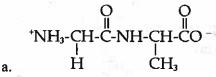
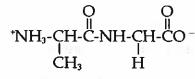
ame:		Class:		Date:	A 200	ID: A
iochemi	stry Unit 4 Review					A Company * Company
Iultiple C	hoice	The state of the s				Needling a street of the state
lentify the	choice that best completes	the statement or an	swers	the question.		salas a magan blaka jar
1.	Nitrogen's abundance amor class of compounds?	ng organic compour	nds is	primarily the	result of t	the wide distribution of which
	a. aimides b.	amides	c.	amines	d.	imides
2.	 What is the basis for classi a. the number of carbon a b. the number of nitroger c. the number of hydroge d. any of the above may lead 	atoms bonded to a ratoms present atoms present			r tertiary?	
3.	Which of the following is t	he simplest aromat	ic am	ine?		
	a. anilamine b.	12/21/21/27	c.	TERRETOR PROTECTION	d.	benzylamine
4.	amine?	ber of hydrogen ato	oms w	hich can be a		a nitrogen atom in a heterocyclic
5.	a. 0 b. Which chemical property of		c.	2 (N) (N) (N) (N)	d.	3
	a. their reactivity with mb. their reactivity with stc. their reactivity with std. their similarity to alka	rong acids rong bases	ch as	sodium and po	otassium	
6.	Control of the contro		ine w			
	a. the amine is a 1° amin		c.	the amine is	and dates in	
	b. the amine is a 2° amin	e 🖊 🐧	d.	the amine ha	is more th	an one N atom
		/ >	NC ₂	H ₅		
7.	What is the common name	of _		?	Alleria Sa	grave and second and the
	a. ethylaniline b. ethylphenylamine		c. d.	phenylethyla N-ethylanili		
8.	그 회사 없는 어릴 때문장 기사들은 경기를 받는다.	of CH2-NH-C2H5	?			
	a. ethylmethylamine		c.	N-methyleth	anamine	
	b. methylethylamine	1 min - 7	d.	propanamin	е	
9.	The same of the sa	characteristic of rel	ative			
	a. they are odorless	100	C.	Strain and the lead of the ball	A Property of the last	
	b. they have mild, pleasa		d.			pleasant odors
10.	a. CH ₃ NH ₂ b. (CH ₃) ₂ NH	and one may	43	no hydrogen		
	c. (CH ₃) ₃ N			nik hindusia		
	d. none, pure samples of	all these have hydi	rogen	bonds	Harry Land	TRACTOR AND ADDRESS OF THE PARTY OF THE PART

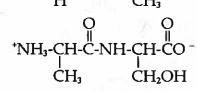
_	11.	Which of the following is true?
		a. the N-H bond is nonpolar
		b. the N-H bond is polar but its polarity is less than that of the O-H bond
		c. the polarity of the N-H bond is the same as that of the O-H bond
		d. the polarity of the N-H bond is greater than that of the O-H
_	12.	Which of the following is true of the solubility of amines?
		a. all amines are insoluble in water
		b. all amines are soluble in water
		c. most low molecular weight amines are soluble in water d. amines decompose when water is added to them
	12	O Demanda control III adda a control
_	15.	Trimethylamine, ethylmethylamine, and propylamine are isomers. Based on their shapes and hydrogen bonding ability which of the following is true regarding their boiling points?
		a. they all have very nearly the same boiling points, so it is hard to predict the order
		b. the predictions based on shape are opposite to those from hydrogen bonding ability, so it
		is hard to predict the order
		c. propylamine < ethylamine < trimethylamine
		d. propylamine > ethylamine > trimethylamine
	14.	Which of the following has the highest boiling point?
		a. butane b. 1-propanamine c. 1-propanol d. 2-propaname
	15.	Which of the following gives the correct order of solubility in water?
		a. $C_2H_5NH_2 < C_4H_9NH_2 < C_6H_{13}NH_2$ c. $C_6H_{13}NH_2 < C_4H_9NH_2 < C_2H_5NH_2$
		b. $C_2H_5NH_2 < C_6H_{13}NH_2 < C_4H_9NH_2$ d. $C_6H_{13}NH_2 < C_2H_5NH_2 < C_4H_9NH_2$
1000	16.	Although many amines are insoluble in water they can be dissolved in which of the following?
- 20		a. acids c. both (a) and (b)
		b. bases d. neither (a) nor (b)
	17.	Although all biological molecules are important, which type of molecules is considered the most important
		a. amino acids b. carbohydrates c. lipids d. proteins
	18.	Which functional group is involved in linking together the amino acids of proteins?
		a. amine b. amide c. carbonyl d. carboxyl
	19.	Proteins are associated with which of the following functions?
		a. catalysis b. movement c. storage d. all of these
	20.	Which of the following is a structural protein?
		a. cellulose b. collagen c. hemoglobin d. insulin
	21.	Which of the following is a protein associated with the movement of muscles?
		a. actin b. ferritin c. hemoglobin d. insulin
	22.	Which of the following is a protein associated the storage of iron?
		a. actin b. ferritin c. hemoglobin d. insulin
	23.	Which of the following proteins is a hormone?
		a. casein b. hemoglobin c. insulin d. all of these
	24.	Which of the following is true of the solubility of proteins in water?
		a. both fibrous and globular proteins are generally insoluble in water
		b. both fibrous and globular proteins are generally soluble in water
		c. fibrous proteins are generally insoluble in water
		d. globular proteins are generally insoluble in water

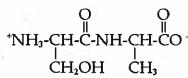
	25.	Which of the following is not a fibrous pro	tein?			50 10 10	
		a. actin	c.	keratin			
		b. collagen	d.	none, they are	all fibro	us proteins	
	26.	How many different amino acids are comm	nonly for	and in proteins?			
100		a. 10 b. 20	C.	200	d.	1000	
	27.	What is the most important property of the	R group	s of the amino a	cids?		
160		a. their polarity b. their shape	c.	their size	d.	none of thes	e
	28.	In which of the following do both amino a	cids cont	ain a sulfur aton	n?		
1841)		a. cysteine and glycine	c.	histidine and m		ne	
		b. cysteine and methionine	d.	phenylalanine	and tryp	otophan	
	29.	Which of the following explains the unusu	ally high	melting points	of amin	o acids?	
× 65		a. their formula weights	c.	the presence of	f nitroge	en atoms	
		b. the polarity of the side chains	d.	their existence	as zwit	terions	
g1 /	30.	What determines the characteristics of an	amino ac	id?	17:3-4	905	
		a. its molecular weight	c.	both (a) and (b			
		b. the identity of its side chain	d.	neither (a) nor	(b)		
25=	31.	What is the relationship between ala-gly a	and gly-a	ala?			
7		a. none, they are the same	c.	they are isome			
		b. they are allotropes	d.	they are mirror	r images	STATE OF THE	
	32.	What is a residue?					
la local		a. an amino acid which has been severed	d from a	protein			
		b. any individual amino acid in a proteir					
		c. the portion of a protein which remain C-terminus	s after or	ne amino acid ha	s been r	emoved from	the
		 d. the portion of a protein which remain N-terminus 	s after or	ne amino acid ha	is been i	removed from	the
	33.	When naming a protein or polypeptide wh	nich of th	e following is tr	ue?		
a .		a. the convention for proteins is differen		The second secon			
		b. they are named from the C-terminus t	to the N-t	terminus			
		c. they are named from the middle towa				and the same	
		d. they are named from the N-terminus	to the C-1	terminus		2.50	
	34.	Protein synthesis proceeds in which direct					
		a. from the C-terminus to the N-terminu					
		b. from the middle towards the two ends				5 41 100 100	y for
		c. from the N-terminus to the C-terminu		in particular			
		d. the direction varies from one protein	to anothe	er		100	i y
		Chief Chief Chief	O	O			
		NH₃-ÇH-C-NH-C	H-C-NE	I-CH-CO			
	25	How is the tripentide CH ₃	HSH	l CH₂COOH d	ooiomat-	40	
1/2-10	35.	How is the tripeptide CH ₃	11011	C112COO11 ()	esignate	U.S. Company	

36. Which of the following is glycylalanine?









- 37. Which of the following is true of proteins?
 - a. all proteins are acidic
 - b. all proteins are basic
 - c. all proteins are neutral
 - d. the acid/base properties of a protein depend on the identity of its side chains
- 38. Which of the following defines the primary structure of proteins?
 - a. the geometric arrangement of the backbone atoms
 - b. the geometric arrangement of the side chains
 - c. the sequence of the amino acids
 - d. all of the above
- ___ 39. How many tripeptides can be made using the 20 standard amino acids?
 - a. 60

b.

- b. 400
- c. 6840
- d. 8000
- 40. Which of the following correctly describes relationship between the primary structure of a protein and protein function?

c.

d.

- a. changing one amino acid always affects protein function
- b. changing one amino acid may or may not affect protein function
- c. changing one amino acid never affects protein function
- d. there is no relationship between primary structure and protein function
- 41. Which of the following is a type of secondary structure?
 - a. α-helix

c. both (a) and (b)

b. β-pleated sheet

- d. neither (a) nor (b)
- 42. Which of the following contributes to the tertiary structure of proteins?
 - a. the sequence of amino acids
 - b. hydrogen bonding within the backbone
 - c. hydrogen bonding between the side chains
 - d. the interaction of protein subunits
 - 43. Which of the following pairs of amino acids can form a salt bridge?
 - a. alanine and glutamic acid
- c. leucine and phenylalanine

b. aspartic acid and lysine

- d. serine and tyrosine
- 44. Which of the following pairs of amino acids has hydrophobic interactions?
 - a. alanine and glutamic acid
- c. leucine and phenylalanine

b. aspartic acid and lysine

- d. serine and tyrosine
- 45. What is the name for proteins which assist other proteins attain their correct secondary and tertiary structures?
 - a. AGE's
- o. chaperones
- c. prions
- d. proteinaids

						I	D: A
16	Which of the following is aggregated	d with the gues		faratai	ma?		
1 0.	Which of the following is associate a. the sequence of amino acids	a with the quan	ernary structure of	i protei	118 :	the street	
	a. the sequence of amino acidsb. hydrogen bonding within the b	ackhone					
	c. hydrogen bonding between the						
	d. the interaction of protein subur						
	A Street Service Control of the Cont						
4/.	How many protein chains make up	**** **** ***** **********************	2	V 15			
	a. 1 b. 2	c.	3	d.	4		
48.	Which level of protein structure is						
	a. primary b. second	lary c.	tertiary	d.	quaternary		
49.	Which part of an amino acid determ	nines its behavi	or?				
	a. n-terminal	c.	R side chain				
	b. c-terminal	d.	peptide bond				
50.	Due to the nature of amines they ca	ın behave as aci	ds or bases, this i	s called	100		
	a. amphoteric	c.					
	b. neutrophile	d.	zwitterion				
51.	List the ways an amino acids side of A)	B)			- 14. Project		
31.	A)	B) D)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
31.	A)	B) D)		A 15			
	A)	B) D)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A)	B) B) D) F)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A)	B) B) D) F)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A) C) E) List the functions of a protein. A)	B) B) F) B)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A)	B) B) D) F)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A) C) E) List the functions of a protein. A)	B)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A) C) E) List the functions of a protein. A) C)	B) B) F) B)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A) C) E) List the functions of a protein. A) C)	B)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
	A) C) E) List the functions of a protein. A) C) E)	B)	un eta Trago ^a (decesio) Tarronoga (ser	A 15			
52.	A)	B)			ide and who	ra the side of	a inc
	A)	B)	side chains in a p	olypept			
52.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			
52.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			
52.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			
52.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			
52.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			
552.	A)	B) D) B) B) B) F) B) F) Ceen amino acid cture. (refer to	side chains in a p	olypept			

54. Complete the following illustrations and determine the classification of the amines (1°, 2°, or 3°).

3-methyl pentanamine

N-propyl butanamine

Class:

Class:

N,N-diethyl propanamine

Class:

cyclohexanamine

Class:

55. Complete the following illustrations of the peptides. Please illustrate them in the charged Zwitterion state. Label the N-terminal, C-terminal, R-group and peptide bonds.

Glu-Ser-Lys

Asp-Gly-Val