

For More Questions [Click Here](#)

1. Conversion of messages carried by mRNA into amino acid sequences is called \_\_\_\_\_

- a) Replication
- b) DNA repair
- c) Translation
- d) Transcription

View Answer

Answer: c

Explanation: Translation is the process of conversion mRNA base sequences into amino acid sequences.

2. tRNA has peptidal transferase activity.

- a) True
- b) False

View Answer

Answer: b

Explanation: Peptidal transferase activity is performed by rRNA. tRNA functions in bringing amino acid to the ribosome.

3. The following set of RNA is required in the translation process except one, mark the INCORRECT?

- a) Si RNA
- b) rRNA
- c) mRNA
- d) tRNA

View Answer

Answer: a

Explanation: Three types of RNA are required to perform cooperative functions in protein synthesis i.e, mRNA carries a genetic message, tRNA, and rRNA.

4. What is the size of the prokaryotic ribosome?

- a) 80S
- b) 70S
- c) 40S
- d) 60S

View Answer

Answer: b

Explanation: The size of prokaryotic ribosome is 70S and it consists of two subunits large (50S) and small (30S).

5. Name the sequence of RNA, which is recognized by a small subunit of the ribosome.

- a) Rho utilization site
- b) Downstream sequence
- c) Upstream sequence

d) Shine Dalgarno sequence

[View Answer](#)

Answer: d

Explanation: In prokaryotes, Shine Dalgarno sequences are found near the initiation codon and it is complementary to the sequences present on the small subunit of the ribosome.

6. Which of the following is considered as a start codon?

a) AUG

b) GUG

c) UAG

d) AGG

[View Answer](#)

Answer: a

Explanation: Start codon refers to the first base of sequences from which reading begins and proceed 3 nitrogenous bases at a time.

7. Mark the one, which is NOT a stop codon?

a) UAA

b) UAG

c) UGA

d) GGA

[View Answer](#)

Answer: d

Explanation: Out of total codons, there are three non-sense codons or stop codon i.e, UAA (ochre), UAG (Amber), and UGA (opal).

8. Which of the following is not true to the nature of the genetic code?

a) Codon is triplet

b) Codons are commaless

c) Codons are overlapping

d) Codons are universal

[View Answer](#)

Answer: c

Explanation: Codons are non-overlapping in nature, commaless, and there is no punctuation mark between them. Codons are universal as well, except mammalian mitochondria and some bacteria.

9. Who explained the wobble hypothesis?

a) Darwin

b) Watson and Crick

c) Samuel B. Weiss

d) Nirenberg

[View Answer](#)

Answer: b

Explanation: In 1966, Watson and Crick proposed the degeneracy wobble hypothesis.

Wobble hypothesis explained the ability of an anticodon to base pair with more than one codon.

10. Which of the following recognize a specific amino acid and its cognate t-RNA molecule?

- a) t-RNA synthetase
- b) Ribosome
- c) r-RNA
- d) Topoisomerase

[View Answer](#)

Answer: a

Explanation: The t-RNA synthetase enzyme recognizes a specific amino acid and its cognate t-RNA molecules. There are 20 different enzymes, which are categorized into 2 classes.