

بسم الله الرحمن الرحيم

BIOCHEMISTRY (Midterm- 2021)

إعداد:



1- The incorrect statement about disulfide bond is:

- a) It can occur intramolecule or intermolecule.
- b) It's a covalent bond.
- c) It can occur only on intramolecule
- d) It occurs between two closely cysteine residues
- e) the oxidation of two cysteine produce cystine

2- The molecule gives positive reaction in seliwanoff's test and negative reaction in Barfoed and Benedict test is a:

- a) Glucose
- b) maltose
- c) **Sucrose**
- d) lactose
- e) fructose

3- when you are in lab and use micropipette, you will change the tip if: ((if you working in a sterile conditions))?

- a) change your sample
- b) touches the flask
- c) touches your hand
- d) All of above statement
- e)

4- which of them form the covalent bond:

- a) P & H
- b) K & Na

c) P & Cl

d) H & Cl

e)

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

a) Bloating

b) diarrhea

c) headache

d) abnormal cramps

e)

6- All of the following is alpha amino acid except:

a) valine

b) Isoleucine

c) alanine

d) Phenylalanine

e)

7- A protein which has a sufficient of glycine and Proline is a/an:

a) Collagen

b) Myoglobin

c) keratin

d) Actin

e)

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

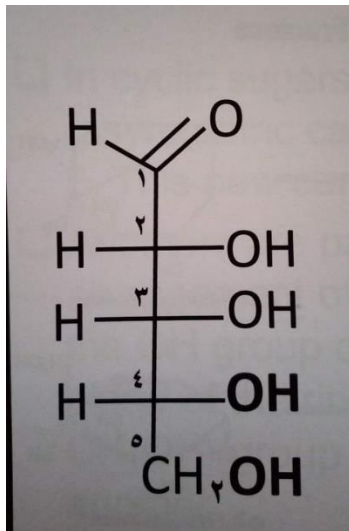
a) 4

b) 6

c) 8

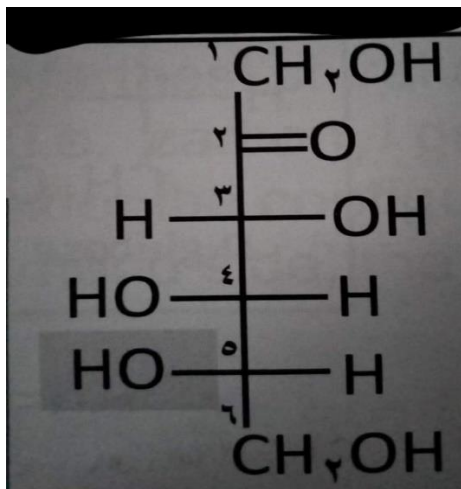
d) 10

e) 12



9-This sugar is (in picture)?

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- a)
- b)
- c)
- d)
- e) can not specified

10- The sequence of amino acid [alanine - valine - lysin - tryptophan - glycine - glutamate - proline - leucin] is?

- a) AVKEQGWPL
- b)
- c)
- d)

11- The folding process depends on all of them except:

- a) temperature
- b) Charge
- c) Ph degree
- d) Acid solvent
- e) Chaperones

12- Who is responsible of 3D structure of protein:

- a) Peptide bond
- b) Amino acid sequence
- c) Inter hydrogen bond
- d) Chaperons
- e)

13- All of these is function of the protein except:

- a) Transport molecules
- b) Work as receptors
- c) Catalyze specific reactions
- d) Protection from invaders
- e) Contains genetic material

14- The functional group (COOH) is:

- a) Amine group
- b) Phosphate group
- c) Aldehyde group
- d) Hydroxyl group
- e) **Carboxyl group**

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

- a) Epimers
- b) **Enantiomers**
- c) Conformers
- d) Anomers
- e) diastereomers

16- Dextrose is:

- a) commercial name of galactose
- b) It is disaccharide
- c) It is hexose sugar
- e) dextrorotatory

17- All of them can be rotated except:

- a) Proline
- b) Glycine
- c) Serine
- d)
- e)

18- All of them is alpha amino acids except:

- a) Serine
- b) Phenylalanine
- c) Glycine
- d) Proline
- e) GABA

19- If you have an acid with $pH = 6.5$,acid concentration = 0.32, conjugate concentration= 0.32 ,the pka is:

- a) 6.5
- b) 4.3.
- c)
- d)
- e)

20- Which one of this can make polar covalent bond:

- a) P & H
- b) Mg & Ca

- c) P & C
- d) K & Na
- e) **Cl & H**

21- The henderson hasselbalch:

- a) show that ph equal to pka in all conditions
- b) Ph is more than pka
- c) Ph is less than pka
- d) Relative between ph, pka, acid concentration , conjugate base concentration .
- e)

22- The best buffer occurs when:

- a) Conjugate base concentration = weak acid concentration
- b) Ph = 7
- c) Ph = 7.4
- d) Pka > ph
- e) Pka = 1

23- Which of these proteins is the second in the chromatography (gel transmission):

- a) Protein M = 65,000
- b) Protein M = 145,00
- c) Protein M = 24,000
- d) Protein M = 350,00
- e) Protein M = 33,000

وصلنا السؤال بصيغة أخرى:::

Which of these molecules are second eluted in exclusion gel chromatography?

الجواب كان ثاني اكبر وزن يعني بنرتب الارقام من الاكبر للاصغر وبنختار الرقم الثاني

24- Molisch test reagent is:

- a) Naphthol
- b)
- c)
- d)
- e)

25- How you can distinguish between glucose, fructose, and sucrose:

- a) Barford's test
- b) Benedict's test
- c) Iodine test
- d) Seliwanoff test
- e) Molisch test

26- One of these symptoms are not caused by glucose intolerance:

- a) Headache
- b)
- c)
- d)
- e)

27- Which of the following is true?

- a) H-bond is roughly parallel to the α -helix
- b)

c)

d)

e)

28- Which of the following is not a derivative from tyrosine?

a) Serotonin

b) ,

c) ,

d) ,.

e) ,

29- All amino acids are alpha except:

Alanine

30- Glycogen and starch?

Starch can be linear but glycogen is branched

31- The anomer carbon is originated from:

Carbonyl carbon

32- At which of the following , both functional groups of the amino acid are fully protonated:

PH=1

33- L-iduronic acid exists in:

Heparin and dermatan

34- Antiparallel β sheet is more stable than parallel sheets because the latter:

Have less hydrogen bonds than antiparallel

35- Less stable?

Oh group is alpha and axial position

36- Genetics?

Is the study of nucleic acids

37- Which of the following is standard amino acid?

Phenyl alanine

38- Regarding phenylketonuria All true except:

It's characterized with high levels of tyrosine

39- Very active area of research by biochemists:

a) lipidomic and glyceimic

b) pharmacogenetics and genomic

40- in colectomy we use ...?

Carcinoembryonic

41- one of the following clinical biochemistry:

diagnosis .therapy and treatment من ضمن الخيار مكتوب

42- when you in lab and the acid splatters into your hand what you should do:

a) water

b) weak base

c) natural soap

43- you will carry 155 micl, what pipette will you use?

20-200micropipettes

44- for 6N of H₂so₄ the molarity of this solution is equal to:

3

45- picture and the OH is left handed side:

L- suger

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-3

في سؤال كان على البروتين انا مش متذكره بالضبط صراحة ، بيجوز متذكر شيء من نصه
بس متذكر موضوعه ، بسسال عن

. اعتقد هيك اسمه Ribocleolus enzyme

ولا اذكر شيء آخر عنه

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-4 في سؤال عن الهيدروجين بوند ، حط مجموعة عبارات وا