

<b>Candidate Forename</b>						<b>Candidate Surname</b>					
<b>Centre Number</b>						<b>Candidate Number</b>					

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

**1987/04**

**GEOGRAPHY B (AVERY HILL)**

**Paper 4 (Higher 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.**

		<b><u>MARK</u></b>
<b><u>PART A</u></b>	<b>Investigates the geography of an area of Portugal and present uses of the cork oak forest ecosystem in that area.</b>	<b>23</b>
<b><u>PART B</u></b>	<b>Explores features of the cork oak forest ecosystem and the pressures it is under.</b>	<b>15</b>
<b><u>PART C</u></b>	<b>Asks you to decide how the area of cork oak forests should be developed in the future.</b>	<b>22</b>
<b><u>TOTAL MARK</u></b>		<b><u>60</u></b>

## **PART A**

**YOU ARE ADVISED TO SPEND ABOUT 20 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 European and African distribution of the cork oak ecosystem and the region of Alentejo.**

(i) **DESCRIBE** the distribution of the cork oak ecosystem. [2]

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(ii) **DESCRIBE** the location of the Portuguese region of Alentejo. [2]

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**(b) Study Graph 1 on page 4 of the separate Resource Booklet. It shows the climate of Evora, a settlement in the Alentejo region.**

(i) **DESCRIBE** the climate of the Alentejo region.

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[4]

**(ii) What difficulties would this climate cause for people trying to farm in it?**

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**[2]**

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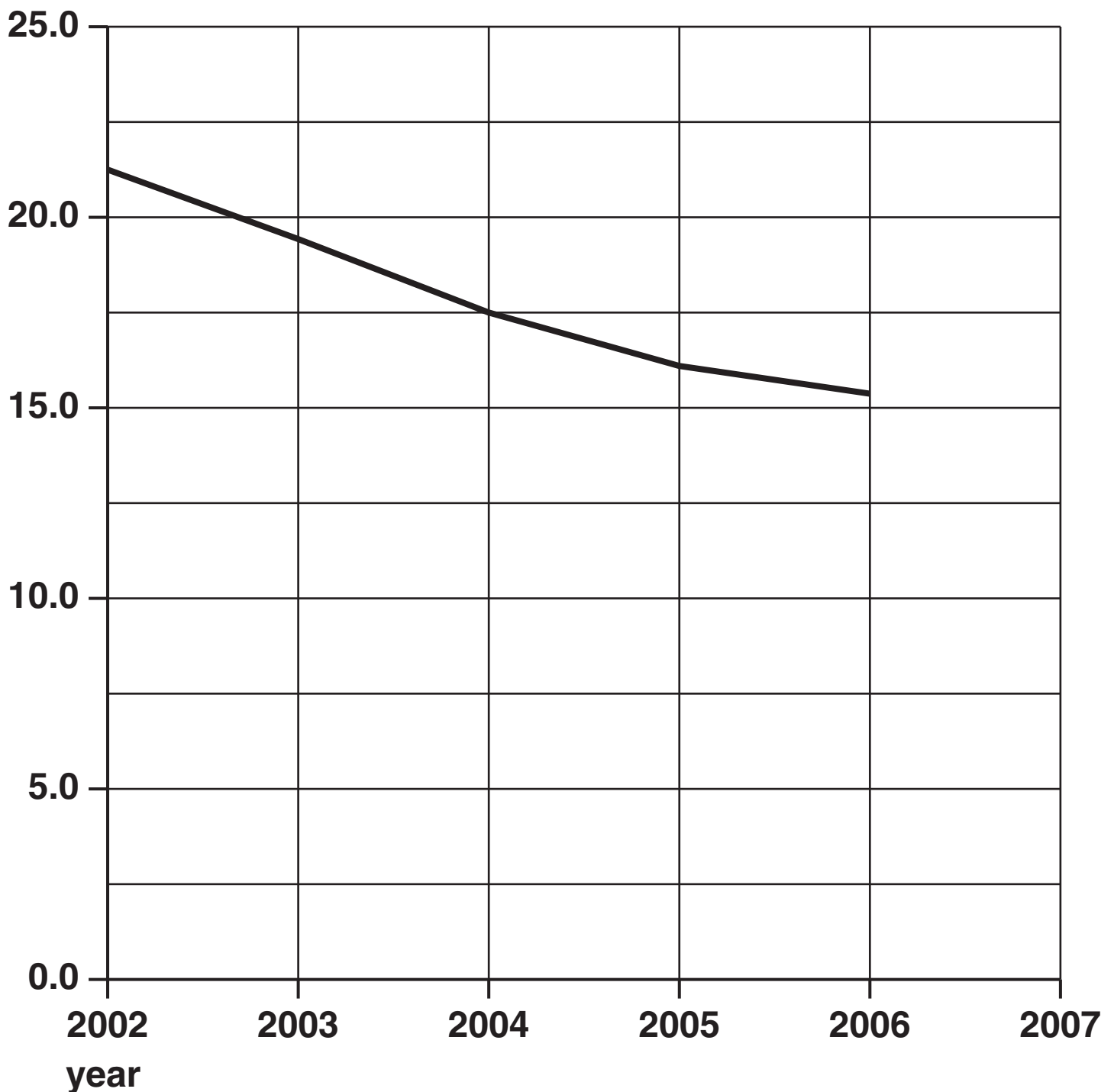
**Please turn over for part (c)**

**(c) The cork oak is farmed to produce corks for bottles. The corks are made from the trees' bark.**

**Study the graph below. It shows Portugal's sales of corks for bottles. Portugal is the world's largest producer of corks for bottles.**

### **CHANGES IN SALES OF CORKS FOR BOTTLES**

**Corks for bottles sold (billions)**





(i) **COMPLETE** the graph with the following data:

2007 14 billion. [1]

(ii) **DESCRIBE** the trend in sales of corks for bottles.

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[2]

(iii) **How might this trend affect different groups of people?**

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[4]

**(d) Study Graph 2 on page 6 of the separate Resource Booklet. It shows Portugal's income from cork.**

**(i) What percentage of Portugal's income from cork comes from corks for bottles?**

\_\_\_\_\_ **[1]**

**(ii) What are the DISADVANTAGES for Portugal of relying so much on one crop?**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ **[3]**

**Corks for bottles are increasingly being replaced by metal and plastic tops.**

- (iii) SUGGEST how corks might be more sustainable than metal and plastic tops.**

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[2]

**[Total mark: 23]**

**END OF PART A**

## **PART B**

**YOU ARE ADVISED TO SPEND ABOUT 25 MINUTES ON THIS PART.**

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

**(a) Cork oak forest is an example of an ecosystem.**

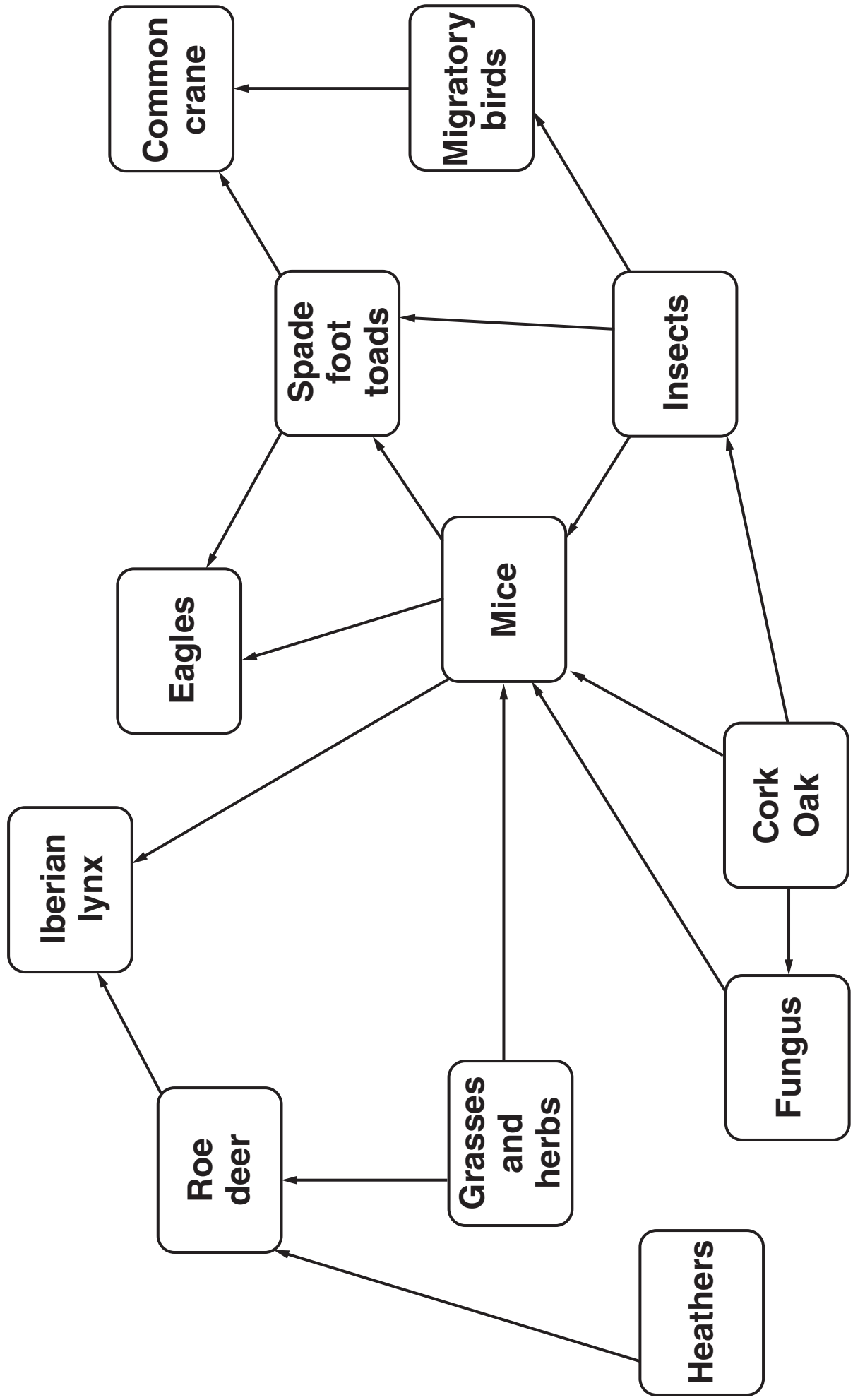
**What is meant by the term ‘ecosystem’?**

\_\_\_\_\_  
\_\_\_\_\_ [1]

**(b) (i) Using the food web opposite, IDENTIFY ONE FOOD CHAIN within the ecosystem.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

## EXTRACT OF A FOOD WEB FROM THE CORK OAK FOREST



- (ii) What would happen to other species if there were FEWER Iberian lynx?

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[3]

- (c) This food web shows the cork oak forest's large biodiversity. Biodiversity is the variation of life forms within an ecosystem. Biodiversity can be used as a measure of the health of biological systems.

- (i) What might cause biodiversity to be REDUCED in the cork oak forest ecosystem?

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[2]

- (ii) What would be the effects on the natural environment of REDUCING the biodiversity of an area?

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[2]

- (d) Study Graph 1 on page 4 and Sketch 1 on page 5 of the separate Resource Booklet.

EXPLAIN TWO ways the cork oak is adapted to the climate.

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[4]

[Total marks: 15]

END OF PART B

## **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 forest should be developed in the future.**

- (a) Sustainable management of resources is important.**

**What is meant by the term ‘sustainable management’?**

\_\_\_\_\_

\_\_\_\_\_ **[1]**

- (b) Study Table 1 on page 8 of the separate Resource Booklet. It shows some features of eucalyptus and cork oak forests.**

**Is eucalyptus a more or less sustainable crop than cork oak?**

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_



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[4]

- (c) Study Advertisement 1 on page 9 of the separate Resource Booklet.

For a named group of people, **SUGGEST AND EXPLAIN** either the advantages or disadvantages tourism brings them.

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[3]

**(d) Write a report to the Portuguese Government on how to secure a sustainable future for the Alentejo region by choosing one of the following projects:**

- **promote eucalyptus growing for paper instead of cork oak;**

**OR • give grants to cork farmers in order to stay in business and to promote the use of cork;**

**OR • promote tourism in the Alentejo.**

**Use the FACTFILE on page 10 of the separate Resource Booklet, other information from the Resource Booklet and ideas of your own to COMPLETE THE MATRIX on page 19 to help you organise your ideas. Some of the matrix has been completed for you.**

**YOU SHOULD SPEND ABOUT 20 MINUTES COMPLETING THE MATRIX.**

	<b>Eucalyptus growing for paper</b>	<b>Give grants to cork farmers in order to stay in business and to promote the use of cork.</b>	<b>Promote tourism in the Alentejo.</b>
<b>Advantages</b>		<b>Habitat preserved</b>	
<b>Disadvantages</b>			
<b>Sustainable or not because....</b>	<b>Sustainable because trees grow quickly so it creates regular income</b>		

**Use the information on the completed matrix on page 19 to help you write your report for the government of Portugal. You may also use information from other parts of the paper, from your studies and ideas of your own.**

**You should EXPLORE ALL OF THE OPTIONS in your report and refer to both ADVANTAGES and DISADVANTAGES of each scheme on the people, environment and sustainability of the Alentejo region.**

**[14]**

## To the Portuguese Government

[illegible]

[illegible]

[illegible]

**[Total mark: 22]**

**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]

[illegible]

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