

Chapter 2 Metabolism

1. Which of the following are a fat-soluble vitamin?
(A) Vitamin D
(B) Vitamin K
(C) Vitamin C
(D) Vitamin A
2. Which of the following are reduced coenzymes?
(A) NADH
(B) FAD
(C) FADH₂
(D) ubiquinone
3. Lipoic acid exists
(A) In reduced form
(B) As diastereomers
(C) In oxidized form
(D) As enantiomers
4. Mark the CORRECT statement about Ascorbic acid.
(A) It is a strong reducing agent
(B) It can have synthesized in the body
(C) Involves in hydroxylation of prolyl- and lysyl- residues of collagen
(D) Shows antioxidant activity
5. The end products of respiration in plant are
(A) energy
(B) H₂O
(C) CO₂
(D) sugar
6. Metabolism of TCA cause the breakdown of
(A) polysaccharides
(B) fats
(C) carbohydrates
(D) protein
7. Which of the following enzymes acts in the pentose phosphate pathway?
(A) Glycogen phosphorylase
(B) 6-phosphogluconate dehydrogenase
(C) 6-phosphogluconolactonase
(D) Pyruvate kinase
8. Which of the following are the factors determining the activity of an enzyme?
(A) Association with regulatory protein
(B) Sequestration
(C) Allosteric regulation
(D) Nucleotides

9. The enzymes which catalyze the reactions in both glycolysis and gluconeogenesis are
(A) phosphohexose isomerase
(B) triose phosphate isomerase
(C) aldolase
(D) hexokinase
10. The glycolytic enzymes are subjected to allosteric regulation are
(A) hexokinase IV
(B) pyruvate dehydrogenase
(C) PFK-1
(D) pyruvate kinase

Answer Key

1. (A) (B), (D)
2. (A), (C)
3. (A), (C), (D)
4. (A), (C), (D)
5. (A), (B), (C)
6. (A), (B), (D)
7. (B), (C)
8. (A), (B), (C)
9. (A), (B), (C)
10. (A), (B), (D)