

QB365 Question Paper Software
12th Standard - Biology
Evolution Assertion and reason

Exam Time: 00:20 Hrs

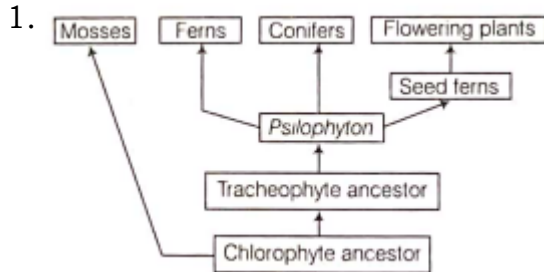
Roll No:

Date: 27/09/2025

Total Marks: 10

Assertion and reason

10 x 1 = 10



Assertion (A) : Common ancestor of ferns, conifers and seed ferns in Psilophyton.

Reason (B) : The common ancestor of Psilophyton and seed fern is chlorophyte

- (a) If both A and R are true and R is the correct explanation of A
- (b) If both A and R are true, but R is not the correct explanation of A
- (c) If A is true, but R is false
- (d) If A is false, but R is true



Assertion (A) : He is also called handy man.

Reason (R) : Heaps of tools found with these fossils included sharpened stones.

- (a) If both A and R are true and R is the correct explanation of A
- (b) If both A and R are true, but R is not the correct explanation of A
- (c) If A is true, but R is false
- (d) If A is false, but R is true

3. Assertion (A) : Variation due to mutation. recombination or gene flow results in changed frequency of genes and alleles in progeny

Reason (R) : This would results in speciation

- (a) If both A and R are true and R is the correct explanation of A
- (b) If both A and R are true, but R is not the correct explanation of A
- (c) If A is true, but R is false
- (d) If A is false, but R is true

4. **Assertion** : Milky way is the galaxy in the universe.

Reason : Our Earth is part of milky way.

Codes:

- (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.

5.**Assertion:** Louis Pasteur showed that in flask open to air, new living organisms appeared in the heat killed yeast culture.

Reason: Life arises from pre-existing life.

Codes:

- (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.

6.**Assertion :** Stanley Miller could work on experimental evidence of origin of life because of Harold Urey.

Reason : H. Urey was geochemist, cosmo chemist and teacher of S. miller.

Codes:

- (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.

7.**Assertion:** We have lost all the direct evidence of origin of life.

Reason: The persons responsible for protecting evidences were not skilled.

Codes:

- (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.

8.**Assertion :** Evolution is not a directed process in the sense of determinism.

Reason : Evolution is a stochastic process based on chance events in nature and chance mutation in the organism.

Codes:

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

9.**Assertion (A) :** Giraffe's neck is an acquired character and it occurred due to directional selection.

Reason (R) : In directional selection more individuals acquire value other than the mean character value.

Codes:

- a) Both (A) and (R) are true and (R) is the correct explanation of (A)

- b) Both (A) and (R) are true and (R) is not the correct explanation of (A)
- c) (A) is true but (R) is false
- d) (A) is false but (R) is true

10. **Statement I:** As a result only fit individual increase in a population is called natural Selection

Statement II : As a result commercially high yielding and disease resistant varieties Increase is called artificial selection

Codes:

- a) Both I and II statements are correct
- b) Statement I is correct, II is incorrect
- c) Statement I is incorrect, II is correct
- d) Both statements are wrong

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