OXFORD CAMBRIDGE AND RSA EXAMINATIONS
WELSH JOINT EDUCATION COMMITTEE
General Certificate of Secondary Education

GEOGRAPHY SPECIFICATION B (Avery Hill) 1987/2

PAPER 2 HIGHER TIER

Monday **6 JUNE 2005** Morning 1 hour 30 minutes

Additional materials:
Resource Booklet (1987/1/2/RB) – inserted
12 or 16 page Answer Booklet to be provided by the Centre

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces at the top of the separate Answer Booklet.

This question paper is in three sections (Sections A, B and C). Each section contains two questions.

Answer only **one** question from each section.

Answer **all** parts of the question in your Answer Booklet. Make sure each answer is clearly numbered.

At the end of the examination complete the grid on the front of your Answer Booklet.

INFORMATION FOR CANDIDATES

You are strongly advised to read through each section carefully before answering a question.

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

You will be awarded marks for the quality of written communication.

This question paper consists of 20 printed pages.

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SECTION A: CLIMATE, THE ENVIRONMENT AND PEOPLE

Answer EITHER Question A1 OR Question A2.

Question A1

(a) Study the map below.

A Weather Map for the United Kingdom

Source: Questioning Geography; Baumber, Pick, Renwick

(i) Describe fully the weather that is taking place at Weather Station A. [2]

(ii) Give two ways in which the weather at Weather Station B is different from the weather at Weather Station A. Give a reason for each difference. [4]

(b) Study the map below and Photograph 1 in the separate Resource Booklet.

Weather Map for 10th August 2003

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Details: A weather map of the UK and Western Europe for 10th August 2003

Source: Met Office

(i) Which number on Photograph 1 links to the features below that are shown on the map above?

- an area of high pressure
- a cold front [2]

(ii) What is the highest air pressure on the map? Where is it located? [2]

(iii) What evidence from the map and Photograph 1 suggests that the easterly winds blowing into the UK on 10th August 2003 were light and dry? [2]

[Turn over

(c) Study Graphs 1 and 2 below.

Graph 1: Highest daily temperature recorded in the United Kingdom.

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Details: A graph showing the highest daily temperature recorded in the UK in August 2003

Graph 2: Average monthly temperature at Gravesend over 30 years.

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Details: A graph showing the average monthly temperature at Gravesendover 30 years

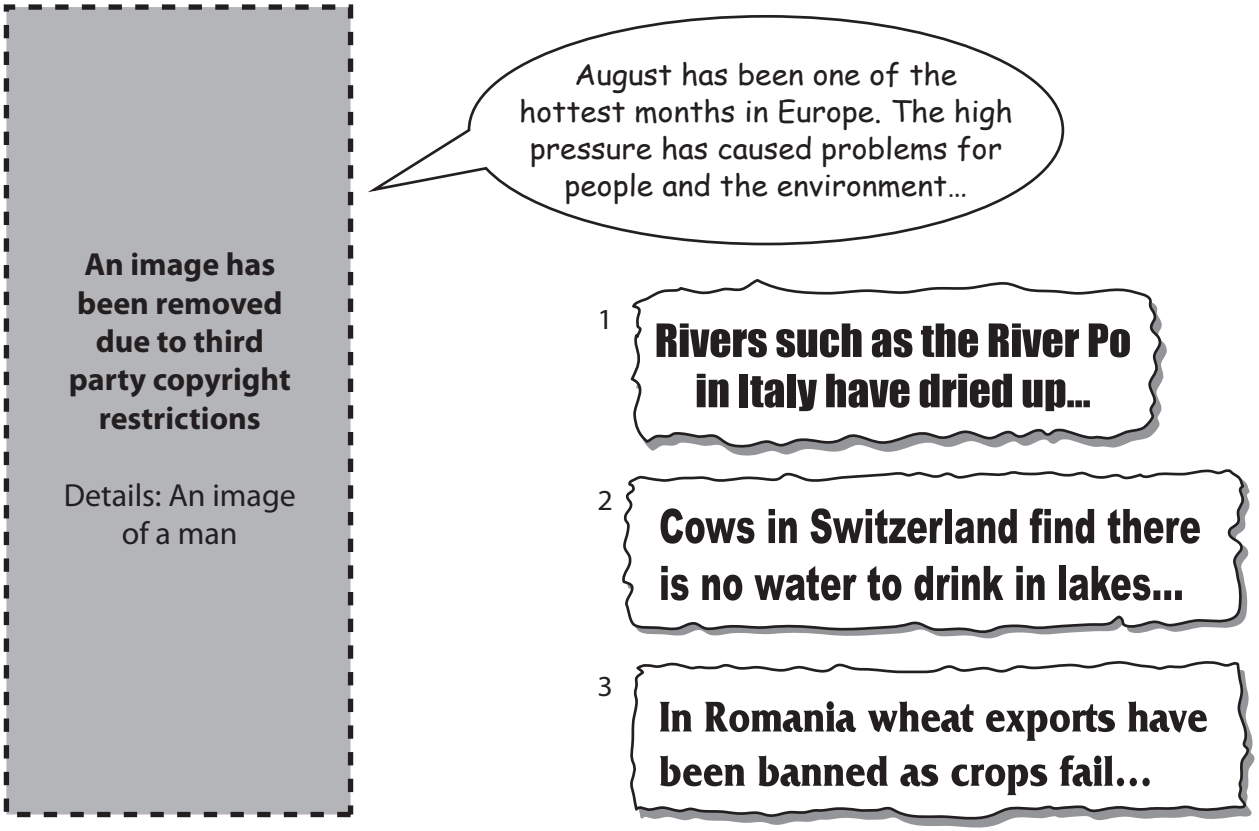
(i) What was the highest recorded temperature in the UK between the 1st and 16th August 2003? When was it recorded? [2]

(ii) What do you understand by the following terms?

- weather
- climate [2]

(iii) Look again at Graphs 1 and 2 . Suggest why climate statistics may be misleading when planning outdoor activities in August. [2]

(d) Study the information below.



Suggest another way in which the hot weather in the first two weeks of August 2003 could have affected people or the environment. Explain your answer. [4]

(e) CASE STUDY: A weather event caused by low pressure.

(i) Name and locate a weather event that has been caused by a low pressure weather system .

(ii) Describe the weather event.

(iii) Explain how the weather event affected different groups of people and/or organisations. [8]

Total marks : 30

End of Question A1

Question A2

(a) Study the map below.

World Map Showing Where Coral Reefs Can Be Found

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Details: A world map showing where coral reefs can be found

Corals are small animals that need warm shallow seas and sunlight to survive. Most coral forms reefs that support rich marine ecosystems. Many coral reefs are under threat from human activity.

(i) Name one ocean where coral can be found. [1]

(ii) Suggest why coral is not found south of Australia. [1]

(iii) What is meant by a "marine ecosystem"? [2]

(b) Study Map 1 in the separate Resource Booklet .

(i) Describe the location of the Great Barrier Reef. [2]

(ii) What is meant by " sustainability "? [2]

(iii) The Australian government has created the Great Barrier Reef Marine Park . Points A and B on Map 1 have been marked at each end of the Park. Estimate the straight-line distance in kilometres between points A and B using the scale provided. [1]

(c) Study the information below.

URGENT ACTION NEEDED TO SAVE GREAT BARRIER REEF

Global warming is threatening one of Australia's great natural wonders. Each year tourists generate over £500 million of income but the rising temperature of the sea is killing off the coral. There will no new coral by 2030. Without the coral reef there will be no demand from tourists for diving and boat trips. Less people will visit Queensland. Damage to the environment will also affect the economy.

A diagram has been removed due to third party copyright restrictions

Details: A diagram showing threats to the Great Barrier Reef. Threats shown are boat anchors damaging coral, dredging activity, rivers bringing nutrients and sediments from deforestation, pollution from farming, sewage and industry, intensive fishing and tourists treading on the coral

(i) Why is global warming causing a threat to the ecosystem of the Great Barrier Reef? [1]

(ii) Suggest one human activity that causes global warming. Explain how this activity causes global warming. [3]

(iii) Give one reason why it is important to conserve the Great Barrier Reef. Explain your reason. [2]

(iv) The diagram above shows some threats to the coral reef ecosystem. Choose one human activity from the diagram that is causing damage to the coral reef. Explain the damage it is causing. [3]

(d) Suggest one way that the Great Barrier Reef Marine Park could be protected and conserved. Explain how your way would work. (Refer to examples you have studied if you wish.) [4]

(e) CASE STUDY: An ecosystem and climate.

(i) Name and locate an ecosystem that is found on land.

(ii) Describe the plants and animals found in this ecosystem.

(iii) Explain how the plants and animals are adapted to the climate of this ecosystem.

[8]

Total marks : 30

End of Question A2

SECTION B: PEOPLE AND PLACE

Answer EITHER Question B3 OR Question B4.

Question B3

(a) Study the map below and Map 2 in the separate Resource Booklet .

The location of the villages of Caverswall and Cookshill in 1955

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Details: A map showing the location of the villages of Caverswall and Cookshill in 1955

North

(i) Describe the location of the village of Caverswall in relation to the village of Cookshill.

[2]

(ii) Between 1955 and 2004, Cookshill has expanded much more than Caverswall. Use the map on page 8 and Map 2 in the Resource Booklet to suggest two reasons why. [4]

(b) Study the 2001 census data below.

Population and Age Structure

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Details: A table comparing the population and age structure of Caverswall and Cookshill with England and Wales

(i) Give two ways in which the age structure of Caverswall and Cookshill is different from the age structure of England and Wales. Refer to figures in your answer. [4]

(ii) Suggest how the age structure of the villages could affect services provided in the villages. [2]

[Turn over

(c) Study the information below.

Housing and Households at the 2001 Census

England and Wales

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Details: A pie chart showing the percentage of houses in England and Wales that are owner occupied, rented from the council or housing association and privately rented

Caverswall and Cookshill

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Details: A pie chart showing the percentage of houses in Caverswall and Cookshill that are owner occupied, rented from the council or housing association and privately rented

Car Ownership per Household (2001)

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Details: A table comparing the car ownership per household in Caverswall and Cookshill with England and Wales

(i) What percentage of housing in Caverswall and Cookshill is owner occupied? [1]

(ii) Give one way in which car ownership differs between Caverswall and Cookshill and England and Wales. Give a reason for the difference. [2]

(iii) What do the figures suggest about the income levels of the people who live in the villages? Justify your answer. [3]

(d) Suggest two reasons why people may migrate from urban areas into rural areas. Refer to push and pull factors. Explain each reason. (Refer to examples you have studied if you wish.) [4]

(e) CASE STUDY: Where people live in a town or city.

(i) Name a town or city you have studied.

(ii) Describe where different groups of people live in this town or city. (Draw a diagram or map if you wish.)

(iii) Explain why different groups of people live in these areas.

[8]

Total marks : 30

End of Question B3

Question B4

(a) Study the map below.

Population of Some Major Cities in India

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Details: A map showing the population of some of the major cities in India

Since 1995, the Indian city of Calcutta has been known as Kolkata. Describe the location of Kolkata. [3]

(b) Study Map 3 in the separate Resource Booklet .

(i) What is meant by each of the following terms:

- residential land-use?
- commercial land-use? [2]

(ii) Describe where the industrial land-use is located in Kolkata. [1]

(iii) Suggest a reason for the location of the industrial land-use. Explain your reason. [2]

[Turn over

(c) Study the graph below.

Population Growth of Kolkata

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Details: A graph showing the population growth of Kolkata

(i) Describe how the population of Kolkata has changed between 1881 and 1981. Refer to figures in your answer. [3]

(ii) Suggest one reason why the population growth has been rapid since 1981. [1]

(iii) Explain two problems that this population growth may have caused for the planners in Kolkata. [2]

(d) Read the article below.

THE KMC IS IMPROVING KOLKATA'S SLUMS!

The Kolkata Municipal Corporation (KMC) has set up a scheme to provide for poor people who live in the slums of the city. Improving services has been a main priority. In the last 15 years, the KMC has provided the following:

- over 600 kilometres of paved roads in the slums.
- over 15 000 street lights.
- improved drainage and sewage systems.

(i) State one way in which the KMC has improved conditions in the slums. Explain how this way should improve the quality of life. [2]

(ii) Suggest two other ways that might improve the quality of life for the slum dwellers. Explain how each way would work. (Refer to examples you have studied if you wish.) [6]

(e) CASE STUDY: An area where services have been changed in a More Economically Developed Country (MEDC).

(i) Name and locate an urban or rural area where services have been changed in an MEDC.

(ii) **Describe** how the services in this area have been changed.

(iii) **Explain** how different groups of people and organisations have gained or lost from these changes.

[8]

Total marks : 30

End of Question B4

SECTION C: WATER, LANDFORMS AND PEOPLE

Answer EITHER Question C5 OR Question C6.

Question C5

(a) Study the maps below.

Map A: The Location of the River Cuckmere

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Details: A map showing the location of the River Cuckmere

Map B: Drainage Basin of the River Cuckmere

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Details: A map showing the drainage basin of the River Cuckmere

(i) What do the following terms mean:

- a watershed?
- a drainage basin? [2]

(ii) Look at Map A above. Describe the location of the River Cuckmere within the region shown on the map. [2]

(iii) Look at Map B above. Write down which of the following figures is closest to the area of the River Cuckmere's drainage basin in square kilometres.

150 180 210 square kilometres [1]

(b) Study Photograph 2 in the separate Resource Booklet .

(i) Name the river feature that can be found:

- in the shaded area A
- where the River Cuckmere meets the sea at B. [2]

(ii) From which direction was the photograph taken? Choose your answer from the following:

north east south west [1]

(iii) Measure the straight-line distance in kilometres between Points R and S. Use either Photograph 2 or Map 4 in the Resource Booklet to help. [1]

(iv) How can you tell that the course of the River Cuckmere has been changed? Suggest why it has been changed. [3]

(c) Study Map 4 in the Resource Booklet .

(i) What has been built at 514976? [1]

(ii) Suggest why these have been built here. [1]

(d) (i) Choose a river landform shown on Photograph 2 or Map 4 or any other river landform you have studied. Explain how it has been formed. (Use diagrams if you wish.) [4]

(ii) The floodplain of the River Cuckmere has suffered badly from flooding in recent years. Suggest and explain two methods that could be used to manage flooding. (Refer to examples of rivers you have studied if you wish.) [4]

(e) CASE STUDY: A landform created by the work of the sea.

(i) Name and locate a landform that has been created by the work of the sea.

(ii) **Describe** how the landform was created by the sea.

(iii) **Explain** any advantages and disadvantages that the landform brings to the area around it.

[8]

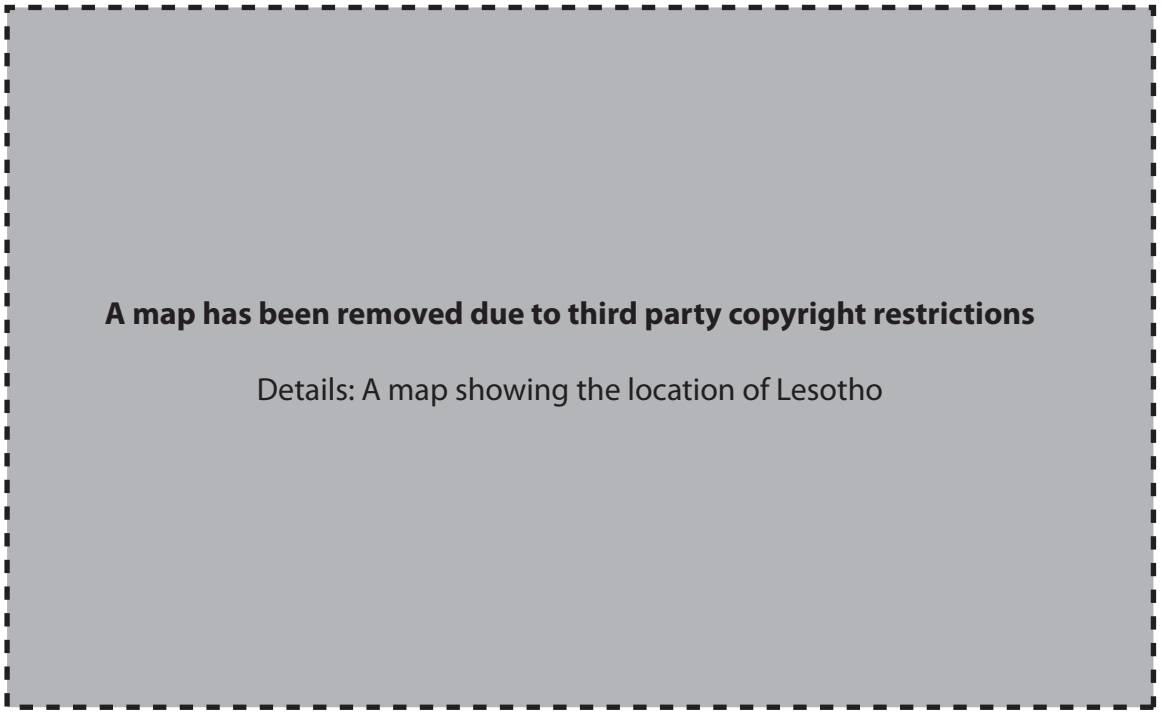
Total marks : 30

End of Question C5

Question C6

(a) Study the map below.

Lesotho – A Country Within South Africa



Describe the location of Lesotho. [2]

(b) Study the information below.

LESOTHO WATER HIGHLANDS PROJECT TO SOLVE SOUTH AFRICA'S WA TER WORRIES

With the building of the Katse Dam, water can now be taken from the Orange River to Johannesburg. Here, both industry and population have grown rapidly. This has created a demand for water that cannot be met in South Africa. Fortunately the country of Lesotho has a high rainfall. Building reservoirs and taking water through tunnels and rivers can provide enough to supply the needs of Johannesburg.

(i) Give two reasons why there is a large demand for water in Johannesburg. [2]

(ii) How will the reservoir water be transferred to Johannesburg? [2]

[Turn over

(c) Study Photograph 3 in the separate Resource Booklet and the information below.

The Katse dam is Africa's largest dam. Water from the reservoir is being transferred into South Africa.

Villager who used to farm in the valley now covered by the Katse reservoir

Climate graph for Lesotho's mountains (over 3000 metres)

(i) The sketch on page 18 opposite has numbers 1–4 on it. Write down which number goes with the features listed below:

- the Katse Dam
- steep valley sides
- the reservoir
- the river outflow [2]

(ii) Suggest a process from the water cycle that might be taking place:

- at D on Photograph 3 ,
- at E on Photograph 3 .

Give a reason for your answers. [4]

(iii) Suggest two reasons why this site was chosen for the reservoir. Explain your reasons. [4]

(iv) Give two reasons why this was not the ideal site for a new reservoir. [2]

(d) Study the information below.

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Details: A quote from the Minister of Natural Resources in Lesotho about Lesotho selling water to South Africa

Minister of Natural Resources, Lesotho

Employment structure

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Details: A pie chart showing the Employment structure in Lesotho

A table has been removed due to third party copyright restrictions

Details: A table comparing the life expectancy, class size in primary schools, infant mortality rate and average annual income of Lesotho and the UK

Lesotho is a landlocked LEDC. Suggest how it could use the water income to help improve the quality of life for its own people. [4]

[Turn over

(e) CASE STUDY: A coastal management scheme that protects the coast from the action of the sea.

(i) Name and locate a coastal management scheme that has taken, or is taking, place to protect the coast.

(ii) Describe the scheme.

(iii) Explain why the scheme was, or is, necessary.

[8]

Total marks : 30

End of Question C6