

Heredity and Evolution

Chapter: 9

Q1: How does the creation of variations in a species promote survival?

Q2: How do Mendel's experiments show that traits are inherited independently?

Q3: A man with blood group A marries a woman with blood group O and their daughter has blood group O. Is this information enough to tell you which of the traits – blood group A or O – is dominant? Why or why not?

Q4: Why are traits acquired during the life-time of an individual not inherited?

Q5: Difference between Acquired and Inherited Traits.

Q6: How is the equal genetic contribution of male and female parents ensured in the progeny?

Q7: **Assertion:** When pure breed tall plants are crossed with pure breed short plants, all the plants in F_1 progeny are tall. When the tall plants of F_1 progeny are crossed, short plants re-appear in F_2 progeny.

Reason: Traits are independently inherited.

(a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.

(b) The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.

(c) Assertion is true but the Reason is false.

(d) The statement of the Assertion is false but the Reason is true.