



QB365 Question Paper Software
12th Standard - Biology
Human Health and Disease Assertion and reason

Exam Time: 00:20 Hrs

Roll No:

Date: 27/09/2025

Total Marks: 10

Assertion and reason

10 x 1 = 10

1. **Assertion :** Skin forms the first line of defence.

Reason: It is a non-specific defence.

Codes:

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.
- (b) Both assertion and reason are true but reason is not the correct explanation of assertion.
- (c) Assertion is true but reason is false.
- (d) Both assertion and reason are false.

2. **Assertion :** Some diseases that attack in childhood do not attack again.

Reason: Memory cells plays an important role.

Codes:

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.
- (b) Both assertion and reason are true but reason is not the correct explanation of assertion.
- (c) Assertion is true but reason is false.
- (d) Both assertion and reason are false.

3. **Assertion:** SCID is the first genetic disorder to be combated with gene therapy.

Reason: SCID is a type of allergy.

Codes:

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.
- (b) Both assertion and reason are true but reason is not the correct explanation of assertion.
- (c) Assertion is true but reason is false.
- (d) Both assertion and reason are false.

4. **Assertion:** Smack is a by-product of heroin synthesis.

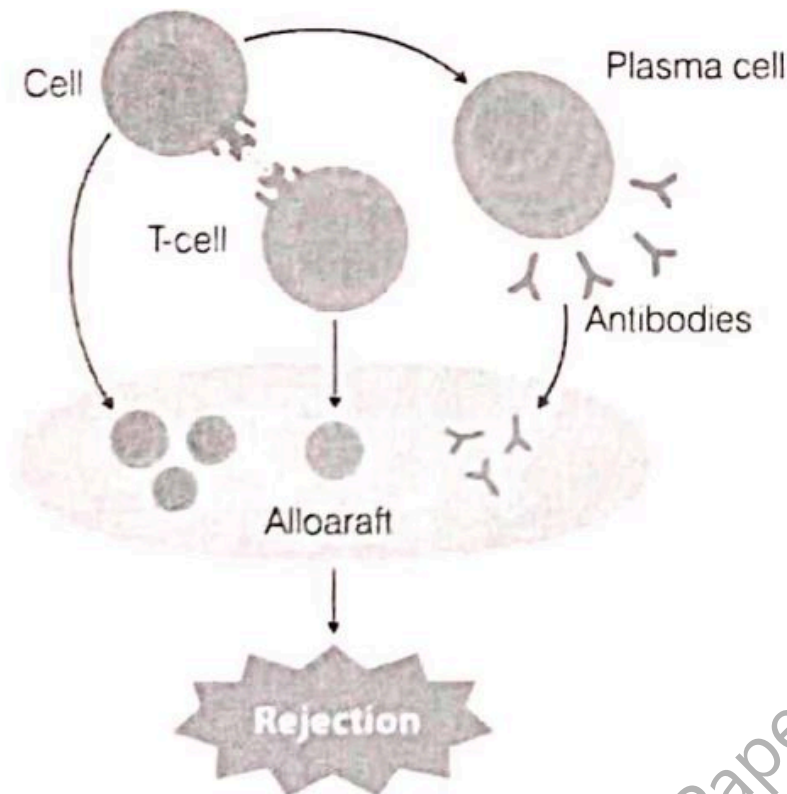
Reason: Heroin is an opium alkaloid.

Codes:

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.
- (b) Both assertion and reason are true but reason is not the correct explanation of assertion.
- (c) Assertion is true but reason is false.
- (d) Both assertion and reason are false.

5. Given below is the schematic representation of transplant rejection. When a person receives an organ from someone else, his body may recognise this foreign organ and

attacks them. Study the figure given below and comment upon the appropriateness of the Assertion and Reason.

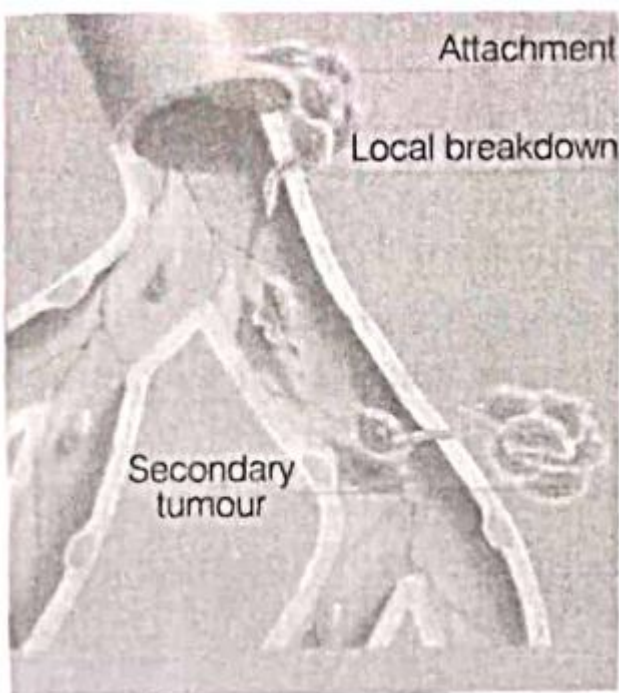


Assertion (A) In organ transplantation, donor and recipient should be genetically as close as possible.

Reason (R) Cell-mediated immune response is responsible for such graft rejection.

- (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

6. The figure shown below is showing the cancer cells which are breaking off from the tumour where they originated, travelling through the blood stream and getting lodged in other area. Study this figure and comment upon the appropriateness of the Assertion and Reason.



Assertion (A) The cancer shown above is more serious.

Reason (R) This spreads from one organ to other body organs and there is increased interference with metabolic functioning.

- (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

7. **Assertion (A)** : B-cells work chiefly by secreting substances called antibodies into the body fluids.

Reason (R) : Antibodies ambush foreign antigen circulating in the blood stream.

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) Both (A) and (R) are false

8. **Assertion (A)** : Innate immunity is non-specific defence.

Reason (R) : It consists of four types of barriers.

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) Both (A) and (R) are false

9. **Statement - I** : Many fungi belonging to genera Microsporum, Trichophyton, and Epidermophyton are responsible for the disease ringworm.

Statement - II : Ringworm infection is generally acquired from soil or by using towels, clothes, comb, etc. of infected individuals.

Codes:

- a) Both statements I and II are correct.
- b) Statement I is correct but statement II is incorrect.
- c) Statement I is incorrect but statement II is Correct.
- d) Both statements I and II are incorrect.

10. **Statement I**: Innate immunity is accomplished by providing different types of barriers.

Statement II: Acquired immunity is present from the birth and is inherited from parents.

Codes:

- a) Both statements I and II are correct.
- b) Statement I is correct but statement II is incorrect.
- c) Statement I is incorrect but statement II is Correct.
- d) Both statements I and II are incorrect.