



Quaid-i-Azam University
B. Sc Annual Examination
Paper-C Biochemistry-III
(Objective Model Paper)

Maximum Marks: 40

Time : 3 Hours

Note:- Question No. 1 is compulsory. Additionally attempt any four questions. All questions carry equal marks.

SECTION –A

Q. 1a) Encircle the correct option.

04 Marks

- The product of urea cycle are
 - 1 molecule of urea, 1 molecule of ammonia, 1 molecule of ATP and 1 molecule of fumaric acid
 - 1 molecule of fumaric acid, 1 molecule of urea, 1 molecule of AMP, 2 molecules of ADP
 - 1 molecule of aspartic acid, 1 molecule of ammonia, 1 molecule of fumaric acid, 1 molecule of ATP
 - None of the above
- Which of the following is used as carbon atom source while producing urea in the urea cycle?
 - Arginine
 - Aspartic acid
 - Carbon dioxide
 - Glucose
- Oxidative deamination is the conversion of an amino
 - group from an amino acid to a keto acid
 - acid to a carboxylic acid plus ammonia
 - acid to a keto acid plus ammonia
 - group from an amino acid to a carboxylic acid
- An example of a transamination process is
 - glutamate = hexanoic acid + NH_3
 - aspartate + hexanoic acid = glutamate + oxaloacetate
 - aspartate + α ketoglutarate = glutamate + oxaloacetate
 - glutamate = α -ketoglutarate + NH_3

5. How many molecules of ATPs are synthesized per NADH oxidation?
A. 2 B. 1 C. 3 D. 4
6. In what form does the product of glycolysis enter the TCA cycle?
A. Acetyl CoA B. Pyruvate C. NADH D. Glucose
7. In the intestine, the dietary fats are hydrolysed by
A. triacylglycerol lipase B. adenylate cyclase C. pancreatic lipase D. protein kinase
8. In eukaryotes fatty acid breakdown occurs in
A. mitochondrial matrix B. cytosol C. cell membrane D. endoplasmic reticulum

b) Fill in the blanks with appropriate words.

04 Marks

1. Synthesis of fatty acids takes place when -----and -----are plentiful.
2. Animals cannot convert fatty acids into glucose because----- can not be converted to pyruvate.
3. The released energy obtained by oxidation of glucose is stored as-----.
4. During glycolysis, the major energy generating step involves-----.
5. FAD is reduced to FADH₂ during-----.
6. A person with phenylketonuria cannot convert phenylalanine to-----.
7. In electron transport, electrons ultimately pass to-----.
8. Purines constitutes of ----- and -----.