C 3.2 Defence Against Disease MC

1. Which of the following is not known to cause disease in humans?

- A) Viruses
- B) Bacteria
- C) Archaea
- D) Protists

2. What is the main role of skin and mucous membranes in defending against pathogens?

- A) They act as primary chemical barriers.
- B) They act as physical and chemical barriers.
- C) They produce antibodies.
- D) They release clotting factors.

3. What initiates the blood clotting process when skin is injured?

- A) ErythrocytesB) LymphocytesC) Platelets
- D) Phagocytes

4. During clotting, which protein is rapidly converted to form a protective mesh over a wound?

A) Hemoglobin B) Fibrinogen C) Collagen D) Antigen

5. Which component is trapped in the fibrin mesh to form a clot?

A) AntibodiesB) ErythrocytesC) PhagocytesD) Pathogens

6. The body's innate immune system primarily:

- A) Targets specific pathogens and builds a memory of them.
- B) Responds to broad categories of pathogens non-specifically.
- C) Produces antibodies specific to pathogens.
- D) Includes only B-lymphocytes and T-lymphocytes.

7. Phagocytes are part of which branch of the immune system?

A) Innate immune systemB) Adaptive immune systemC) Both innate and adaptive immune systemsD) Neither, they function independently

8. In phagocytosis, pathogens are digested by:

A) PlateletsB) ErythrocytesC) Lysosomal enzymesD) Plasma cells

9. Which cells are primarily responsible for producing antibodies?

A) PhagocytesB) PlateletsC) B-lymphocytesD) Erythrocytes

10. Antigens on pathogens are mainly composed of:

A) CarbohydratesB) LipidsC) GlycoproteinsD) Nucleic acids

11. What type of cell activates B-lymphocytes to proliferate and produce antibodies?

A) PlateletsB) PhagocytesC) ErythrocytesD) Helper T-cells

12. Long-term immunity is achieved by retaining which cells after infection?

A) ErythrocytesB) Memory cellsC) PlateletsD) Phagocytes

13. How do vaccines contribute to immunity?

- A) They directly produce antibodies.
- B) They contain pathogens to stimulate the immune response.
- C) They use antigens or genetic material coding for antigens to stimulate immunity.
- D) They function like antibiotics.

14. Which of the following describes herd immunity?

- A) Immunity developed by an individual after an infection.
- B) Immunity developed by a significant portion of a population to limit disease spread.
- C) Immunity achieved by taking antibiotics.
- D) Immunity achieved only by receiving a vaccine.

15. COVID-19 is an example of:

- A) An innate immune response
- B) An adaptive immune response
- C) A zoonotic disease
- D) A vaccine-preventable disease

Answers:

- 1. C) Archaea
- 2. B) They act as physical and chemical barriers.
- 3. C) Platelets
- 4. B) Fibrinogen
- 5. B) Erythrocytes
- 6. B) Responds to broad categories of pathogens non-specifically.
- 7. A) Innate immune system
- 8. C) Lysosomal enzymes
- 9. C) B-lymphocytes
- 10. C) Glycoproteins
- 11. D) Helper T-cells
- 12. B) Memory cells
- 13. C) They use antigens or genetic material coding for antigens to stimulate immunity.
- 14. B) Immunity developed by a significant portion of a population to limit disease spread.
- 15. C) A zoonotic disease