OCR GCSE 21ST CENTURY BIOLOGY B · J257

BIOLOGY



EXAM QUESTION PACK

B5.3 HOW DO HORMONES CONTROL RESPONSES IN THE HUMAN BODY? (HIGHER)

SCORE	PERCENTAGE
/13	%

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1(a). The human body responds to changes so that it can maintain a constant internal environment.

* When temperature receptors in the skin and hypothalamus detect a drop in temperature, the hormone adrenaline is released from the adrenal gland.

Explain how the release of adrenaline could help the body to raise its core temperature back to normal.

[6]

(b). The sensitivity of cells to the hormone adrenaline is increased by the hormone thyroxine.

(i) Explain how the production of thyroxine is regulated by negative feedback.

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(ii) Hormones stimulate cells by binding to receptors on the cell surface. These receptors are protein molecules.

Suggest how the hormone thyroxine could cause a cell to become more sensitive to the hormone adrenaline.

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END OF QUESTION PAPER

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