

# Carbohydrates

## Multiple Choice Question on Carbohydrates

**A positive Benedict's test is not given by**

- A.Lactose
- B.Maltose
- C.Sucrose
- D.Glucose

**The most important epimer of glucose is**

- A.Arabinose
- B.Fructose
- C.Galactose
- D.Xylose

**Q28 Analogue of starch is**

- A.cellulose
- B.glycogen
- C.sucrose
- D.pentose

**Q 29. Glucose is a monosaccharide and is a**

- A.hexose
- B.pentose
- C.furanose
- D.sucrose

**Q30. Linkage between two monosaccharides, is**

- A.ionic bond
- B.covalent bond
- C.hydrogen bond
- D.glycosidic bond

**Q31. If carbonyl group is an aldehyde monosaccharide is**

- A.ketose
- B.Tetrose
- C.aldose
- D.Maltose

**Q32. 3 carbon monosaccharides are called as**

- A. trioses
- B. Tetrose
- C. pentose
- D. hexoses

**Q33. Starch is a glucose polymer in which glucopyranose units are bonded by**

- A. alpha linkages
- B. beta linkages
- C. gamma linkages
- D. none of above

**Q34. The minimum number of carbons in monosaccharide is**

- A. 1
- B. 2
- C. 3
- D. 4

**35 Examples of Epimers**

- A. Glucose & Galactose
- B. Glucose & Ribose
- C. Mannose & Glucose
- D. a & c

**Q36. Majority of the monosaccharides found in the human body are of**

- A. L-type
- B. D-type
- C. DL-types
- D. None of the above

**Q37. For hydrolysis of starch, enzyme used is**

- A. glycosylase
- B. amylase
- C. polymerase
- D. helicase

**Q38. Sugar that makes up RNA is**

- A. ribose
- B. deoxyribose
- C. glucose
- D. pentose

**Q39. Maltose exists in**

- A.  $\alpha$  configuration
- B.  $\beta$  configuration
- C.  $\gamma$  configuration

D.all of above

**Q40. On heating starches are**

- A.Insoluble in water
- B.Soluble in water
- C.becomes a regular geometrical shape
- D.No effect of heat

**Q41. Units of carbohydrates which cannot be further hydrolyzed to simpler compounds are**

- A.disaccharides
- B.polysaccharides
- C.monosaccharides
- D.Oligosaccharides

**Q42. A monosaccharide switches from an open chain to a cyclic form through**

- A.hydroxylation
- B.carbation
- C.nucleophilicaddition
- D.hydrogenation

**Q43. Formula for monosaccharide is**

- A. $(CH_2O)_n$
- B. $C_nH_{2n}$
- C.both A and B
- D.none of above

**Q44. Hydrolysis of glycoside bond involves**

- A.breakdown of glycosidicbonds
- B.formation of glycosidicbonds
- C.formation of hydrogen bond
- D.formation of ionic bond

**Q45. 6 carbon rings have suffix**

- A.glucose
- B.fructose
- C.pyranose
- D.pentose

**Q46. If OH group is to left of last stereocentercarbon than configuration is**

- A.D
- B.L
- C. $\alpha$
- D. $\beta$

**Q47.Simplest form of sugars are usually**

- A.colorless
- B.water soluble

- C.crystalline
- D.all of above

**Q48. Lactose is an example of**

- A.polysaccharides
- B.monosaccharides
- C.Disaccharides
- D.Oligosaccharide

**Q49. A method of writing structural formula of carbohydrates to represent monosaccharide's cyclic structure with a simple 3D perspective is known as**

- A.Haworth projection
- B.Structural formula
- C.Empirical formula
- D.Simple formula

**Q50.When mixed with iodine glycogen turns**

- A.blue
- B.purple
- C.pink
- D.red

Question	Option	Answer
26	C	Sucrose
27	C	Galactose
28	B	Glycogen
29	A	Hexose
30	D	Glycosidic bonds
31	C	Aldose
32	A	Trioses
33	A	Alpha linkages
34	C	3
35	D	a & c
36	B	D type
37	B	Amylase
38	A	Ribose
39	A	$\alpha$ configuration
40	B	Soluble in water
41	C	monosaccharides
42	C	Nucleophilic addition

43	A	$(CH_2O)_n$
44	A	Breakdown of glycosidic bonds
45	C	Pyranose
46	B	L
47	D	All of the above
48	C	disaccharides
49	A	Haworth projections
50	D	red

: Which of the following are obtained from fruits, vegetables, and cereals?

1. monosaccharides
2. sucrose
3. cellulose
4. starch

Ans: A

Which of the following is used to make rectified spirit by fermentation process?

1. cellulose
2. starch
3. glucose
4. fructose

Ans: B Starch

The molecular formula of fructose is

1.  $C_{12}H_{22}O_{11}$
2.  $C_{18}H_{32}O_{16}$
3.  $C_6H_{12}O_6$
4.  $C_7H_{14}O_7$

Ans:  $C_6H_{12}O_6$

Upon hydrolysis oligosaccharides form

1. 1 to 8 molecules of simple sugars
2. 10 to 12 molecules of simple sugars

3. 5 to 8 molecules of simple sugars
4. 2 to 9 molecules of simple sugars

**Ans: D** 2 to 9 molecules of simple sugars

Starch is an example of?

1. monosaccharides
2. oligosaccharides
3. polysaccharides
4. lipids

**Ans: 3** polysaccharides

**Raffinose is an example of**

- A. monosaccharides**
- B. disaccharides**
- C. polysaccharides**
- D. Trisaccharides**

**Answer D**