Centre Number	Candidate Number	Name		

## CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

BIOLOGY 0610/05

Paper 5 Practical Test

May/June 2003

1 hour

Candidates answer on the Question Paper. Additional Materials: As listed in Instructions to Supervisors.

## **READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces provided at the top of this page. Write in dark blue or black pen in the spaces provided on the Question Paper. You may use a soft pencil for any diagrams, graphs or rough working. Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer all questions.

The number of marks is given in brackets [ ] at the end of each question or part question.

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

FOR EXAMI	INER'S USE
1	
2	
TOTAL	

This document consists of 7 printed pages and a Supervisor's Report.

For Examiner's Use

1 You are provided with two samples of bread dough in test-tubes, labelled **S1** and **S2**.

Do **not** remove the dough from the tubes.

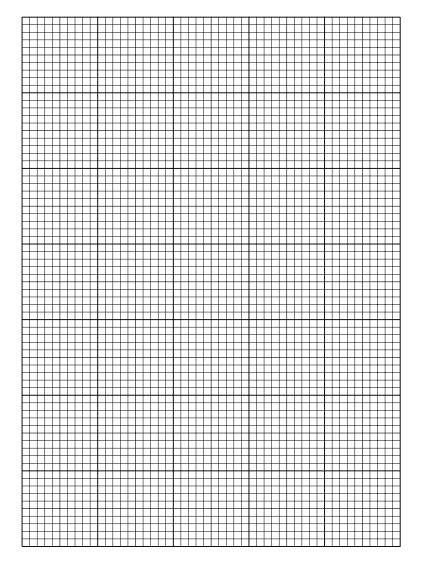
Support the tubes vertically and measure the highest level of the dough in each tube immediately and note the time on the clock.

Record these heights and the time the readings were taken in the space below.

(a) At 5 minute intervals over the next 30 minutes, measure the levels of the dough for S1 and S2. Record the heights and times in a suitable table in the space below.

You should start Question 2 whilst you continue with your readings.

(b) On the grid below, plot your measurements for S1 and S2 as two curves on one set of axes.



[6]

Describe the two curves on the graph for both dough samples, S1 and S2.			
[3]			

For
Examiner's
Use

	(d)		e two dough samples are similar in conter o contains yeast and a small amount of su	nt of flour and water but dough sample <b>S1</b> gar.
		Use	e this information to explain your recorded	data.
				[6]
				[Total : 20]
2	(a)		are provided with a test tube <b>S3</b> contain pended in water.	ing a material similar to mollusc secretion,
		Tes	t the contents of the tube for the presence	e of protein.
		(i)	Record your results in the table below.	
			Observation after testing for protein	Conclusion
		•	Observation after testing for protein	Odriciusion
	5	3		
				[2]
		(ii)	Describe how you carried out the test for	r protein.
				[2]
				[2]

- (b) You have been provided with specimen S4.
  - Take care **not** to touch or disturb the animal.
  - Examine the specimen carefully, using the hand lens.
  - (i) Make a large, labelled drawing of **S4** in the space below.

    Label those features which enable you to recognise this specimen as a mollusc.

(ii) Measure the length of specimen S4 and your drawing of specimen S4. Calculate the magnification of your drawing.

| length of specimen S4 | length of your drawing of your

[6]

6

For Examiner's Use

- (c) It has been suggested that the body temperature of molluscs is the same as the temperature of their environment.
  - Fig. 2.1 shows some snails in a beaker.

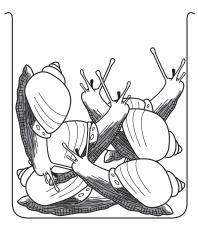


Fig. 2.1

<b>not</b> carry out, Fig. 2.1 is the		iture of the sr	nails in
 	 	 	[3]

For
Examiner's
Use

1)	Spe	cimen S5 is part of a mollusc and was formed by the animal when it was alive.
	(i)	Describe the appearance and structure of specimen <b>S5</b> .
		[2]
	(ii)	Dilute hydrochloric acid reacts with calcium carbonate to produce carbon dioxide gas.
		Place the specimen on the tile provided. <b>Carefully</b> add a few drops of dilute hydrochloric acid on to the specimen and observe the effect.
		Comment on your observation and suggest an explanation.
		observation
		explanation
		[2]
	(iii)	Suggest a function of <b>S5</b> in the living animal.
		[1]
		[Tatal: 00]

[Total: 20]

8

## SUPERVISOR'S REPORT

\*The Supervisor or Teacher responsible for the subject is asked to answer the following questions.

1	Was any difficulty experienced in providing the necessary material? If so, give brief details.
2	Did the candidate experience any difficulty during the examination as a result of faulty material? If so, give brief details.
3	Did the candidate suffer any accidents with apparatus or materials? If so, give brief details.
4	Please state any other information that is likely to assist the Examiner, especially if this cannot readily be discovered from the answers.
5	Please identify S4 and S5. S4
	S5
	Please describe briefly the appearance of any features likely to assist the Examiner.
	Declaration (to be signed by the Principal, and completed on the top script from the Centre)
	The preparation of the practical examination has been carried out so as fully to maintain the security of the examination.
	Signed
	Name (in block capitals)
*Inf	formation that applies to all candidates need be given only once.

0610/05/M/J/03

appropriate seating plan are sent inside each envelope.

N.B. If scripts are required by CIE to be despatched in more than one envelope, it is essential that a copy of the relevant Supervisor's Results (when requested), the Supervisor's Report and the