

CUET 2026 May 18 Shift 1 Biology

Question Paper (Memory-Based)

Conducted by National Testing Agency (NTA)



General Instructions

- (i) The examination will be conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.
- (iii) The total number of questions are 50.
- (iv) Duration of the exam is 1 hour (60 minutes).

1. In the recombinant DNA technology involving plasmid pBR322, insertion of foreign DNA at the *Pst*I restriction site results in the loss of resistance against:

- (A) Tetracycline
- (B) Ampicillin
- (C) Chloramphenicol
- (D) Kanamycin

2. Which scientist experimentally demonstrated that DNA replication is semiconservative in nature using ^{15}N and ^{14}N isotopes?

- (A) Watson and Crick
- (B) Meselson and Stahl
- (C) Hershey and Chase
- (D) Griffith

3. The correct evolutionary sequence in the evolution of modern humans is:

- (A) Homo habilis → Homo erectus → Neanderthal man → Cro-Magnon man
- (B) Homo erectus → Homo habilis → Neanderthal man
- (C) Neanderthal man → Homo habilis → Cro-Magnon man

(D) Cro-Magnon man → Homo erectus → Homo habilis

4. Match the following mammals with their correct category and geographical distribution.

Column-I	Column-II
(P) Kangaroo	(1) Monotreme found in Australia
(Q) Platypus	(2) Marsupial found mainly in Australia
(R) Whale	(3) Placental mammal
(S) Echidna	(4) Egg laying mammal

Choose the correct option.

- (A) $P \rightarrow 2, Q \rightarrow 1, R \rightarrow 3, S \rightarrow 4$
(B) $P \rightarrow 1, Q \rightarrow 2, R \rightarrow 3, S \rightarrow 4$
(C) $P \rightarrow 2, Q \rightarrow 4, R \rightarrow 1, S \rightarrow 3$
(D) $P \rightarrow 3, Q \rightarrow 1, R \rightarrow 2, S \rightarrow 4$
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5. A bioreactor working for industrial production of antibiotics must maintain maximum microbial growth and product formation. Which combination of components is correctly matched with their functions?

Component	Function
(P) Sparger	(1) Uniform oxygen distribution
(Q) Agitator	(2) Uniform mixing of nutrients
(R) Cooling jacket	(3) Removal of excess metabolic heat
(S) Foam breaker	(4) Prevention of foam accumulation

Choose the correct option.

- (A) $P \rightarrow 1, Q \rightarrow 2, R \rightarrow 3, S \rightarrow 4$
(B) $P \rightarrow 2, Q \rightarrow 1, R \rightarrow 4, S \rightarrow 3$
(C) $P \rightarrow 3, Q \rightarrow 2, R \rightarrow 1, S \rightarrow 4$
(D) $P \rightarrow 1, Q \rightarrow 4, R \rightarrow 2, S \rightarrow 3$
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6. Read the following statements carefully regarding scientists and their contributions in genetics.

- (P) Mendel proposed the law of segregation.
- (Q) Sutton and Boveri proposed chromosomal theory of inheritance.
- (R) T.H. Morgan experimentally proved linkage in *Drosophila*.
- (S) Hershey and Chase proved that proteins are genetic material.

Choose the correct option.

- (A) P, Q and R are correct but S is incorrect
- (B) P and R are correct but Q and S are incorrect
- (C) Only P and Q are correct
- (D) All statements are correct
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7. Which hormone is secreted by the corpus luteum during pregnancy?

- (A) Estrogen only
- (B) Progesterone only
- (C) Progesterone and relaxin
- (D) Testosterone
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8. Read the following statements regarding Bt cotton and choose the correct option.

- (P) Bt toxin is produced by *Bacillus thuringiensis*.
- (Q) The inactive protoxin gets activated in the acidic gut of insects.
- (R) Cry proteins create pores in the epithelial cells of insect midgut.
- (S) Different cry genes control different groups of insects.
- (A) P, R and S are correct but Q is incorrect
- (B) P and Q are correct but R and S are incorrect
- (C) Only P and R are correct
- (D) All statements are correct
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9. Match the following mammals in List-I with their correct characteristics in List-II.

List-I	List-II
(P) Platypus	(1) Marsupial mammal
(Q) Kangaroo	(2) Placental mammal
(R) Blue whale	(3) Egg laying mammal
(S) Koala	(4) Pouch bearing mammal

Choose the correct option.

- (A) $P \rightarrow 3, Q \rightarrow 4, R \rightarrow 2, S \rightarrow 1$
(B) $P \rightarrow 1, Q \rightarrow 3, R \rightarrow 2, S \rightarrow 4$
(C) $P \rightarrow 3, Q \rightarrow 1, R \rightarrow 4, S \rightarrow 2$
(D) $P \rightarrow 2, Q \rightarrow 1, R \rightarrow 3, S \rightarrow 4$
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10. During transcription in eukaryotes, the enzyme responsible for synthesis of mRNA is:

- (A) DNA polymerase
(B) RNA polymerase I
(C) RNA polymerase II
(D) RNA polymerase III