General Certificate of Secondary Education

Welsh Joint Education Committee and OCR (former Midland Examining Group) syllabus

GEOGRAPHY SYLLABUS B (Avery Hill)

PAPER 2 HIGHER TIER

SPECIMEN PAPER FOR JUNE 2003

1 hour 30 minutes

1987/2

Additional materials: OS Map Extract (1987/M) Scale: 1 : 50 000 Resource Sheet (1987/1/2/RS) Answer Paper

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 Paper.

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 on your Answer Paper. Make sure each answer is clearly numbered.

Begin each question on a new page of your Answer Paper.

At the end of the examination complete the grid on your Answer Paper.

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.

Credit will be given for relevant use of sketch maps and diagrams.

You are reminded of the need for good English and clear presentation in answers.

SECTION A

CLIMATE, THE ENVIRONMENT AND PEOPLE

Answer EITHER Question A1 OR Question A2.

Question A1

(a) Study the weather map below. It shows a depression (low pressure weather system) over the east coast of North America in 1993. It also shows the locations of weather stations **A** and **B**.



Source: based on data provided by the United States Weather Service



- (i) **Describe** the location of:
 - the centre of low pressure;
 - the warm front;
 - the cold front.

[3]

- (ii) **Describe** four features of the weather at weather station **A**. Use the key to help. [2]
- (iii) Give three ways in which the weather at weather station B is different from the weather you have described at weather station A.
 [3]

- Cold front Direction of weather system movement ⊁ Warm \ast front Cold air Warm Air Weather * Weather *> Station 🗡 Cold Station air А В * *x Y Km 0 250 500 750 1000 Key * Snow {|| Drizzle /// Rain Cloud \mathcal{C} 7
- (b) Study the diagram below. It shows a cross-section from X to Y through the depression.

Use the **diagram** and **map** to:

- (i) **describe** the location of weather station A and weather station B; [2]
- (ii) explain the differences between the weather at station A and station B. [4]



(c) Look at the map below. It shows the route of the depression between 12th and 14th March 1993.

Source: based on continuous satellite images (NASA)

- (i) **Describe** the **route** of the centre of the depression between 12th and 14th March. [1]
- (ii) Use evidence from the map to **describe** how the pressure at the centre of the depression **changed** between 12th and 14th March. [2]
- (iii) **Explain** how the extreme weather events labelled on the map could have affected people **and** environments. [5]

(d) CASE STUDY: A type of climate and its effects on people and the environment.

- (i) Name and locate a type of climate you have studied.
- (ii) **Describe** the main features of the climate type.
- (iii) **Explain** how it affects or has affected people and the environment. [8]

Total mark 30

5

End of Question A1

Answer **EITHER** Question A1 **OR** Question A2.

Question A2



The distribution of major world ecosystems (biomes)

(a) Study the world map above. It shows the distribution of major ecosystems (biomes).

Describe the distribution of coniferous forest.

[2]

(b) **Study** the climate graph and information below. It is for the town of Pitea which is in Sweden. Pitea is located on the world map opposite.



A climate graph for Pitea in Sweden

- (i) **Describe** how the temperature changes through the year at Pitea. [2]
- (ii) **Explain** how temperature changes affect the growing season near Pitea. [2]
- (iii) Give two reasons to explain how coniferous trees have adapted to grow in this type of climate. [4]

(c) Study the map below. It shows the distribution of acid rain over Scandinavia. Acid rain is measured using the pH scale.



Scandinavia = Norway, Sweden, Finland and Denmark

Key:

Net importers of acid rain Net exporters of acid rain

- (i) Why is acid rain an issue of international concern? [1]
- (ii) Scandinavia is a 'net importer' of acid rain. What is meant by this? [1]
- (iii) Study the map above and the diagram below. Explain how the United Kingdom (UK) may cause acid rain in Scandinavia. [4]





(d) Study the diagram below. It shows a food web for the ecosystem near Pitea.



A food web for the area around Pitea

- (i) What is meant by the term 'a sustainable ecosystem'? [2]
- (ii) Suggest how acid rain may be making this ecosystem near Pitea unsustainable. [4]

(e) CASE STUDY: The sustainable management of an ecosystem.

- (i) Name and locate an ecosystem you have studied.
- (ii) **Describe** how the ecosystem has been managed for sustainability.
- (iii) Explain how successful this management has been.

Total mark 30

[8]

End of Question A2

SECTION B

WATER, LANDFORMS AND PEOPLE

Answer EITHER Question B3 OR Question B4.

Question B3

(a) Study the diagram below. It shows part of a drainage basin.



- (i) Name two stores and two flows from the diagram. [2]
- (ii) **Explain** how the cutting down of the trees may affect the water cycle. [3]
- (b) Study the map on the separate Resource Sheet. It shows an area of China which flooded in 1997.
 - (i) **Describe** the locations of the areas that were flooded. [2]
 - (ii) Suggest two reasons for the flooding. Use evidence from the map to help. [4]

(c) Study the flood hydrograph below. It shows rainfall and river flow at Harbin City which is located on the map.



- (i) **Describe** the pattern of river discharge shown by the graph. [3]
- (ii) Suggest reasons for the time lag between the peaks of rainfall and river discharge. [4]
- (d) Suggest two measures that people or organisations might take to protect property when given a flood warning. Explain your choices. [4]
- (e) CASE STUDY: A water shortage and its effects on people and places.
 - (i) Name a place which has been affected by a water shortage.
 - (ii) **Describe** how the water shortage caused problems for **people** and the environment.
 - (iii) Explain what is being done or could be done to prevent a water shortage in future. [8] Total mark 30

End of Question B3

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Answer **EITHER** Question B3 **OR** Question B4.

Question B4

- (a) Study the Ordnance Survey (OS) Map Extract provided. It shows part of the Yorkshire coast.
 - (i) Give a six figure grid reference for point D. [1]
 - (ii) Use evidence from the map to **describe** what might happen to material eroded at point D. [2]
- (b) Photograph A on the Resource Sheet shows point D on the map.
 - (i) **Describe** the appearance of the coast shown in the photograph. [2]
 - (ii) **Suggest** and explain the processes that may be affecting this coast. [3]
 - (iii) Give two ways in which the changes to the cliff may affect the owners of the house in the photograph. **Explain** your choices. [4]
- (c) Study the OS map between point **S** and point **T** and study Photograph B on the Resource Sheet. They show a part of the coast at Hornsea which has been protected by the local council.

Describe and **explain** how the coast has been protected in this area. Use both map and photograph evidence. [4]

- (d) Only some areas of this coast have been protected by the local council from erosion. Suggest reasons for this decision. You may use map evidence to help. [6]
- (e) CASE STUDY: A landform created by a river and its use by people.
 - (i) Name and locate a landform created by a river.
 - (ii) **Describe** how it was formed. Use maps and diagrams if you wish.
 - (iii) **Explain** how it has been used by people.

Total mark 30

[8]

End of Question B4

SECTION C

PEOPLE, WORK AND DEVELOPMENT

Answer EITHER Question C5 OR Question C6.

Question C5

(a) The line D-D on the world map below divides the world into MEDCs (More Economically Developed Countries) and LEDCs (Less Economically Developed Countries). A table of indicators comparing France (an MEDC) and Senegal (an LEDC) is also shown.



	Children per woman	Life expectancy (years)	Gross National Product per head (Dollars)	Percentage of population with access to safe water
France	1.9	77	22,260	96
Senegal	6.2	50	780	47

- (i) Describe two ways in which LEDCs are different from MEDCs. [2]
- (ii) Give a reason for each of the differences you have described. [4]

- 14
- (b) Study the map below. It shows life expectancy in part of Africa.



Life expectancy in North Africa (1996)

- (i) Name a country with a life expectancy of:
 - 50 years or less;
 - more than 65 years.

[2]

- (ii) **Describe** the distribution of countries with a life expectancy of 55 years or less. [2]
- (iii) Suggest two reasons to explain why some countries in this part of Africa have a higher life expectancy than others. [4]

(c) Look at the information in the table below. It shows the population structure and the employment structure for Senegal and for France.



- (i) Compare the two countries under the following headings:
 - population structure;
 - employment structure.

[4]

(ii) Suggest how trade and aid from MEDCs could help Senegal develop its economy and improve the quality of life of its people. You may use evidence from the table to help. [4]

(d) CASE STUDY: A country or region outside the United Kingdom (UK) where changing employment opportunities are affecting people and the area.

Choose a country or region **outside the UK** where employment opportunities are changing.

- (i) Name the country or region.
- (ii) **Describe** how employment opportunities are changing.
- (iii) **Explain** how these changes are affecting people and the area. [8]

Total mark 30

End of Question C5

Answer EITHER Question C5 OR Question C6.

Question C6

(a) Study the graphs below. They show how employment structures have changed in South Korea, an LEDC (Less Economically Developed Country) and the United Kingdom, an MEDC (More Economically Developed Country).



- (i) **Describe** the trend in **secondary** employment in the UK between 1950 and 1996. [1]
- (ii) **Compare** the changes in employment structure in South Korea with the UK between 1950 and 1996. [3]

(b) Samsung is a **multi-national company** based in South Korea. The map below shows the distribution of Samsung factories and offices across the world.



Where Samsung factories and offices are located

(i) What is 'a multi-national company'?

[1]

(ii) **Compare** the global distribution of Samsung factories with the Samsung offices.

[4]

(c) Look at the two maps below.



Map 1: Links to European countries from Teesside ports

Acknowledgement: Tees Valley Development Company

Map 2: The Samsung site in

North East England

(i) Use Map 1 to help suggest two reasons why Samsung have located a factory in the UK.

[2]

- (ii) Use Map 2 to suggest advantages for Samsung of locating the factory at Wynyard Park in north-east England. [3]
- (d) Study Photograph C on the Resource Sheet. It shows the Samsung factory at Wynyard Park.
 - (i) Suggest **disadvantages** that the building of this factory may have on the environment.

[2]

 (ii) Suggest advantages and disadvantages that the building of this factory may have on the local economy and people.
 [6]

(e) CASE STUDY: The effect of the location of a primary or tertiary economic activity on people and the environment.

- (i) Name and locate a primary or tertiary economic activity you have studied.
- (ii) **Describe** the location of the economic activity. (Use maps or diagrams if you wish).
- (iii) Explain how this location has affected people and the environment.

Total marks 30

[8]

End of Question C6

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