

90168

NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

For Supervisor's use only

Level 1 Biology, 2008

90168 Describe biological ideas relating to how humans use and are affected by micro-organisms

Credits: Two
9.30 am Monday 17 November 2008

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

If you need more space for any answer, use the page(s) provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–6 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

For Assessor's use only		Achievement Criteria		
Achievement		Achievement with Merit		Achievement with Excellence
Describe biological ideas relating to how humans use and are affected by micro-organisms.	<input type="checkbox"/>	Explain biological ideas relating to how humans use and are affected by micro-organisms.	<input type="checkbox"/>	Discuss biological ideas relating to how humans use and are affected by micro-organisms.
Overall Level of Performance				<input type="checkbox"/>

You are advised to spend 35 minutes answering the questions in this booklet.

QUESTION ONE

(a) Old Man's Beard is a common weed plant in New Zealand.

A parasitic fungus has been used to slow the growth of Old Man's Beard.

(i) **Describe** the meaning of 'parasitic'.

(ii) **Explain** how the feeding of the fungi on the leaves of Old Man's Beard could help slow the growth of Old Man's Beard.

(b) Fungi are decomposers and help cycle nutrients.

Discuss how fungi act as decomposers and help cycle nutrients.

In your discussion you should **LINK explanations** of:

- how fungi act as decomposers
- how fungi help to cycle nutrients.

QUESTION TWO

(a) **Explain** how bacteria in food can make people sick.

(b) Someone with an infection can be given antibiotics.

(i) **Describe** the function of antibiotics.

(ii) **Explain** how bacteria can become resistant to antibiotics.

QUESTION THREE

Bacteria can be cultured on agar plates but viruses cannot be cultured on agar plates.

(a) Explain why bacteria can, but viruses cannot be cultured on agar plates.

(b) **Discuss** ways in which bacteria and fungi can be used in food production.

In your discussion you should:

- **describe** a food made with fungi and a food made with bacteria
- **explain** how the bacteria and fungi are involved in making the food.

**Extra paper for continuation of answers if required.
Clearly number the question.**

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