

GCSE Biology B (Twenty First Century Science)
J257/01 Breadth in Biology (Foundation)

Question Set 26

Multiple Choice Questions

1. (a) Insulin controls the blood sugar level in the human body.

Complete the sentences to describe how insulin controls blood sugar levels.

Use words from the list.

You can use each word once, more than once, or not at all.

high kidney less low more pancreas

When blood sugar levels are **high**, insulin is released from the **pancreas**

The insulin causes cells to take up **more** sugar.

[3]

(b) Insulin is an example of a hormone released by the endocrine system in the human body.

For each statement decide if it is a **true** or **false** description of hormonal control.

Tick (✓) **one** box in each row.

Statement about hormonal control	True	False
Effects can be long-lasting.	✓	
Hormones are transported by the blood.	✓	
Target cells have specific receptors.	✓	
Hormones are usually fast-acting.		✓
Hormones are secreted by glands.	✓	

[2]

(c) People with Type 1 diabetes cannot make enough insulin.

Scientists think stem cells could be used to enable the pancreas to produce insulin again.

What **two** properties do stem cells have that make this possible?

- can differentiate into a wide range of specialised cells (that produce insulin)
- can differentiate to make more stem cells

[2]

Total Marks for Question Set 26: 7

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