

DEFINITION BASED PROBLEMS (PART-I)

- Q.1** The two enantiomers differ in-
- (A) Their boiling and melting points.
 - (B) Their chemical properties towards achiral reagents.
 - (C) Their optical activities.
 - (D) Their solubilities in a solvent.
- Q.2** Diastereomers can be separated by-
- (A) Fractional distillation
 - (B) Simple distillation
 - (C) Electrophoresis
 - (D) All the above
- Q.3** Polariser used to get plane polarized light is-
- (A) Optical isomer
 - (B) Flint glass prism
 - (C) Nicol prism
 - (D) None of the above
- Q.4** Optically active compounds can rotate plane polarized light in-
- (A) Upwards and downwards
 - (B) Leftward and rightwards
 - (C) All the directions
 - (D) Do not rotate
- Q.5** Optical isomerism was first observed by-
- (A) Berthelot (1835)
 - (B) Louis pasteur (1885)
 - (C) Biot (1815)
 - (D) Wislieenus (1815)
- Q.6** Which of the following statement is correct ?
- (A) The presence of chiral carbon is essential condition for enantiomerism
 - (B) Functional isomerism is a kind of stereoisomerism
 - (C) The compounds containing one chiral carbon are always optically active
 - (D) All the statements are wrong
- Q.7** The instrument which can be used to measure optical activity i.e., specific rotation is
- (A) Photometer
 - (B) Lactometer
 - (C) Polarimeter
 - (D) Refractometer.
- Q.8** A compound whose molecule is superimposable on its mirror image inspite of containing chiral carbon atoms is called
- (A) a threo isomer
 - (B) meso compound
 - (C) enantiomer
 - (D) diastereomer

Q.9 The optical inactivity of meso-tartaric acid is because of

- (A) absence of chirality
- (B) external compensation
- (C) internal compensation
- (D) presence of asymmetrical carbon atoms

Q.10 Racemic mixture is optically inactive due to

- (A) Presence of plane of symmetry
- (B) External compensation
- (C) Internal compensation
- (D) None of these.

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