**QUIZ Ⅱ**

**Biochemistry Ⅱ November 13, 2014**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_ ID(学号):\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Carnitine is used
2. for transport of fatty acids through the bloodstream to tissues.
3. for transport of fatty acids across the inner mitochondrial membrane.
4. to deliver triacylglycerols from the intestine to tissues via the bloodstream.
5. to transport fatty acids from the bloodstream into cells and tissues.

**Answer\_\_\_\_\_\_B\_\_\_\_\_\_\_**

1. Which of the following carries electrons to P700 of Photosystem Ⅰ?
2. Cytochrome *c* B. Cytochrome *b* C. Plastocyanin
3. Ubiquinone E. Plastoquinone

**Answer\_\_\_\_\_\_E\_\_\_\_\_\_\_**

1. When Dicycloclohexylcarbodiimide (DCCD) is added to a suspension of tightly coupled, actively respiring mitochondria, the rate of electron transfer and the rate of ATP production dramatically decrease. If a solution of 2, 4-Dinitrophenol (DNP) is now added to the preparation, O2 consumption returns to normal but ATP production remains inhibited. Which of the following inhibitor does DCCD most resemble in its action?
2. rotenone B. antimycin A C. oligomycin D. valinomycin E. CO

**Answer\_\_\_\_\_\_C\_\_\_\_\_\_\_**

1. Which types of amino acids are ketogenic?
2. those that are degraded to fumarate
3. those that are degraded to succinyl-CoA
4. those that are degraded to α-ketoglutarate
5. those that are degraded to acetyl-CoA

**Answer\_\_\_\_\_\_D\_\_\_\_\_\_\_**

1. Which of the following processes or reactions take place in the mitochondrial matrix? ***(With more than one correct answers)***
2. the reactions catalyzed by glutamate dehydrogenase
3. β-oxidation of fatty acids
4. photosynthesis
5. the reaction catalyzed by carbamoyl phosphate synthetase Ⅰ
6. the reaction catalyzed by α-ketoglutarate dehydrogenase complex
7. the reaction catalyzed by glyceraldehydes 3-phosphate dehydrogenase
8. the pentose phosphate pathway

**Answer\_\_\_\_ABDE\_\_\_\_\_\_\_\_\_**

Answer for QUIZ Ⅱ(November 13, 2014):

1. B
2. C
3. C
4. D
5. ABD

**QUIZ Ⅱ**

**Biochemistry Ⅱ November 14, 2014**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_ ID(学号):\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Complete β-oxidation of a 18-carbon saturated fatty acid
2. generates nine molecules of NADH
3. requires nine β-oxidation cycles
4. generates nine molecules of FADH2
5. generates nine molecules of acetyl-CoA

**Answer\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Which of the following donates electrons to mitochondrial cytochrome oxidase?
2. Cytochrome *b* B. Cytochrome *c* C. Plastocyanin
3. Ubiquinone E. Plastoquinone

**Answer\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Which of the following is true about photosystemⅠ(PSⅠ) of plants?
2. It evolves O2.
3. It splits water.
4. It produces NADPH.
5. It passes electrons to photosystemⅡ(PSⅡ)

**Answer\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Which types of amino acids are both ketogenic and glucogenic?
2. those that are degraded to sunccinyl-CoA
3. those that are degraded to pyruvate
4. those that are degraded to oxaloacetate
5. those that are degraded to acetyl-CoA

**Answer\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Which of the following processes or reactions take place in the mitochondrial matrix? ***(With more than one correct answers)***
2. the reactions catalyzed by pyruvate dehydrogenase complex
3. the reactions catalyzed by glyceraldehydes 3-phosphate dehydrogenase
4. the reaction catalyzed by β-hydroxyacyl-CoA dehydrogenase
5. formation of urea from arginine catalyzed by arginase
6. the reactions catalyzed by glutamate dehydrogenase
7. photosynthesis
8. formation of carbamoyl phosphate

**Answer\_\_\_\_\_\_\_\_\_\_\_\_\_**

Answer for QUIZ Ⅱ(November 14, 2014):

1. D
2. B
3. C
4. B
5. ACEH