



Assertion and Reason

Q.No.1:

Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Apomixis is an asexual mode of reproduction.

Reason (R): It involves the fusion of gametes.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.2: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): DNA is considered better than RNA for the storage of genetic information.

Reason (R): DNA requires RNA for protein formation.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.3: Assertion: DNA strand with $3' \rightarrow 5'$ polarity acts as template strand.

Reason: RNA polymerase catalyze only in $5' \rightarrow 3'$ direction.

- A. If both assertion and reason are true and reason is the correct explanation of assertion
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false
- D. If both assertion and reason are false

Q.No.4: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A) : Replication and transcription occur in the nucleus but translation occurs in the cytoplasm.

Reason (R) : mRNA is transferred from the nucleus into the cytoplasm where ribosomes and amino acids are available for protein synthesis.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.5: Directions : *These questions consist of two statement of each, printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following five responses.*

- A. If both the Assertion and the Reason are true and the Reason is a correct explanation of the Assertion.
- B. If both the Assertion and the Reason are true but the Reason is not a correct explanation of Assertion.
- C. If the Assertion is true but the Reason is false.
- D. If both the Assertion and the Reason are false.
- E. If the Assertion false but the Reason is true.

Assertion : Phenylketonuria is recessive hereditary disease caused by body's failure to oxidise an amino acid phenylalanine to tryosine because of a defective enzyme.

Reason : It results the presence of phenylalanine acid in urine.

- A. A
- B. B
- C. C
- D. D
- E. E

Q.No.6: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Spermatogenesis starts at puberty due to a significant increase in the secretion of GnRH.

Reason (R): LH acts on Sertoli cells and stimulates the secretion of factors that help in spermatogenesis.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.7:

Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Use of intra-uterine contraceptive devices is a reversible method of contraception.

Reason (R): Females having IUCDs can never bear a child.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the

assertion.

- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.8: Assertion: Vasectomy is the surgical method in which vas deferens are cut.

Reason: It provides a temporary way of birth control.

- A. Both assertion and reason are true and reason is the correct explanation for assertion.
- B. Both assertion and reason are true but reason is not the correct explanation for assertion.
- C. Assertion is true and reason is false.
- D. Assertion is false and reason is correct.

Q.No.9: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): In eukaryotes, replication and transcription occur in the nucleus but translation occurs in the cytoplasm.

Reason (R): mRNA is transferred from the nucleus into the cytoplasm where ribosomes and amino acids are available for protein synthesis.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.

Q.No.10: Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Which of the following options is correct for the given statements?

Assertion (A): Phenylketonuria is an example of pleiotropy.

Reason (R): This disease is caused by a mutation in the gene that codes for the enzyme phenylalanine hydroxylase.

- A. Both A and R are true, and R is the correct explanation of the assertion.
- B. Both A and R are true, and R is not the correct explanation of the assertion.
- C. A is true, but R is false.
- D. A is false, but R is true.