

Life Processes in Living Organisms - Part 2

Chapter 13: Life Processes in Living Organisms - Part 2 · Topic 1

Key Concept

Excretion removes metabolic waste products from the body, with the kidneys being the primary excretory organs in humans, filtering blood to form urine.

The nervous system, using neurons, allows rapid coordination and response to stimuli, controlling voluntary and involuntary actions.

The endocrine system, using hormones, provides slower but longer-lasting coordination, regulating growth, metabolism, and other body functions.

These systems work together, ensuring organisms can maintain internal balance (homeostasis) while responding appropriately to their environment.

Quick Revision Notes

- Excretion: removes metabolic waste.
- Kidneys: primary human excretory organs.
- They filter blood, form urine.
- Nervous system: neurons for rapid response.
- Controls voluntary, involuntary actions.
- Endocrine system: hormones for slower coordination.
- Regulates growth, metabolism.
- Systems maintain homeostasis, environmental response.

Practice Questions

- 1 Discuss the role of kidneys in excretion.
- 2 Discuss the difference between nervous and endocrine coordination.
- 3 Research a hormone and its function.
- 4 Discuss why homeostasis is important.
- 5 Draw a diagram of the human excretory system.
- 6 Explain control and coordination in your own words.