1)Serotonin derived from?

A) Tyrosine

b) Tryptophan

c) histamine

d) Phenylalanine

Ans: B

2)Any of these pairs have equal PH?

A) 2 M HCL , 1 M HNO_3

b) 1 M HCL , 1 M NaOH

C) 1 M HCL , 0.5 M H_2SO_4

D) 1 M $Ca(OH)_2$, 0.5 M NaOH

Ans: C

3) Which of these unique about sucralose?

A) Make from glucose and galactose

B) Naturally present in human body

C) It is used to treat damage DNA

D) All its structure rings contain Cl

Ans: D

4)Which incorrect about GAGs?

A) All have negative charge

B) most abundant GAG is chondroitin sulfate

C) Derived from fructose and glucose

D) The Structure represents 2 repeated units

Ans: C

5)Which lipoprotein has high density of protein relative to lipid?

A) HDL

B) LDL

C) IDL

D) Chylomicrons

Ans: A

6) fructose can not be oxidized, but with benedicts test show positive result, why?

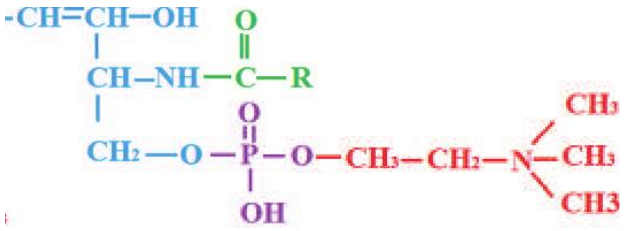
A) By convert it to its isomer, glucose

B) Due to the formation of lactones

C) we use Ca ion in the reaction

Ans: A

7) The structure represent?



A) Ceramide

B) Plasmalogen

C) Cardiolipin

D) Sphingomyelin

Ans: D

8) Choose the correct answer regarding to sulfatides?

A) contain phosphate and sulfate group

B) Are glycolipids

C) We use it to differentiate between blood type

D) have backbone of glycerol

Ans: B

9) Which polysaccharide make of galactose and derivative of galactose?

A) Lactulose

B) Dextran

C) Chitin

D) Pectin

ANS: D

10) Mannose and glucose are?

A) Constitutional isomers

B) Epimers

C) Enantiomers

D) Anomers

Ans: B

11)How Aspirin inhibit inflammatory:

A) Stimulation of eicosanoids

B) Inhibition of eicosanoids

C) Stimulation enzymatic production of eicosanoids

D) Block enzymatic production lf eicosanoids

Ans: D

12)Which bond is the strongest?

A) Between NaCl

B) AMIDE BOND

C) Non covalent

D) Hydrophobic interaction

Ans: B

13) What type of bond connect the chains of immunoglobulin ?

A) Sulfide bond

B) Amide bond

C) Electrostatic bond

D) van der waals

Ans: A

14) Why raffinose make bloating?

A) Pull H2O toward it

B) Because it a polysaccharide

C) Enzyme that is need to break it absent

D) The bond in it very strong can not be broken

ANS: C

15) What true about compensation in respiratory alkalosis?

A) Brain work immediately and take control

B) work in both H+ and HCO3-

C) breathing rate change

D) The reaction go toward H+ and HCO3-, favorable to make HCO3-

Ans: D

16) what is true about disaccharide connecting by 1-2 linkage?

A) non reducing suger

B) can be lactose

C) The body lacks from its digestive enzyme

Ans: A

17) What is the net charge of " SER , GLU , ASP , LEU , ARG " in physiological PH?

A) +1

B)0

C)-1

D)-2

E)+2

Ans: C

18)The correct choice about water at 25 c:

A) PH= -Log OH

b) CON of OH- = CON of H3O+

C) 0H- = H3O+ = 1 * 10 -14

ANS: B

19) You have 10 grams , 20 M.W and 500 ml of HCL . You take 50 ml of it and want to titrate it with 10 molarity of NaOH , What is the volume of NaOH you need?

A)5

B)2.5

C) 10

D) 7.5

ANS: A

20) The only hydroxyl group in cholesterol is?

A) Carboxyl

B) Hydroxyl

C) Sulfate

D) Rings

Ans: B

21) Which is not true about 20:4 cis 5,8,11,14?

A) Linoleic acid it's precursor

B) It's common name Arachidonate

C) Control several function in response to injury

D) omega 3

Ans: D

22)Ribbon structure represent:

A) Secondary structure

B) Orientation of subunits

C) Sequence of amino acids

D) The 3 dimensional structure

Ans: A

23) What are the 2 amino acid that responsible for the beta turn?

A) LYS , ARG

B) PRO , HIS

C) GLY , ALA

D) PRO , GLY

Ans: D

24) Which isn't true about PKa?

A) Even strong acids have PKa

B) The number of hydrogens the acid can donate is not related to the PKa

C) The lower the PKa the stronger the acid

D) Diprotonated acids will have 2 PKa

Ans: B

25)0.2 M of His is prepared at PH 5. How many moles of NaOH should we add to reach PH 6?

A)0.1

B)0.2

C)0.3

D0.4

Ans: C

26) Why proline can not form alpha helix ?

A) it is polar

b) can rotate around amide bond

c) too small

d) has secondary nitrogen

Ans: D

27) van der waals week but important because?

a) they form every where

b) the distance does not matter

c) there is a lot of them

Ans: C

28) The most important buffer in blood ?

A) carbonic acid bicarbonate

b) dihydrogen phosphate

c) proteins

d) ATP

Ans: A