

90168



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

For Supervisor's use only

Level 1 Biology, 2007

90168 Describe how humans use and are affected by micro-organisms

Credits: Two
9.30 am Tuesday 27 November 2007

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 2–8 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"/>

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You are advised to spend 40 minutes answering the questions in this booklet.

QUESTION ONE

Some bacteria can be harmful to humans.

(a) **Describe** THREE conditions that bacteria require for reproduction.

(b) **Describe** how bacteria can cause food poisoning.

(c) Micro-organisms can be very useful in making food.

Answer (i) and (ii) below for a food that requires micro-organisms to make it.

(i) Name of food made: _____

The micro-organism used: _____

The life-process of the micro-organism used in making the food: _____

(ii) **Explain** how the life-process of the micro-organism is used in making the food.

QUESTION TWO

(a) **Describe** the function of the **sporangium** in fungi.

(b) Explain how fungi feed.

(c) **Discuss** the role that fungi such as mushrooms have in nutrient cycles and **explain** how this role benefits other living organisms.

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Note that Question Three begins on the next page.

QUESTION THREE

Meningitis can be caused by either a viral or a bacterial infection. MeNZB is a vaccine used against the most common strain of bacterial meningitis in New Zealand.

(a) **Describe** how meningitis can be passed between people.

(b) **Explain** how a vaccine works to prevent bacterial infections such as meningitis.

(c) The life processes of bacteria and viruses can cause illness like meningitis.

Discuss how the **life processes** of bacteria and viruses **cause** illness.

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

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Question
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