

AQA, OCR, Edexcel

GCSE Science

GCSE Biology

Homeostasis Answers

Name:

M M E

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Total Marks: /20

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Q1: Explain homeostasis.

A= Regulation of the internal conditions of the cell (1) in response to external changes (1).
(2 marks)

Q2: Why is a constant environment needed?

A= Allows the body optimum function.
(1 mark)

Q3: Explain which internal conditions are controlled.

A= 1 mark for each of the following:

- Body temperature
- Water content of the body
- Blood glucose concentration

(3 marks)

Q4: What conditions do the body's enzymes require?

A= 1 mark for each of the following:

- Optimum pH
- Optimum temperature

(2 marks)

Q5: How does the body reduce its temperature, when the internal temperature increases?

A= Sweating

(1 mark)

Q6: Give 2 examples of homeostasis in the human body. .

A= Accept any 2 of the following:

- Temperature regulation
- Blood glucose/ Sugar regulation
- Hormone Regulation

(2 marks)

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Q7: Explain the ways the body uses control systems.

A= 3 marks for points, 3 marks for examples:

- Receptors – Detect internal/ external changes
- Coordination centres – Receive and process information
- Effectors – Bring about response to stimuli.

(6 marks)

Q8: Give an example of a receptor.

A= Accept one of the following:

- Nervous system
- Hormonal system

(1 mark)

Q9: Give an example of a coordination centre.

A= Accept one of the following:

- CNS – Central nervous system
- Brain
- Spinal cord
- Hormonal System

(1 mark)

Q10: Give an example of an effector.

A= Accept ant one of the following:

- Muscle
- Glands

(1 mark)