

Quiz II

Biochemistry II

October 28, 2008

Name: _____

ID (学号): _____

1. Which of the following statements correctly describes ketone bodies?
- A. They accumulate in the children with fatty acid oxidation disorders.
 - B. They accumulate in diabetes mellitus after insulin therapy
 - C. They are produced by muscle but not liver
 - D. They include β -hydroxybutyrate and acetone
 - E. They are found in blood but not in urine

Answer _____

2. Antimycin A blocks electron transfer between cytochromes *b* and *c*₁. If intact mitochondria were incubated with antimycin A, excess NADH, and an adequate supply of O₂, which of the following would be found in the oxidized state?

- A. Coenzyme Q
- B. Cytochrome *a*₃
- C. Cytochrome *b*
- D. Cytochrome *e*
- E. Cytochrome *f*

Answer _____

3. The reactions of the urea cycle occur
- A. In the cytosol
 - B. In the mitochondrial matrix
 - C. In the mitochondrial matrix and the cytosol
 - D. In the lysosomes
 - E. In peroxisomes

Answer _____

4. The conversion of pyruvate to oxaloacetate is likely to require which of the following coenzyme?

- A. Biotin
- B. Vitamin B₁₂
- C. Thiamine pyrophosphate
- D. Flavin adenine dinucleotide
- E. Pyridoxal phosphate

Answer _____

5. Which of the following would describe fatty acid transport into the mitochondrial matrix? (***With more than one correct answers***)

- A. It is not the rate-limiting step in fatty acid oxidation.
- B. It is regulated by malonyl-CoA.
- C. The cytosolic and matrix pools of CoA are distinct and separate.
- D. Once fatty acyl groups have entered the matrix, they are committed to oxidation to acetyl-CoA.

Answers _____