Centre Number	Candidate Number	Name
÷		NATIONAL EXAMINATIONS rtificate of Secondary Education
BIOLOGY		0610/05
Paper 5 Pract	ical Test	May/June 2003
Additional Materia	er on the Question Pap als: tructions to Supervisors	
	r, candidate number an	d name in the spaces provided at the top of this page. vided on the Question Paper.

If you have been given a label, look at the details. If any details are incorrect or	FOR EXAMINER'S US
missing, please fill in your correct details in the space given at the top of this page.	1
Stick your personal label here, if	2
provided.	TOTAL

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

UNIVERSITY of CAMBRIDGE Local Examinations Syndicate 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.

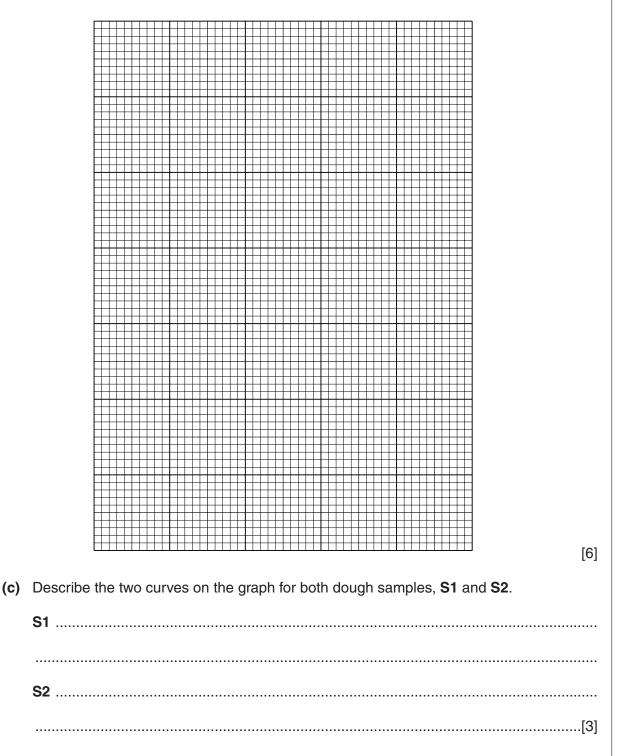
Support the tubes vertically and measure the highest level of the dough in each tube immediately and note the time on the clock.

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.



[2]

(d) The two dough samples are similar in content of flour and water but dough sample S1 also contains yeast and a small amount of sugar.

Use this information to explain your recorded data.

[[Total : 20]

2 (a) You are provided with a test tube S3 containing a material similar to mollusc secretion, suspended in water.

Test the contents of the tube for the presence of protein.

(i) Record your results in the table below.

	Observation after testing for protein	Conclusion
S3		

(ii) Describe how you carried out the test for protein.

- (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.

[6]

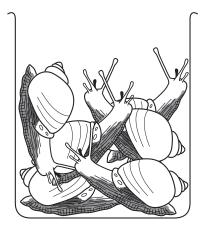
(ii) Measure the length of specimen **S4** and your drawing of specimen **S4**. Calculate the magnification of your drawing.

length of specimen S4 length of your drawing of specimen S4

magnification

(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.





Plan, but do **not** carry out, an experiment to find out if the temperature of the snails in the beaker in Fig. 2.1 is the same as their environment.

 	 	 [3]

(d) Specimen **S5** is part of a mollusc and was formed by the animal when it was alive.

(i) Describe the appearance and structure of specimen **S5**.

	[2]
(ii)	Dilute hydrochloric acid reacts with calcium carbonate to produce carbon dioxide
	gas. Place the specimen on the tile provided. Carefully 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 S5 in the living animal.
	[1]
	[Total: 20]

- * 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)

*Information that applies to all candidates need be given only once.

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 appropriate seating plan are sent inside **each envelope**.