

# Carbohydrates



69. One of the following compounds is not considered as modified sugar?

Select one:

A. glucuronic acid

B. glycerol

C. deoxyribose

---

31 | Page

D. glyceraldehyde

E. glucosamine

5. Which of the following is not of lactose intolerance:

A. Bloating

B. diarrhea

C. headache

D. abnormal cramps

والجراحة

15. Two sugars have mirror images but cannot be superimposable:

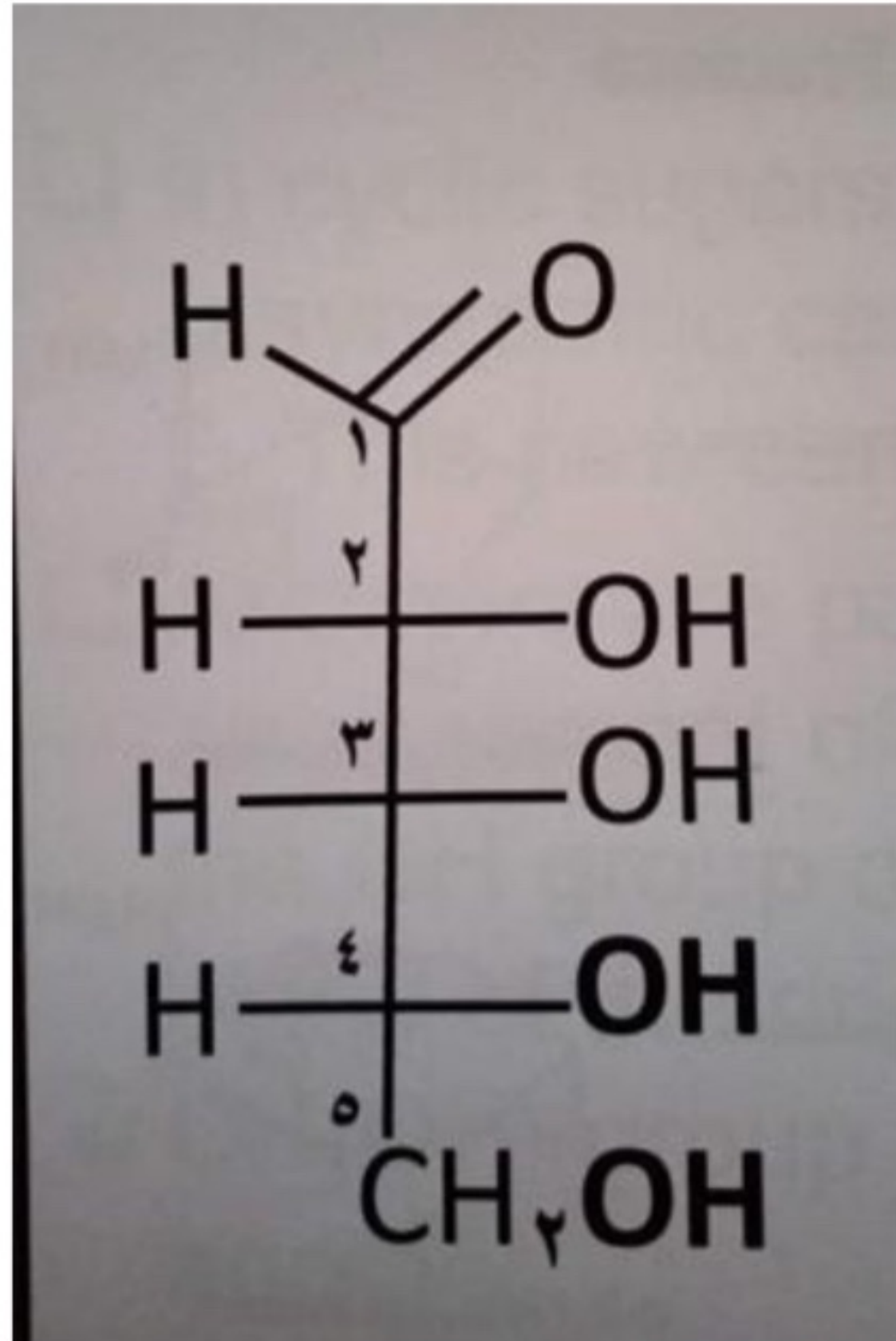
A. Epimers

B. Enantiomers

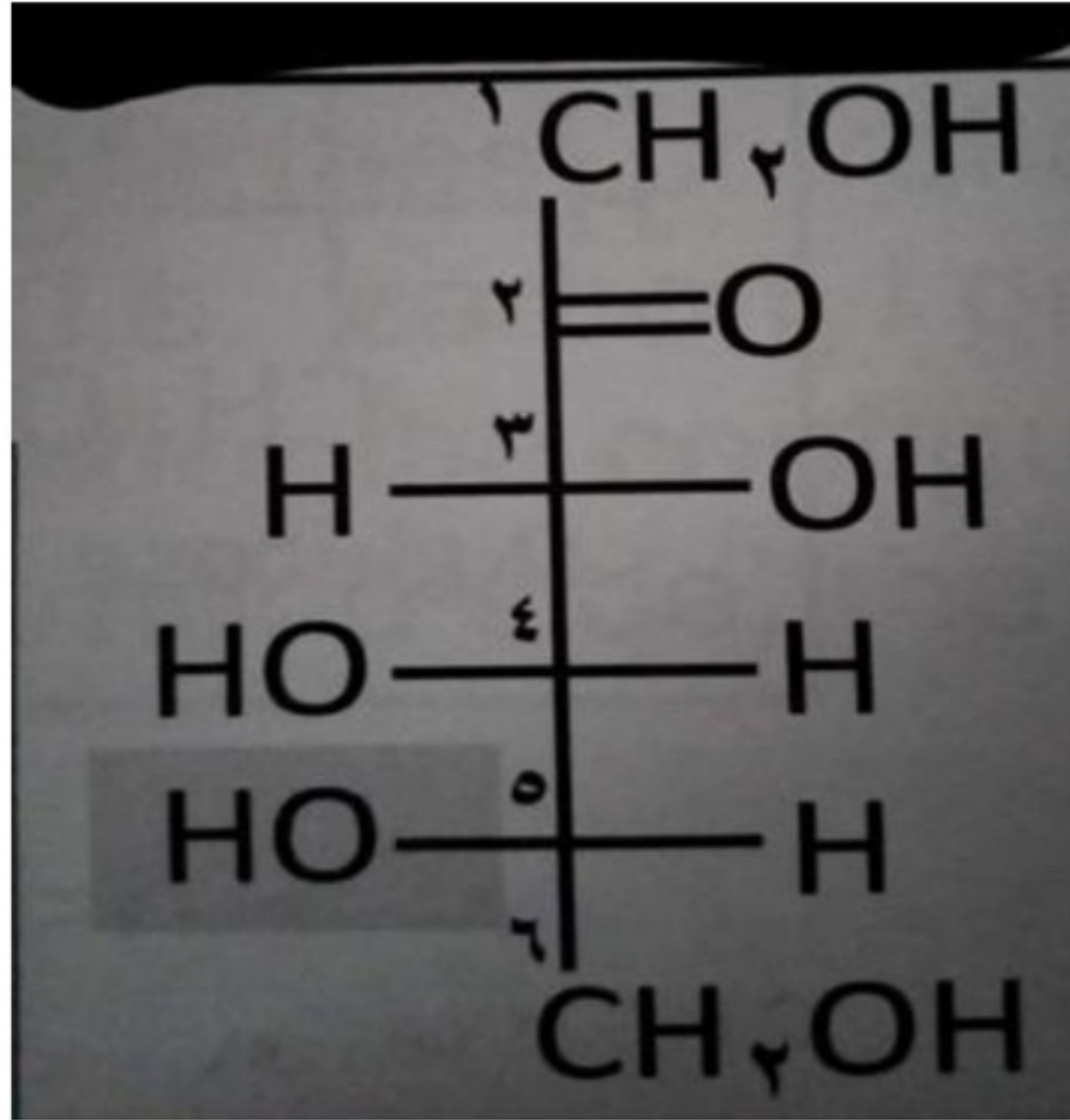
C. Conformers

D. Anomers

8. ((IN THE BELOW PICTURE of ribose)) How much of stereoisomers?



$$\begin{aligned} \text{Stereoisomers} &= 2^n \\ &= 2^3 = 8 \end{aligned}$$



- L-fructose

This sugar is «in picture»?

16. diastereomers 16- Dextrose is:

A. commercially a name of galactose

B. It is disaccharide

C. It is hexoses sugar

### 30. Glycogen and starch?

توضيح: السؤال يكون من النوع  
هنا راى كبراً وهو يكون  
الاجواب اوضح

- Starch can be linear, but glycogen is branched

### 31. The anomeric carbon is originated from:

- Carbonyl carbon



33. L-iduronic acid exists in:

8 | Page



- Heparin and dermatan

35. Less stable?

- OH group is alpha and axial position

44. picture and the OH is left-handed side:

- L- sugar

\* يكون يا صورة بالاحضان « بس هون  
لنا فذ فكره عن  
سؤال وكيف  
ببني صيدنة .. واليه نعام؟ نعام

19. The sugar found in RNA is:

A. Deoxyribose

B. Ribose

C. Ribulose

D. Erythrose

E. Sucrose

يارب يبي حرم  
الاعتقان ربي

21. In the formation of a macromolecule, what type of bond would join two monosaccharide's subunits?

A. peptide bond

B. glycosidic bond

C. phosphodiester bond

D. ionic bond

E. hydrogen bond

26. Enantiomers are all of the followings EXCEPT?

A. pair of stereoisomers

B. optically active

C. chiral molecules

D. mirror images

E. superimposable

Toya

34. The sugar found in DNA is?

A. Deoxyribose

B. Ribose

C. Ribulose

D. Erythrose

E. Sucrose



59. Enantiomers are one of the followings?

A. Pair of constitutional isomers

B. Optically active

C. Achiral molecules

D. Not always mirror images

E. Superimposable



63. The glucose is the main energy substrate in? Select one:

A. Brain cells

B. Skeletal muscles

---

29 | Page

C. Liver cells

D. Heart cells

64. If the OH group at ONLY one chiral carbon in the linear structure of monosaccharides is located on the right or the left, then the resulting stereoisomer is assigned as? Select one:

A. L-sugar

B. D-sugar

C. Epimer

D. α-sugar

E. β-sugar

65.  $C_6H_{12}O_6$  is the molecular formula of all of the following sugars EXCEPT?

Select one:

- A. Glucose
- B. Fructose
- C. Galactose
- D. Mannose
- E. Ribose

**ANSWER: E**

66. After the cyclic sugar formation, the carbonyl carbon will be converted to? Select one:

A. anomeric carbon

B. achiral carbon

---

30 | Page

C. alcoholic carbon

D. carboxylic acid

E. ketonic group

67. One of the following is not correct regarding cellobiose? Select one

A. It is a reducing sugar

B. This disaccharide results from degradation of cellulose

C. It consists of two  $\beta$ -glucose units

D. The monomers in cellobiose are found in the  $\beta$  - configuration and as cyclic pyranose rings

E. The glucose units are joined together by  $\alpha$ -1,4 glycosidic bond

ANSWER: E

68. Many factors affect calcium absorption, which of the following carbohydrate is effective in promoting the calcium absorption? Select one:

A. Sucrose

B. Maltose

C. Lactose

D. Xylose

E. Galactose

70. This polysaccharide is hetero, natural, linear and mainly found in mast cells?

Select one:

A. Glycogen

B. Hyaluronic acid

C. Dermatan sulphate

D. Heparin

E. Chitin

71. Regarding Lactose Intolerance, one of the following is correct?

Select one:

- A. It is caused by deficiency of the sugar lactose in milk
- B. It has symptoms like constipation and fever
- C. due to deficiency of lactase enzyme, the lactose found in milk will be absorbed from the wall of small intestine intact
- D. GIT disturbances are resulted from undegraded lactose reaching the colon intact
- E. Small babies are given the milk formula AR

**ANSWER: D**



