

This is the **Higher Combined** version — includes Higher Tier content. Some Separate-only details are omitted.

Blood is a tissue with four components, each adapted for a specific function.

- Red blood cells: no nucleus, biconcave, haemoglobin — carry O_2 as oxyhaemoglobin
- White blood cells: phagocytes (engulf pathogens), lymphocytes (produce antibodies)
- Plasma: liquid — carries CO_2 , glucose, amino acids, urea, hormones
- Platelets: fragments involved in blood clotting

Key Terms

Haemoglobin	Protein in RBCs binding O_2 in lungs, releasing in tissues
Phagocytosis	Engulfing and digesting pathogens by phagocytes

■ **Exam Tip:** For red blood cells: always mention no nucleus (more space for haemoglobin), biconcave (increased surface area), haemoglobin (carries O_2). All three for full marks.