PYQSide PYQSide.com — free PYQs with solutions Powered by TestBlink

NEET MOLECULAR BASIS OF INHERITANCE — TRANSLATION — PYQS

Max. Marks: 52 **Questions:** 13

Section A (MCQ) — 13 questions

Q.1 Given below are two statements :
Statement-I: Transfer RNAs and ribosomal RNA do not interact with mRNA.
Statement-II: RNA interference (RNAi) takes place in all eukaryotic organisms as a method of cellular defence.

In the light of the above statements, choose the most appropriate answer from the options given below : [NEET (UG) 2025]

(1) Statement-I is correct but statement II is incorrect
(2) Statement-I is incorrect but statement II is correct
(3) Both statement I and statement II are correct
(4) Both statement I and statement II are incorrect

Scan or tap for the full solution

Q.2 How many different proteins does the ribosome consist of? [NEET (UG) 2023]

(1) 60 (2) 40 (3) 20 (4) 80

Scan or tap for the full solution

Q.3 The process of translation of mRNA to proteins begins as soon as: [NEET (UG) 2022]

(1) The small subunit of ribosome encounters mRNA
(2) The larger subunit of ribosome encounters mRNA
(3) Both the subunits join together to bind with mRNA
(4) The tRNA is activated and the larger subunit of ribosome encounters mRNA

Scan or tap for the full solution

Q.4 Which of the following RNAs is not required for the synthesis of protein? [NEET (UG) 2021]

(1) siRNA (2) mRNA (3) tRNA (4) rRNA

Scan or tap for the full solution

Q.5 The first phase of translation is [NEET (UG) 2020]

(1) Recognition of an anti-codon
(2) Recognition of DNA molecule
(3) Binding of mRNA to ribosome
(4) Aminoacylation of tRNA

Scan or tap for the full solution

Q.6 Many ribosomes may associate with a single mRNA to form multiple copies of a polypeptide simultaneously. Such strings of ribosomes are termed as [NEET 2018]

(1) polysome (2) polyhedral bodies
(3) plastidome (4) nucleosome

Scan or tap for the full solution

Q.7 A complex of ribosomes attached to a single strand of RNA is known as : [NEET 2016 (Phase 1)]

(1) Polypeptide (2) Okazaki fragment
(3) Polysome (4) Polymer

Scan or tap for the full solution

Q.8 Which of the following rRNAs acts as structural RNA as well as ribozyme in bacteria ? [NEET 2016 (Phase 2)]

(1) 5.8 S rRNA (2) 23 S rRNA
(3) 18 S rRNA (4) 5 S rRNA

Scan or tap for the full solution

Q.9 Which one of the following also acts as a catalyst in a bacterial cell? [AIPMT 2011 (Prelims)]

(1) 5S rRNA (2) snRNA
(3) hnRNA (4) 23S rRNA

Scan or tap for the full solution

Q.10 Which antibiotic inhibits interaction between tRNA and mRNA during bacterial protein synthesis? [AIPMT 2006]

(1) Neomycin (2) Erythromycin
(3) Tetracycline (4) Streptomycin

Scan or tap for the full solution

Q.11 Amino acid sequence, in protein synthesis is decided by the sequence of - [AIPMT 2006]

(1) cDNA (2) mRNA (3) tRNA (4) rRNA

Scan or tap for the full solution

Q.12 Protein synthesis in an animal cell occurs - [AIPMT 2005]

(1) On ribosomes present in the nucleolus as well as in cytoplasm

(2) On ribosomes present in cytoplasm as well as in mitochondria

(3) Only on the ribosomes present in cytosol

(4) Only on ribosomes attached to the nuclear envelope and endoplasmic reticulum

Scan or tap for the full solution

Q.13 During translation initiation in prokaryotes, a GTP molecule is needed in: [AIPMT 2003]

(1) Association of 30S-mRNA with formyl-met-tRNA

(2) Formation of formyl-met-tRNA

(3) Association of 50S subunit of ribosome with initiation complex

(4) Binding of 30S subunit of ribosome with mRNA

Scan or tap for the full solution

ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11
Ans.	**2**	**4**	**1**	**1**	**4**	**1**	**3**	**2**	**4**	**4**	**2**
Ques.	12	13									
Ans.	**2**	**1**									