

Unit 13: An introduction to AS Level organic chemistry

Subunit 13.4: Isomerism: structural isomerism and stereoisomerism

Topical Question No: 1

- 20 Which types of stereoisomerism are shown by 2,4-dimethylhex-2-ene?
- A both cis-trans isomerism and optical isomerism
B cis-trans isomerism only
C neither cis-trans isomerism nor optical isomerism
D optical isomerism only

Topical Question No: 2

- 30 How many **structural** isomers with the molecular formula $C_4H_{10}O$ give infra-red absorptions both at approximately 1200 cm^{-1} and at approximately 3400 cm^{-1} ?
- A 2 B 4 C 6 D 7

Topical Question No: 3

- 20 How many structural isomers are there of trichloropropane, $C_3H_5Cl_3$?
- A 3 B 4 C 5 D 6

Topical Question No: 4

- 27 Structural isomerism only should be considered when answering this question.

All the isomeric alcohols with the molecular formula $C_5H_{12}O$ are added separately to warm alkaline aqueous iodine.

How many of the isomers give a yellow precipitate?

- A 0 B 1 C 2 D 3

Topical Question No: 5

- 22 How many isomers, including structural and stereoisomers, with the formula C_4H_8 have structures that involve π bonding?
- A 1 B 2 C 3 D 4

Answer Key

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2. Error
3. Error
4. Error
5. Error