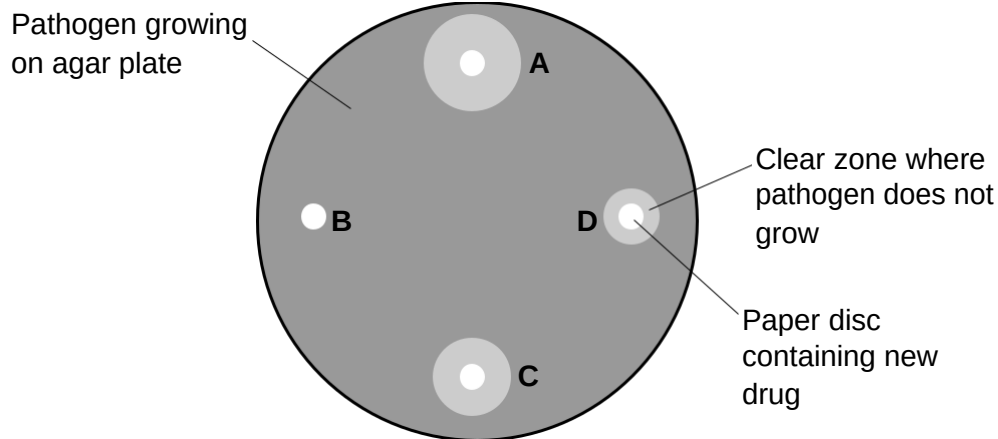


3

- 3 Scientists test the effect of new drugs on the growth of a pathogen.



Which new drug has **no** effect on the growth of the pathogen?

Your answer

☐

[1]

- 4 Which word describes all the physical features and living organisms in an area? **A** Community

B Ecosystem **C**

Habitat

D Interdependence

Your answer

☐

[1]

- 5 Eye colour, height and weight in humans all show variation.

Which of these are examples of **continuous** variation?

A Eye colour and height

B Eye colour, height and weight **C**

Height and weight

D Height only

Your answer

☐

[1]

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(ii) What **two** conclusions can be made about the mass of flying insects in 1995 compared to 2015?

1

.....

2

.....

[2]

(iii) How can the scientists' method be developed to investigate biodiversity in the forest? Tick (✓) **one** box.

Place traps in different parts of the forest.	
Record the number of different species found in the nets.	
Repeat their method again in 2025 to see if mass changes.	
Use their data to calculate mean mass for each year.	

[1]

(b) In a separate investigation, scientists estimated the population of insects that live on the forest ground.

The scientists trap insects using a pitfall trap.

This is a hole in the ground that the insects fall into when they crawl along the ground.

For each estimate they use this method:

- Place pitfall traps in different areas of the forest.
- Count the total number of insects caught in the pitfall traps.
- Mark the insects.
- Release the insects where they are collected from.

A week later they trap a second sample of insects.

(i) The scientists used an ink that is not easily washed off to mark the insects for identification.

State **one** other precaution that they should take when deciding how to mark the insects.

.....

..... [1]

MARKING INSTRUCTIONS

PREPARATION FOR MARKING

RM ASSESSOR

1. Make sure that you have accessed and completed the relevant training packages for on -screen marking: *RM Assessor Online Training*; *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are available in RM Assessor.
3. Log-in to RM Assessor and mark the **required number** of practice responses ("scripts") and the **required number** of standardisation responses.

MARKING

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the RM Assessor 50% and 100% (traditional 50% Batch 1 and 100% Batch 2) deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone, email or via the RM Assessor messaging system.

10. For answers marked by levels of response:

Read through the whole answer from start to finish, using the Level descriptors to help you decide whether it is a strong or weak answer. The indicative scientific content in the Guidance column indicates the expected parameters for candidates' answers, but be prepared to recognise and credit unexpected approaches where they show relevance. Using a 'best-fit' approach based on the skills and science content evidenced within the answer, first decide which set of level descriptors, Level 1, Level 2 or Level 3, best describes the overall quality of the answer. Once the level is located, award the higher or lower mark:

The higher mark should be awarded where the level descriptor has been evidenced and all aspects of the communication statement (in italics) have been met.

The lower mark should be awarded where the level descriptor has been evidenced but aspects of the communication statement (in italics) are missing.

In summary:

The skills and science content determines the level.

The communication statement determines the mark within a level.

Level of response questions on this paper is **15**.

12. Subject-specific Marking Instructions

INTRODUCTION

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper
- the mark scheme.

You should ensure that you have copies of these materials.

You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.