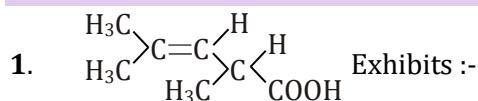


EXERCISE - I (Conceptual Questions)

Build Up Your Understanding

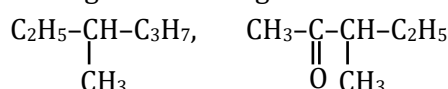
OPTICAL ISOMERISM



- (1) Tautomerism
- (2) Optical isomerism
- (3) Geometrical isomerism
- (4) Geometrical and optical isomerism

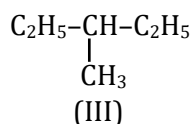
COI001

2. Among the following structure I to III



(I)

(II)



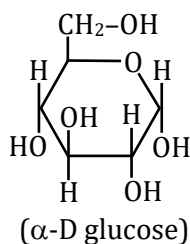
(III)

It is true that :-

- (1) All three are chiral compounds
- (2) Only I and II are chiral compounds
- (3) Only II is chiral compound
- (4) Only I and III are chiral compounds

COI004

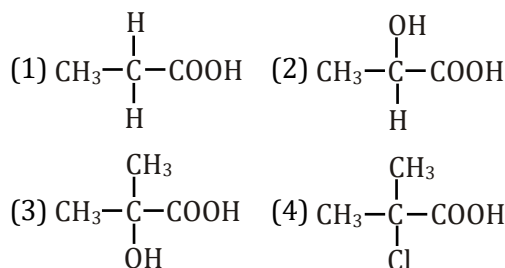
3. Number of chiral C in



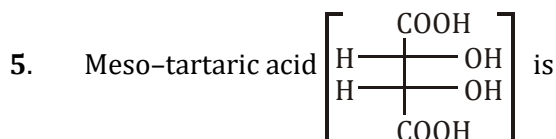
- (1) 4
- (2) 3
- (3) 2
- (4) 5

COI019

4. Which compound is optical active -



COI006

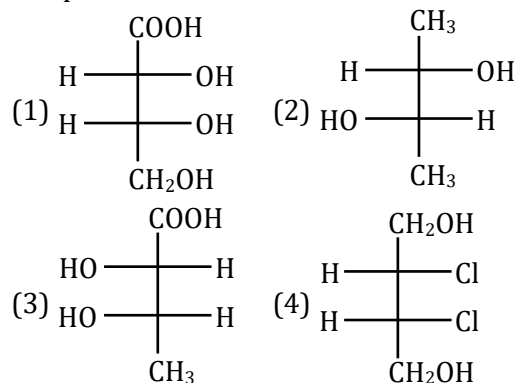


optically inactive due to the presence of :-

- (1) Molecular symmetry
- (2) Molecular asymmetry
- (3) External compensation
- (4) Two asymmetric carbon atoms

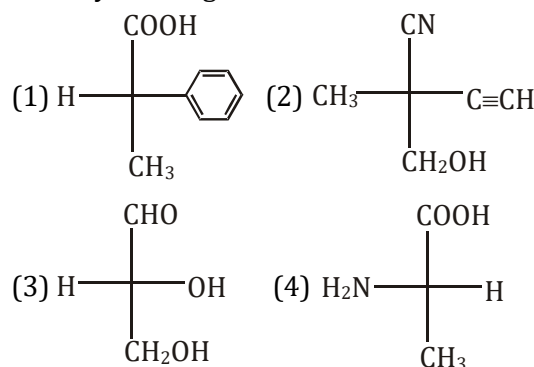
COI002

6. Which one of the following is a meso-compound.

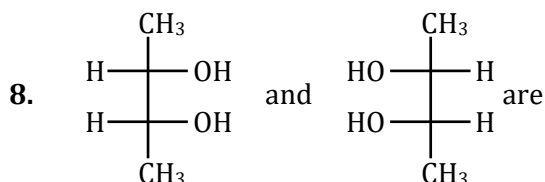


COI005

7. Identify R configuration :



COI003

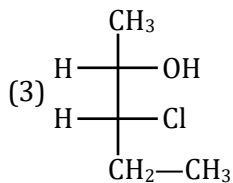
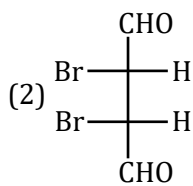
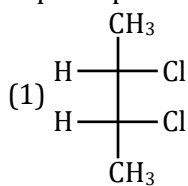


- (1) Enantiomers
- (2) Diastereomers
- (3) Identical
- (4) Position isomers

COI022

Optical Isomerism

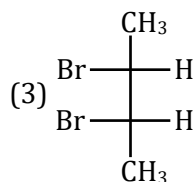
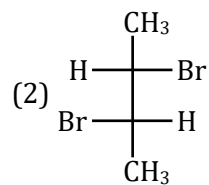
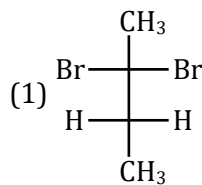
9. Of which compound mirror images is non superimposable



(4) None

COI020

10. Which is Meso 2,3-Dibromobutane ?



(4) All of them

COI021

EXERCISE-I (Conceptual Questions)

ANSWER KEY

Question	1	2	3	4	5	6	7	8	9	10	
Answer	2	2	4	2	1	4	3	3	3	3	

EXERCISE - II (Previous Year Questions)

AIPMT/NEET

Re-AIPMT-2015

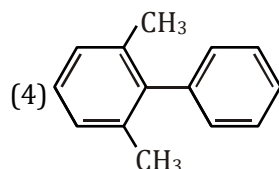
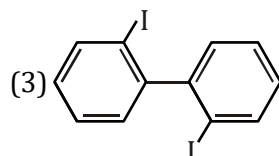
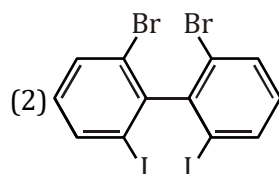
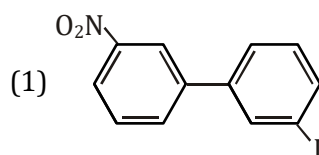
1. Two possible stereo-structures of $\text{CH}_3\text{CHOHCOOH}$, which are optically active, are called :-

- (1) Enantiomers (2) Mesomers
(3) Diastereomers (4) Atropisomers

COI011

NEET-I 2016

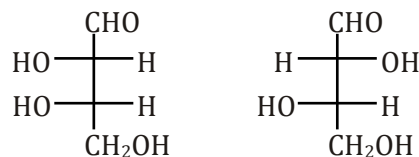
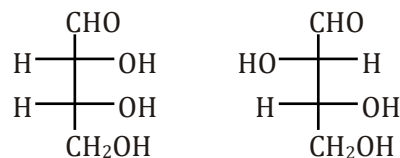
2. Which of the following biphenyls is optically active?



COI012

NEET-II 2016

3. The **correct** corresponding order names of four aldoses with configuration given below



respectively, is :-

- (1) L-erythrose, L-threose, D-erythrose, D-threose
(2) D-erythrose, D-threose, L-erythrose, L-threose
(3) L-erythrose, L-threose, L-erythrose, D-threose
(4) D-threose, D-erythrose, L-threose, L-erythrose

COI013

EXERCISE-II (Previous Year Questions)

ANSWER KEY

Question	1	2	3	
Answer	1	2	2	

EXERCISE – III (Analytical Questions)

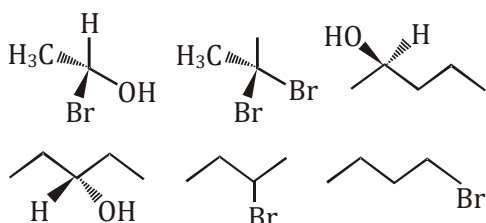
Master Your Understanding

1. Which of the following does not contain any asymmetric carbon but can show enantiomerism:-

(1) Lactic acid (2) 1,3-pentadiene
(3) Tartaric acid (4) 2,3-pentadiene

COI014

2. How many compounds among the following are chiral ?



(1) 1 (2) 2
(3) 3 (4) 4

COI018

3. and are :-

(1) Enantiomers
(2) Position isomers
(3) Geometrical isomers
(4) Homomers

COI017

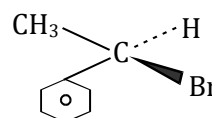
4. The total number of configurational isomers of the given compound are :-



(1) 2 (2) 4
(3) 6 (4) 8

COI016

5. The complete IUPAC name of the compound:-



(1) (R)-1-Bromo-1-phenyl ethane
(2) (S)-1-Bromo-1-phenyl ethane
(3) (E)-1-Bromo-1-phenyl ethane
(4) (Z)-1-Bromo-1-phenyl ethane

COI015

EXERCISE-III (Analytical Questions)

ANSWER KEY

Question	1	2	3	4	5
Answer	4	3	4	4	1

Important Notes