

# Shagaf

## Biochemistry Mid

Done By:

Raghad Mohammad

Fatimah Atawi

Designed By :

Raneem Dmour



Q1. Which of the following sugars will give positive results in the Molisch, Benedict, Barfoed, and Seliwanoff tests?

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

Select the correct answer:

- 1. A only
- 2. B only
- 3. A and B only
- 4. B and C only
- 5. B and D only

**Ans : 2**

Q2. Which of the following tests is used to distinguish reducing monosaccharides from other carbohydrates?

- A. Molisch Test
- B. Benedict's Test
- C. Barfoed's Test
- D. Seliwanoff's Test

**Ans : c**

Q3. Which of the following describes a coiled structure in a single polypeptide chain?

- A. Beta sheet
- B. Alpha helix
- C. Random coil
- D. Tertiary structure

**Ans : b**

Q4. All of the following is consider as glucose derivatives expect?

- glucoraic
- B- glucoanic
- C- glycerin
- D- sibtol
- E -glucosamine

**Ans : c**

Q5. All of the following about Lactose Intolerance is true expect

- A- deficiency in Lactase enzyme
- B- deficiency in colon bacteria
- C- disturbances nausea, cramps and diarrhea
- D- is treated by give children LF

**Ans : b**

Q6. Th stereoisomer which different in all chiral center will

- A-Epimer
- B-anomer
- C- Enatomers
- D- isomer structure

**Ans : c**

Q7. If fructose tested in a polarimeter causes the plane of polarized light to rotate counterclockwise, which of the following is true

- .A. The fructose must be L-fructose
- .B. The fructose is optically active and described as (-) or (l)
- .C. The fructose is optically inactive
- .D. The fructose must be D-fructose

**Ans : b**

Q8. In single polypeptide chain contain hydrogen bonde between sindchains  
The structure between peptide bond will be

- A-secondary structure
- B- quaternary structure
- C- tertiary structure
- D- primary structure

**Ans : c**

Q9. After the cyclic surge formation the carbonyl carbon will be converted to

1. Ketonic group
2. Carboxylic group
3. Alcoholic carbon
4. Anomeric carbon

Ans : d

Q10. For solutions and buffers, Choose the wrong statement

- A. in solution the solvents can be gases
- B. All buffers are solution
- C. Solutions are non-homogeneous mixture
- D. Solutions made up of solvent and solutes
- E. A buffer is solution with a constant PH

Ans : c

Q11. Two sugars have mirror image but can't be superimposable

1. Anomers
2. Conformers
3. Enantiomers
4. Epimer

Ans : c

Q12. Solution with pH = 8 is ..... a solution with pH = 10

1. 100 times more basic
2. 2 times more basic
3. 2 times more acidic
4. 10 times more acidic
5. 100 times more acidic

Ans : e

Q13. The polysaccharide is hetero, natural, linear and mainly found in mast cells ?

1. Glycogen
2. Hyaluronic acid
3. Dermatan sulphate
4. Heparin
5. Chitin

Ans: d

Q14. One group of these sciences can lead to the under of the basic of biochemistry?

1. Biology , chemistry, physiology and anatomy
2. Chemistry, pharmacology, biology and pathology
3. Anatomy, physiology, physics and immunology
4. Anatomy, physiology, physics and immunology

**Ans : A**

Q15. Which of the following is not responsible for protein denaturation ?

1. Heat
2. Charge
3. PH change
4. Chaperone
5. Organic acid

**Ans : d**

Q16. Which is responsible of 3D structure of protein?

1. Chaperone
2. Inter hydrogen bond
3. Amino acid sequence
4. Peptide bond

**Ans: c**

Q17. All of these are function of the protein except?

1. Transport molecules
2. Work as receptors
3. Catalyze specific reaction
4. Contains genetic material

**Ans : d**

Q18. In an alpha helix, choose the correct statement?

1. There are usually many Glycine residues present
2. Side chain residues point up and down the axis of the helix
3. There are 3.6 residues per helical turn
4. The oxygen of the carbonyl carbon in a peptide bond points out toward the exterior of helix

**Ans : c**

Q19. The sequence of amino acid ( alanine, valine, lysin tryptophan, glycine, glutamate, proline, leucine) using the one code system is?

1. AVKWGEPL
2. AVKWTGEP
3. AVKLWTGP
4. ALVKWTGE

**Ans: A**

Q20. Which one of this can make polar covalent bond?

- A. Cl & H
- B. K & Na
- C. P & C
- D. Mg & Ca
- E. P & H

**Ans: A**

Q21. The Henderson Hassel Blach :

1. Show that  $\text{pH}$  equal to  $\text{pK}_a$  in all conditions.
2.  $\text{pH}$  is less than  $\text{pK}_a$ .
3. Relative between  $\text{pH}$ ,  $\text{pK}_a$ , acid concentration, conjugate base concentration
4.  $\text{pH}$  is more than  $\text{pK}_a$

**Ans:c**

Q22. The stronger the acid (choose the correct answer) ?

1. The higher the  $K_a$
2. The higher the OH concentration
3. The lower the  $k_a$  and  $\text{pK}_a$
4. The higher the  $\text{pH}$
5. The higher the  $\text{pK}_a$

**Ans:A**

Q23. If the Normality =3 of the  $\text{H}_2\text{CO}_4$ , the morality is?

1. 2
2. 3
3. 1.8
4. 1.5

**Ans:D**

Q24. For 6N of  $\text{H}_2\text{SO}_4$  the morality of this solution is to?

1. 1
2. 3
3. 12
4. 1.5
5. 18

**Ans: B**

Q25. How you can distinguish between glucose,fructose?

- 1.Seliwanoff test
- 2.Lodine test
- 3.Barford's test
- 4.Benedict's test
- 5.Molisch test

**Ans:A**

Q26. One of the following Amino acid is found in turns and known as the breaker :

- 1.Glycine
- 2.Alanine
- 3.Tyrosine
- 4.Valine
- 5.Uncharged glutamate

**Ans:A**

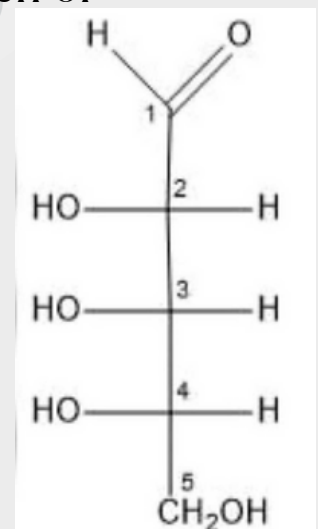
Q27. One of the following is correctly matched:

- 1.Sucrose-milk sugar
- 2.Glucose-blood sugar
- 3.Lactose-table sugar
- 4.Fructose-malt sugar

**Ans:B**

Q28.IN THE BELOW PICTURE OF RIBOSE)) How much of stereoisomers?

- 1.2
- 2.6
- 3.32
- 4.8
- 5.16



**Ans:4**