

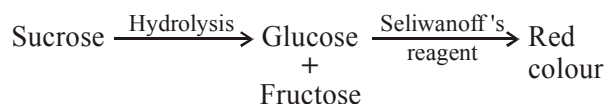


13. The number of chiral carbons present in sucrose is \_\_\_\_\_ .
14. Which one of the following statements not true ?
- (1) Lactose contains  $\alpha$ -glycosidic linkage between  $C_1$  of galactose and  $C_4$  of glucose.
  - (2) Lactose ( $C_{11}H_{22}O_{11}$ ) is a disaccharide and it contains 8 hydroxyl groups.
  - (3) On acid hydrolysis, lactose gives one molecule of D(+)-glucose and one molecule of D(+)-galactose.
  - (4) Lactose is a reducing sugar and it gives Fehling's test.

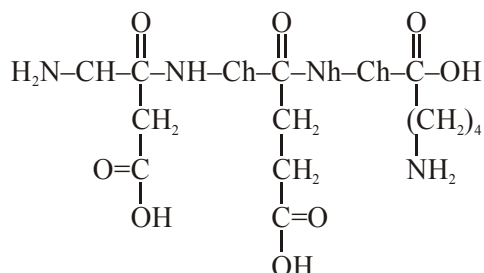


**6. Official Ans. by NTA (3)**

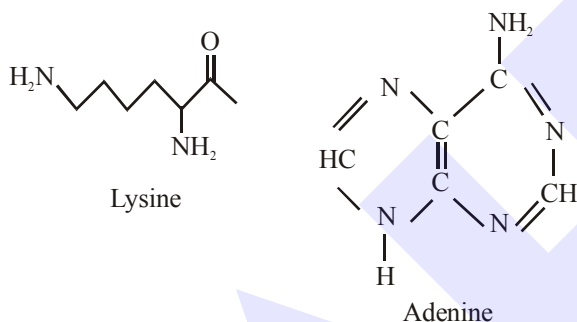
**Sol.** Seliwanoff's test is used to distinguish between aldose and ketose sugars; when added to a solution containing ketose, red colour is formed rapidly.

**7. Official Ans. by NTA (5)**

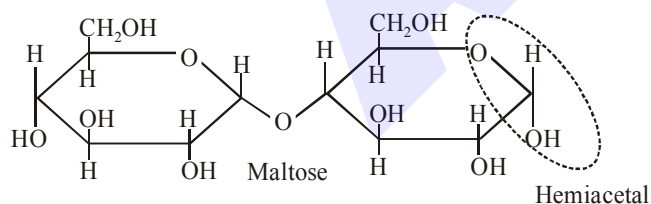
**Sol.** Structure of Tri peptide Asp – Glu – Lys

**8. Official Ans. by NTA (1)**

**Sol.** Adenine and lysine Both have primary amine react with  $\text{CHCl}_3 + \text{alc. KOH}$

**9. Official Ans. by NTA (2)**

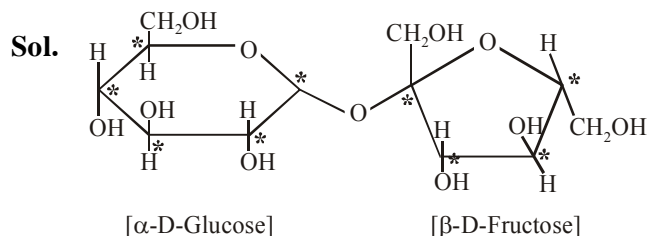
**Sol.**

**10. Official Ans. by NTA (2)**

**Sol.** Structure of Threonine is :

**11. Official Ans. by NTA (4)**

**Sol.** Tyrosine is not an essential amino acid.

**12. Official Ans. by NTA (4)****13. Official Ans. by NTA (9)**

Total no. of chiral carbon in sucrose = 9

**14. Official Ans. by NTA (1)**