

Candidate Forename						Candidate Surname					
Centre Number						Candidate Number					

**WELSH JOINT EDUCATION COMMITTEE AND
OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

1987/03

GEOGRAPHY B (AVERY HILL)

Paper 3 (Foundation Tier)

THURSDAY 17 JUNE 2010: Afternoon

DURATION: 1 hour 30 minutes

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on the Question Paper

OCR SUPPLIED MATERIALS:

Resource Booklet (1987/03/04/RB inserted)

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- **Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes on the first page.**
- **Use black ink. Pencil may be used for graphs and diagrams only.**
- **Read each question carefully and make sure that you know what you have to do before starting your answer.**
- **Answer ALL the questions.**
- **Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.**

INFORMATION FOR CANDIDATES

- **The number of marks is given in brackets [] at the end of each question or part question.**
- **You are strongly advised to read through each section carefully before answering a question.**
- **You will be awarded marks for the quality of written communication.**
- **The total number of marks for this paper is 60.**

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This paper examines an ecosystem in Portugal and the present and possible future uses of that ecosystem.

MARKS

<u>PART A</u>	Investigates the geography of an area of Portugal and present uses of the cork oak forest ecosystem in that area.	27
<u>PART B</u>	Explores features of the cork oak forest ecosystem and the pressures it is under.	10
<u>PART C</u>	Asks you to decide how the area of cork oak forests should be developed in the future.	23
<u>TOTAL MARK</u>		<u>60</u>

PART A

YOU ARE ADVISED TO SPEND ABOUT 30 MINUTES ON THIS PART.

This part investigates the geography of an area of Portugal and present uses of the cork oak forest ecosystem in that area.

- (a) Study Map 1 on the loose A3 sheet included in the separate Resource Booklet. It shows the distribution of the cork oak ecosystem.**

- (i) **COMPLETE** the following passage by **CIRCLING** the correct answers.

Cork oak forests are found mainly in coastal areas of the Atlantic Ocean and

AEGEAN / BLACK / MEDITERRANEAN

Sea. There are forests on the islands of

Corsica, Sardinia and

SICILY / CRETE / MALLORCA. A large area

of cork oak forest grows along the

EAST / WEST / NORTH coast of mainland

Italy.

[3]

- (ii) **DESCRIBE** the location of the Alentejo cork oak forests.

[2]

- (b) Study Graph 1 on page 4 of the separate Resource Booklet. It shows the climate of the Alentejo region.

- (i) What is meant by the term 'climate'?

[2]

- (ii) **COMPLETE** the passage below by writing the correct answers in the spaces provided. Select your answers from the list below:

26 °C	JULY	27 °C	AUGUST	COLD
JUNE	DECEMBER	30 °C	HOT	MILD

The driest season is summer with the lowest monthly rainfall of 5 mm in the month of _____ . This is also the period of highest temperatures with a maximum of _____ in the months of July and August. The area has a climate of hot dry summers and _____ wet winters. [3]

- (iii) **SUGGEST ONE** advantage and **ONE** disadvantage of the Alentejo climate for farmers. [2]

Advantage _____

Disadvantage _____

(c) Study Sketch 1 on page 5 of the separate Resource Booklet. It shows ways in which cork oaks are adapted to the climate in which they live.

(i) **COMPLETE** the following heads and tails by drawing lines to link ways in which trees are adapted with reasons why they adapted. One has been done for you. [3]

<u>WAY ADAPTED</u>	<u>REASON</u>
Deep and extensive root system	so has enough water for dry season.
Able to retain water	so loses little water through transpiration.
Small, waxy leaves	so stops animals taking moisture from it.
Unpleasant-tasting bark	so able to reach more water.

(ii) **CHOOSE ONE** other way in which the cork oak has adapted to its climate. **EXPLAIN** how this adaptation helps it survive. [2]

Way _____

Explanation _____

- (d) Study Graph 2 on page 6 of the separate Resource Booklet. It shows Portugal's income from cork. Cork is the bark of the cork oak tree.

The table below shows Portugal's income from cork oak in value rank order.

COMPLETE the table by filling in the gaps. [3]

CORK OAK USE	% OF TOTAL
Corks for bottles	67
Insulation for houses	
Other products	7

- (e) Portugal produces most of the world's corks for bottles.

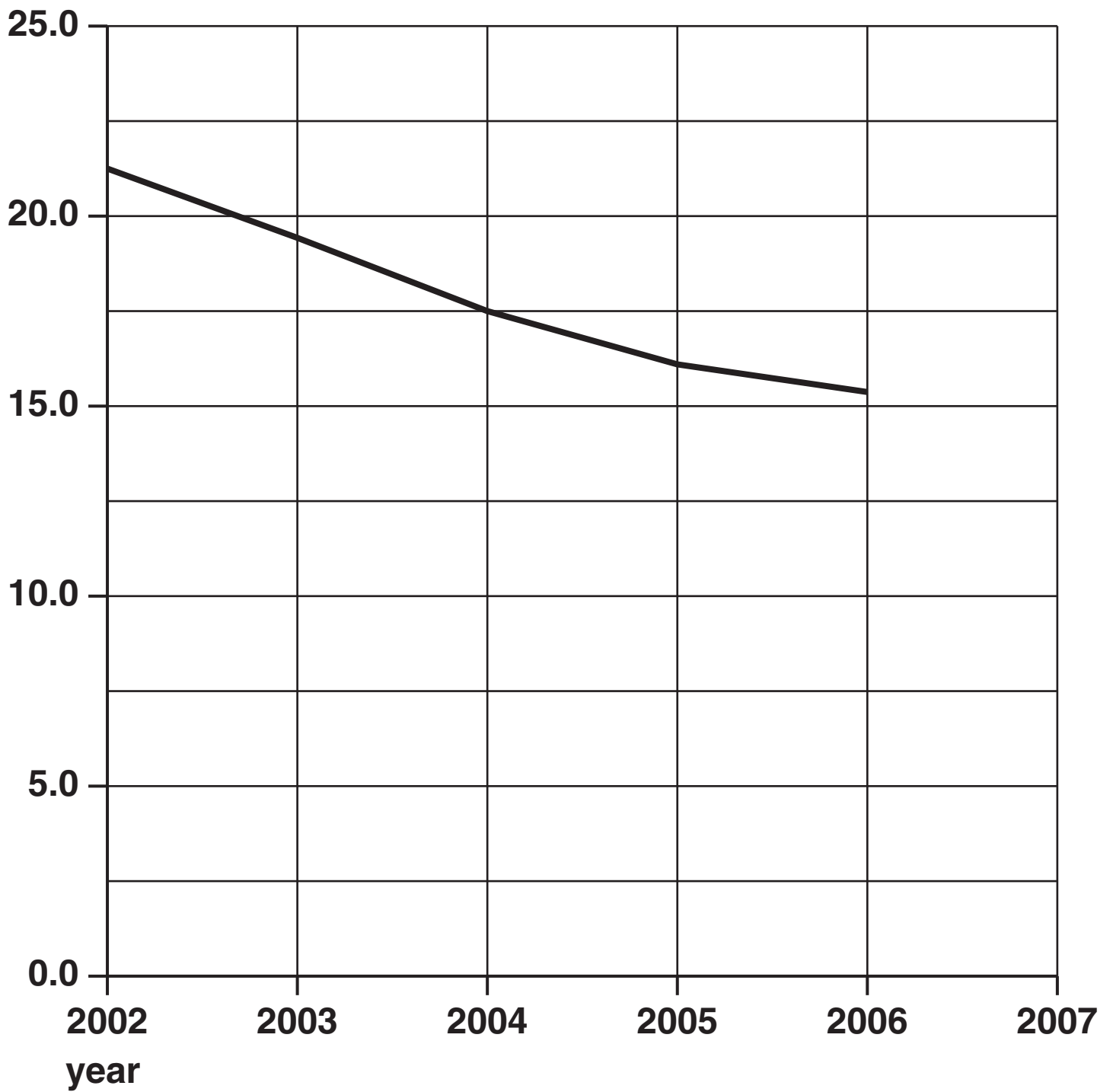
Study the graph opposite.

- (i) **COMPLETE** the graph opposite using the information below:

2007: 14 billion corks for bottles sold. [1]

CHANGES IN SALES OF CORKS FOR BOTTLES

Corks for bottles sold (billions)



- (ii) **DESCRIBE** changes in the graph between 2002 and 2006. **USE FIGURES** in your answer.

[2]

- (iii) **SUGGEST AND EXPLAIN** one effect of these changes on people.

[2]

- (iv) **SUGGEST AND EXPLAIN** one effect of these changes on the natural environment.

[2]

[Total mark: 27]

END OF PART A

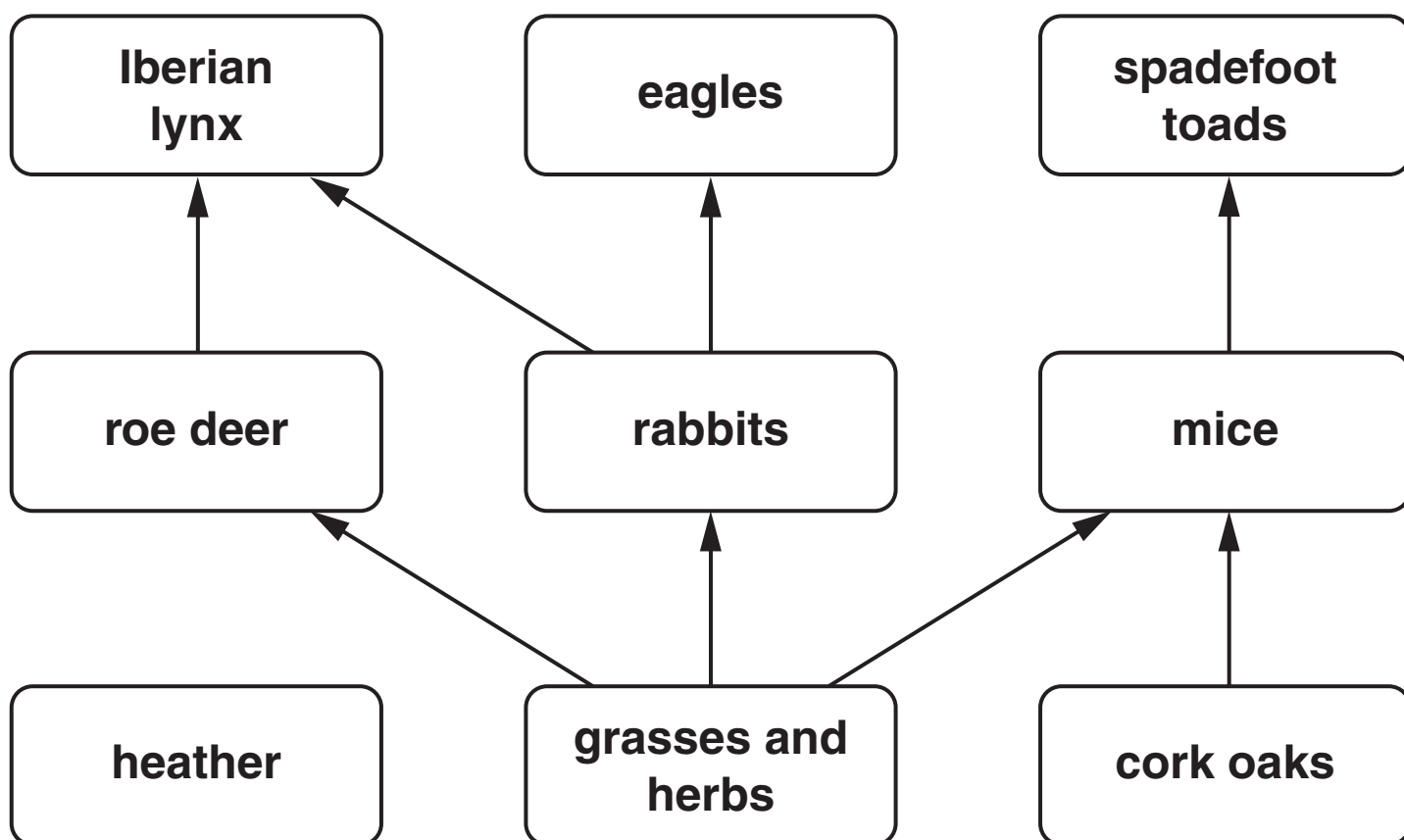
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PART B

YOU ARE ADVISED TO SPEND ABOUT 15 MINUTES ON THIS PART.

This part explores features of the cork oak forest ecosystem and the pressures it is under.

(a) Study the diagram below. It is a food web for the cork oak forest ecosystem.



- (i) What is meant by the term 'ecosystem'?
TICK (✓) the correct description in the table below. [1]

DESCRIPTION	Tick (✓)
All the plants living in one particular area	
A group of plants and animals and the environment in which they live	
All the plants and animals living in one particular area	

- (ii) COMPLETE the food web BY DRAWING ARROWS to show that: [2]

ROE DEER EAT HEATHER

EAGLES EAT MICE

- (iii) FILL IN THE GAPS below to show one food chain in THIS cork oak food web. [3]

Secondary consumer: _____

Primary consumer: _____

Producer: _____

(iv) **DESCRIBE** what might happen to the food web if the **CORK OAKS** were removed.

[4]

[Total mark: 10]

END OF PART B

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PART C

YOU ARE ADVISED TO SPEND ABOUT 45 MINUTES ON THIS PART.

This part asks you to decide how the area of cork oak forests should be developed in the future.

- (a) Study Table 1 on page 8 of the separate Resource Booklet. It compares some features of cork oak trees and eucalyptus trees. Eucalyptus forests have been planted in Portugal.**
- (i) A build up of carbon dioxide in the atmosphere is causing climate change. Give TWO effects of climate change. [2]**

First effect _____

Second effect _____

- (ii) **COMPLETE** the passage below using information from the table. [2]

Growing cork oaks may be considered sustainable for the global environment because cork oaks

_____ .

It may be considered sustainable for the farmer because there is

_____ .

- (iii) What evidence in the table supports growing **EUCALYPTUS** as a more sustainable use of the land than growing **CORK OAK**? **EXPLAIN** your choice. [2]

Evidence _____

Explanation _____

(b) Study Advertisement 1 on page 9 of the separate Resource Booklet. It promotes tourism in the Alentejo region.

(i) Give ONE physical and ONE human attraction of the Alentejo region for THIS type of holiday.
[2]

Physical attraction _____

Human attraction _____

(ii) SUGGEST and EXPLAIN how the growth of this type of holiday may help to protect the plants and animals living there.

_____ **[4]**

- (c) You are asked to advise the government of Portugal as to how it should develop its areas of cork oak forest in the future.**

There are three options:

- 1 give grants to cork oak farmers and promote the use of cork;**
- 2 promote eucalyptus growing on present cork oak land, for paper production;**
- 3 promote the development of tourist activity, such as ecotourism.**

Use information in the FACTFILE, on page 10 of the separate Resource Booklet, to COMPLETE THE MATRIX on page 20 to help you organise your ideas.

Some of the matrix has been completed for you.

You should spend about 15 MINUTES completing the matrix.

OPTION	FACT	SUPPORTS (S) OR REJECTS (R) THE OPTION AND WHY
GIVE GRANTS TO CORK OAK FARMERS AND PROMOTE THE USE OF CORK		
	Climate of Alentejo is ideal for eucalyptus growth	(S) should result in large harvests every year
PROMOTE EUCALYPTUS GROWING ON PRESENT CORK OAK LAND, FOR PAPER PRODUCTION		
PROMOTE THE DEVELOPMENT OF TOURIST ACTIVITY, SUCH AS ECOTOURISM		

USE THE INFORMATION in the completed matrix on page 20 to help you write a letter to the government of Portugal.

You may also use information from other parts of the paper and ideas of your own.

You are to advise the government as to WHICH ONE of the three options they should support and EXPLAIN why it is better than the other two options. [11]

TO THE GOVERNMENT OF PORTUGAL.

I am writing to advise you to:

- 1 give grants to cork oak farmers and promote the use of cork;**
- 2 promote eucalyptus growing on present cork oak land, for paper production;**
- 3 promote the development of tourist activity, such as ecotourism.**

UNDERLINE your chosen option.

I have chosen this option because _____

[illegible]

[Total mark: 23]

END OF PART C

ADDITIONAL PAGES:

If you use these lined pages to complete the answer(s) to any question(s), the question number(s) MUST be clearly shown.

[illegible]

[illegible]

[illegible]

[illegible]

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