

DEFINITION BASED PROBLEMS (PART-II)

Q.1 The process of separation of racemic modification into d and l enantiomers is called

- (A) resolution (B) dehydration
(C) revolution (D) dehydrohalogenation.

Q.2 d and l tartaric acids are

- (A) Diastereomers (B) Enantiomers
(C) Achiral molecules (D) Tautomers.

Q.3 The process of converting d-form to l or vice versa is known as

- (A) Walden inversion (B) Resolution
(C) Racemisation (D) None

Q.4 Equimolar mixture of d and l forms of different compounds is

- (A) Optically inactive
(B) Optically active
(C) May or may not be optically active
(D) None of these

Q.5 Which of the following statement is wrong ?

- (A) Enantiomers are similar chemically, but their rates of reaction with other optically active substances are usually different
(B) A sample of sec-butyl chloride is optically inactive due to the absence of chiral carbon atom
(C) Diastereomers are optical isomers but not mirror images
(D) Diastereomers differ in their physical properties.

Q.6 A molecule is said to be chiral if it

- (A) cannot be superimposed on its mirror image
(B) contains a plane of symmetry
(C) exists as cis and trans isomers
(D) fulfil all the above requirements.

Q.7 Optically active isomers but not mirror images are called

- (A) Enantiomers (B) Mesomers
(C) Tautomers (D) Diastereoisomers.

Q.8 An organic compound will show optical isomerism if

- (A) Four groups attached to C atom are different
- (B) Three groups attached to C atom are different
- (C) Two groups attached to C atom are different
- (D) All the groups attached to C atom are same.

Q.9 R and S pairs of enantiomers differ from one another in

- (A) Optical rotation of polarised light
- (B) Solubility in racemic mixture
- (C) Reaction with racemic mixture
- (D) None of these

Q.10 Which of the following statements is not correct ?

- (A) A compound whose molecule has D configuration will always be dextrorotatory
- (B) A compound whose molecule has D configuration may be dextrorotatory or laevorotatory.
- (C) A compound whose molecule has L configuration can be laevorotatory.
- (D) A compound whose molecule has L configuration may be dextrorotatory or laevorotatory.

Definition Based Problems (Part - II)										
Q.No.	1	2	3	4	5	6	7	8	9	10
Ans.	A	B	A	C	B	A	D	A	A	A