

## QUESTION

- The change in optical rotation, with time, of freshly prepared solution of sugar is known as
- A) Rotatory motion
  - B) Inversion
  - C) Specific rotation
  - D) Mutarotation

ANSWER :

**Correct Answer:** D

**Solution :**

$\alpha - D - \text{Glucose} \left| \begin{array}{l} [\alpha]_D = +112^\circ \\ (36) \end{array} \right. \rightleftharpoons \text{Equilibrium mixture} \left| \begin{array}{l} [\alpha]_D = +52^\circ \\ (0.02) \end{array} \right. \rightleftharpoons \beta - D - \text{Glucose} \left| \begin{array}{l} [\alpha]_D = +19^\circ \\ (64) \end{array} \right.$  Glucose has two forms a and b. When either of these two is dissolved in water and allowed to stand, it gets converted to an equilibrium mixture of a and b forms.