

PYQSide

JEE MAIN ISOMERISM — STRUCTURAL ISOMERISM — PYQS

Max. Marks: 28

Questions: 7

Section A (MCQ)

Q.1 Given below are two statements :

Statement-I: 2,6-diethylcyclohexanone and 6-methyl-2-n-propylcyclohexanone are metamers.

Statement-II: 2,2,6,6-tetramethylcyclohexanone exhibits keto-enol tautomerism.

In the light of the above statements, choose the correct answer from the options given below :

[JEE Main 2026 (Online) 6th April Morning Shift]

- (1) Both Statement-I and Statement-II are true
- (2) Both Statement-I and Statement-II are false
- (3) Statement-I is true but Statement-II is false
- (4) Statement-I is false but Statement-II is true

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Q.2 Identify **correct** statements from the following :

- A. Propanal and propanone are functional isomers.
- B. Ethoxyethane and methoxypropane are metamers.
- C. But-2-ene shows optical isomerism.
- D. But-1-ene and but-2-ene are functional isomers.
- E. Pentane and 2,2-dimethylpropane are chain isomers.

Choose the **correct** answer from the options given below :

[JEE Main 2026 (Online) 21st January Morning Shift]

- (1) A, B and E only
- (2) A, B and C only
- (3) C, D and E only
- (4) B, C and D only

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Q.3 Match **List - I** with **List - II**.

List - I Pair of Compounds		List - II Type of Isomers	
A.	2-Methylpropene and but-1-ene	I.	Stereoisomers
B.	Cis-but-2-ene and trans-but-2-ene	II.	Position isomers
C.	2-Butanol and diethyl ether	III.	Chain isomers
D.	But-1-ene and but-2-ene	IV.	Functional group isomers

Choose the **correct** answer from the options given below :

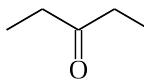
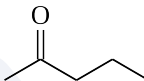
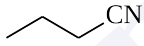
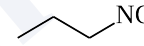
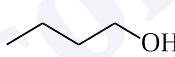
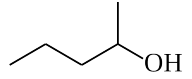
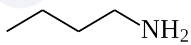
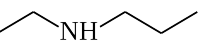
[JEE Main 2026 (Online) 21st January Evening Shift]

- (1) A-III, B-I, C-IV, D-II
- (2) A-II, B-I, C-IV, D-III
- (3) A-I, B-IV, C-III, D-II
- (4) A-III, B-I, C-II, D-IV

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Q.4 Identify the correct statements from the following. Choose the correct answer from the options given below:

- A.  and  are metamers
- B.  and  are functional isomers
- C.  and  are position isomers
- D.  and  are homologous

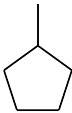
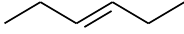
[JEE Main 2025 (Online) 3rd April Morning Shift]

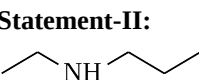
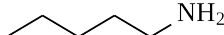
- (1) B & C Only
- (2) C & D Only
- (3) A, B & C Only
- (4) A & B Only

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Q.5 Given below are two statements:

Statement-I:  and  are isomeric compounds.

Statement-II:  and  are functional group isomers.

In the light of the above statements, choose the correct answer from the options given below:

[JEE Main 2025 (Online) 28th January Evening Shift]

- (1) Statement-I is false but Statement-II is true
- (2) Both Statement-I and Statement-II are true
- (3) Statement-I is true but Statement-II is false
- (4) Both Statement-I and Statement-II are false

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Section B (Numerical)

- Q.6** Consider the isomers of hydrocarbon with molecular formula C_5H_{10} . These isomers do not decolourise $KMnO_4$ solution. These isomers are subjected to chlorination with chlorine in presence of light to give monochloro compounds. The total number of monochloro compounds (structural isomers only) formed is _____.

[JEE Main 2026 (Online) 2nd April Morning Shift]

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- Q.7** The total number of structural isomers possible for the substituted benzene derivatives with the molecular formula C_9H_{12} is _____.

[JEE Main 2025 (Online) 3rd April Evening Shift]

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ANSWER KEY

Section A (MCQ)

Ques.	1	2	3	4	5						
Ans.	3	1	1	4	2						

Section B (Numerical)

Ques.	6	7									
Ans.	14	8									