

KEY FACTS

- Non-specific barriers: skin, mucus + cilia in airways, stomach acid (pH 2)
- Phagocytes: engulf and digest any pathogen (non-specific) — phagocytosis
- Lymphocytes: produce **ANTIBODIES** specific to one antigen (specific response)
- Antibodies bind to antigens → mark for destruction / clump pathogens together
- Memory cells: remain long-term → rapid response on re-exposure → immunity

KEY TERMS

Antigen	Protein on pathogen surface — triggers immune response
Antibody	Specific Y-shaped protein from lymphocytes — binds to one antigen type
Memory cell	Long-lived lymphocyte — enables rapid response on re-exposure
Phagocytosis	Engulfing and digesting pathogens — done by phagocytes

■ **EXAM TIP:** MEMORY CELLS provide long-term immunity, not circulating antibodies. Always mention memory cells in immunity/vaccination answers.