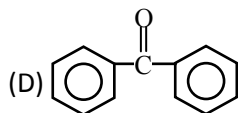
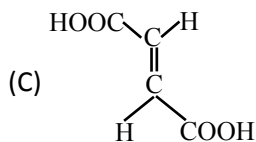
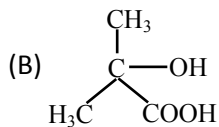
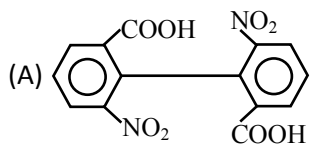
Q.26 Structural isomers possible for $C_4H_8Br_2$ are -

- (A) 9 (B) 8 (C) 7 (D) 6

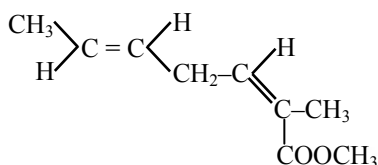
Q.27 False statement is -

- (A) Angle of rotation increases with increase in number of asymmetric carbon atoms
(B) Cis - isomer of a compound is more stable than trans form
(C) Fumaric acid on heating produces fumaric anhydride
(D) All of them

Q.28 Which compound would exhibit optical isomers—

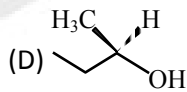
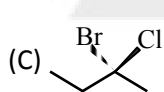
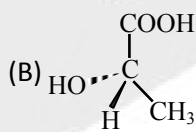
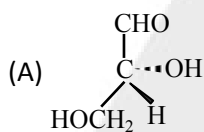


Q.29 The correct stereochemical name of —



- (A) Methyl 2-methylhepta (2E, 5E) dienoate
 (B) Methyl 2-methylhepta (2Z, 5Z) dienoate
 (C) Methyl 2-methylhepta (2E, 5Z) dienoate
 (D) Methyl 2-methylhepta (2Z, 5E) dienoate

Q.30 Which of the following structures has the S-configuration at the chiral centre ?



ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10
Ans.	C	C	B	A	A	D	C	D	C	D
Que.	11	12	13	14	15	16	17	18	19	20
Ans.	C	C	D	C	B	C	B	B	D	A
Que.	21	22	23	24	25	26	27	28	29	30
Ans.	D	D	D	A	C	A	D	A	D	B

