

RELATED PROBLEMS

20. Carbohydrates are classified on the basis of their behaviour on hydrolysis and also as reducing or non-reducing sugar. Sucrose is a _____.
- (i) monosaccharide
 - (ii) disaccharide
 - (iii) reducing sugar
 - (iv) non-reducing sugar

Ans. (ii), (iv)

Explanation: One of the common disaccharides is sucrose which on hydrolysis gives equimolar mixture of D-(+)- glucose and D-(-) fructose. These two monosaccharides are held together by a glycosidic linkage between C1 of α -glucose and C2 of β -fructose. Since the reducing groups of glucose and fructose are involved in glycosidic bond formation, sucrose is a non-reducing sugar.