

Trauma 999 Curriculum Links for Pearson Edexcel Level 3 Advanced GCE in Biology B (9BI0)

Topic 4: Exchange and Transport

Topic 9: Control Systems

Topic 4: Exchange and Transport

4.4 Circulation

vi Know the structure of blood as plasma and blood cells, to include erythrocytes and leucocytes (neutrophils, eosinophils, monocytes and lymphocytes).

vii Know the function of blood as transport, defence, and formation of lymph and tissue fluid.

viii Understand the role of platelets and plasma proteins in the sequence of events leading to blood clotting, including:

- platelets form a plug and release clotting factors, including thromboplastin
- prothrombin changes to its active form, thrombin
- soluble fibrinogen forms insoluble fibrin to cover the wound.

Topic 9: Control Systems

9.1 Homeostasis

i Know that homeostasis is the maintenance of a state of dynamic equilibrium.

9.5 Nervous transmission

i Understand how the properties of the axon membrane and the transport of Na⁺ ions and K⁺ ions result in a resting potential.

ii Understand how an action potential is formed and how it is propagated along an axon.

iii Understand why the speed of transmission along myelinated axons is greater than along non-myelinated axons, including the role of saltatory conduction.