

Immunology Foundations in South Asia

Immunology · Practice Test · 12 Questions

1. Which specialized white blood cell in the human body is primarily responsible for producing antibodies to fight infections?

- A) Red blood cell
- B) B-lymphocyte
- C) Platelet
- D) Osteoblast

2. The BCG vaccine, widely administered in India and Pakistan at birth, is designed to protect children primarily against which disease?

- A) Tuberculosis
- B) Malaria
- C) Dengue fever
- D) Cholera

3. What is the primary function of an antigen when it enters the human bloodstream?

- A) To strengthen the immune system
- B) To trigger an immune response
- C) To provide nutrients to cells
- D) To repair damaged tissue

4. Which organ in the human body acts as a filter for the blood and is a major site for the immune system to respond to blood-borne pathogens?

- A) Liver
- B) Spleen
- C) Pancreas
- D) Gallbladder

5. In the context of the South Asian climate, the 'cold chain' is critical for maintaining the potency of vaccines. What does the cold chain refer to?

- A) The metal links on a syringe
- B) The process of keeping vaccines at specific low temperatures
- C) The freezing of blood samples
- D) The transport of ice in monsoon season

6. Which type of immunity is acquired by an infant through the mother's placenta or breast milk?

- A) Artificial active immunity
- B) Passive immunity
- C) Cell-mediated immunity
- D) Herd immunity

7. What is the main role of 'memory cells' in the human immune system?

- A) To digest dead bacteria
- B) To recognize and respond faster to previously encountered pathogens
- C) To produce red blood cells
- D) To regulate body temperature

8. Which specific substance does the body produce in response to an invading pathogen to neutralize it?

- A) Antibody
- B) Hormone
- C) Enzyme
- D) Glucose

9. The 'Pulse Polio' campaign in India is an example of a public health initiative designed to achieve what type of community-wide protection?

- A) Individual immunity
- B) Herd immunity
- C) Natural immunity
- D) Genetic immunity

10. Which part of the immune system consists of a network of vessels that transports lymph throughout the body?

- A) Circulatory system
- B) Digestive system
- C) Lymphatic system
- D) Endocrine system

11. Which white blood cell is often the first to arrive at the site of an infection to engulf bacteria via phagocytosis?

- A) Neutrophil
- B) Erythrocyte
- C) Platelet
- D) Keratinocyte

12. What occurs in the body during an allergic reaction?

- A) The body ignores the substance
- B) The immune system overreacts to a harmless substance
- C) The blood stops clotting
- D) The body produces too much oxygen