

Name: _____

Date: _____

Time: _____

1 Draw structural formulas.

Acetoacetic acid

Lactone derived from 4-hydroxypentanoic acid

Acetylcholine

Ethanolamine

Butyl sulfate

Glyceric acid

2 Write reaction using structural formulas and give the names of products.

6

Dehydrogenation and deamination of glutamate:

Names of products

Conversion of fumarate in citrate cycle:

Names of products

4

3 Draw the structure of valine prevailing at pH 5
($pK_{A1} = 2.3$; $pK_{A2} = 9.7$).

4 Draw the structure of adenosine.

1

1

5 Draw the structure of cysteinyl-serine.

6 Draw the structure of α -D-galacturonic acid.

1

1

7 Draw the structure of phosphatidylethanolamine.

1

8 Consider the reaction $A \rightarrow P$. Draw the dependence of reaction velocity v on time t for this reaction.



1

9 A strong acid was added to hydrogen carbonate buffer. Express the buffer response by chemical equation.

1

Exam evaluation:

	50 - 57	excellent (A)
	47 - 49	outstanding (B)
1. Part:	42 - 46	good (C)
2. Part:	38 - 41	satisfactory (D)
Total:	34 - 37	acceptable (E)
Signatures:	0 - 33	unacceptable (F)