

Chapter – 7 | Human Health and Disease

QUIZ
PART-07

1. Active immunity occurs when:

- A. Antibodies are directly injected into the body
- B. The body produces antibodies after exposure to an antigen
- C. Antibodies are received from mother's milk
- D. Drugs provide antibodies directly (B)

Explanation : In active immunity, the immune system produces its own antibodies after encountering an antigen.

2. Antibodies obtained from breast milk provide:

- A. Natural active immunity
- B. Artificial active immunity
- C. Natural passive immunity
- D. Artificial passive immunity (C)

Explanation : Antibodies, especially IgA, transferred through colostrum provide natural passive immunity.

3. Artificial active immunity is produced by:

- A. Vaccination
- B. Breast milk
- C. Antibody injection
- D. Placental transfer (A)

Explanation : Vaccination introduces antigens or weakened/inactivated pathogens to stimulate antibody production.

4. The principle of vaccination is based on the:

- A. Mutation property of pathogens
- B. Memory property of immune system
- C. Destruction of RBCs
- D. Formation of allergens (B)

Explanation : Vaccination works by developing memory B and T cells for rapid response during future infections.

5. Gamma globulin injection provides:

- A. Natural active immunity
- B. Artificial passive immunity
- C. Artificial active immunity
- D. Natural passive immunity (B)

Explanation : Artificial passive immunity involves direct administration of pre-formed antibodies and gives immediate but short-term protection.

6. Hepatitis B vaccine produced by yeast uses:

- A. Tissue culture method
- B. Recombinant DNA technology
- C. Radiation therapy
- D. Antibiotic treatment (B)

Explanation : Hepatitis B vaccine is produced by producing antigenic polypeptides using recombinant DNA technology.

7. Allergy is a:

- A. Weak response of immune system
- B. Hyperactive response of immune system to certain antigens
- C. Complete failure of immune system
- D. Bacterial infection (B)

Explanation : Allergy occurs due to an exaggerated immune response against environmental antigens called allergens.

8. The antibody produced against allergens is:

- A. IgA
- B. IgG
- C. IgE
- D. IgM (C)

Explanation : Allergens stimulate production of IgE antibodies.

9. Which chemicals are released by mast cells during allergic reactions?

- A. Insulin and glucagon
- B. Histamine and serotonin
- C. Antibodies and antigens
- D. DNA and RNA (B)

Explanation : Mast cells release histamine and serotonin, causing allergic symptoms.

10. Autoimmunity occurs when:

- A. The immune system attacks foreign pathogens only
- B. The immune system fails to distinguish self from non-self cells
- C. Antibodies are not produced
- D. Vaccines stop working (B)

Explanation : In autoimmunity, the immune system attacks the body's own cells and proteins, causing autoimmune disorders.