

Chapter 4
Biochemistry and Molecular Biology

1. Which of the following are example of transition mutation?
(A) A replaced by G
(B) G replaced by T
(C) T replaced by C
(D) C replaced by A
2. The codon for amino acid tryptophan are
(A) GUU
(B) GUC
(C) GCU
(D) GUG
3. Enzymes catalyzed biochemical reactions by
(A) destabilize bonds within the substrate
(B) changing conformation of enzyme over substrate
(C) stabilizing the transition state of the reaction
(D) increasing the ΔG of the reaction
4. From the point of view of the enzymatic reactions, which of the following belong here?
(A) Telomerase
(B) Reverse transcriptase
(C) *Taq* polymerase
(D) Primase
5. The end products of glycolysis include
(A) pyruvate
(B) H₂O
(C) NADH
(D) ATP
6. Glucose monomers are joined by glycosidic linkages to form a cellulose polymer. Which of the following changes occur during this process?
(A) $+\Delta G$
(B) $-\Delta T$
(C) $+\Delta H$
(D) $-\Delta S$
7. Mark the CORRECT match.
(A) Transferrin – binds iron
(B) Insulin – uptake of glucose
(C) α -Macroglobulin – binds to oxygen in RBC
(D) Fibronectin – substratum for cell attachment
8. The value of RQ depends upon the
(A) production of CO₂
(B) type of respiratory substrate
(C) oxidation of O₂

(D) the completeness of oxidation

9. Which of the following are CORRECT about Shine-Dalgarno?
(A) It is a sequence of bases (5'-UAGGAGG-3')
(B) It is located 6-01 bases upstream of the AUG.
(C) It is identified by the 16s RNA
(D) It is associated with the transcription
10. Reverse transcriptase is
(A) RNA dependent DNA polymerase
(B) DNA dependent DNA polymerase
(C) RNA dependent RNA polymerase
(D) DNA dependent RNA polymerase

Answer

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