

X208/301

NATIONAL
QUALIFICATIONS
2008

THURSDAY, 22 MAY
9.00 AM – 10.30 AM

GEOGRAPHY
HIGHER
Paper 1
Physical and
Human Environments

Six questions should be attempted, namely:

all four questions in **Section A** (Questions 1, 2, 3 and 4);

one question from **Section B** (Question 5 **or** Question 6);

one question from **Section C** (Question 7 **or** Question 8).

Write the numbers of the **six** questions you have attempted in the marks grid on the back cover of your answer booklet.

The value attached to each question is shown in the margin.

Credit will be given for appropriate maps and diagrams, and for reference to named examples.

Questions should be answered in sentences.

Note The reference maps and diagrams in this paper have been printed in black only: no other colours have been used.



SECTION A: Answer ALL questions in this section

Question 1: Lithosphere

Study OS Map Extract number 1659/Exp-OL15: Swanage (*separate item*), and Reference Map Q1.

(a) **Describe** the map evidence that shows:

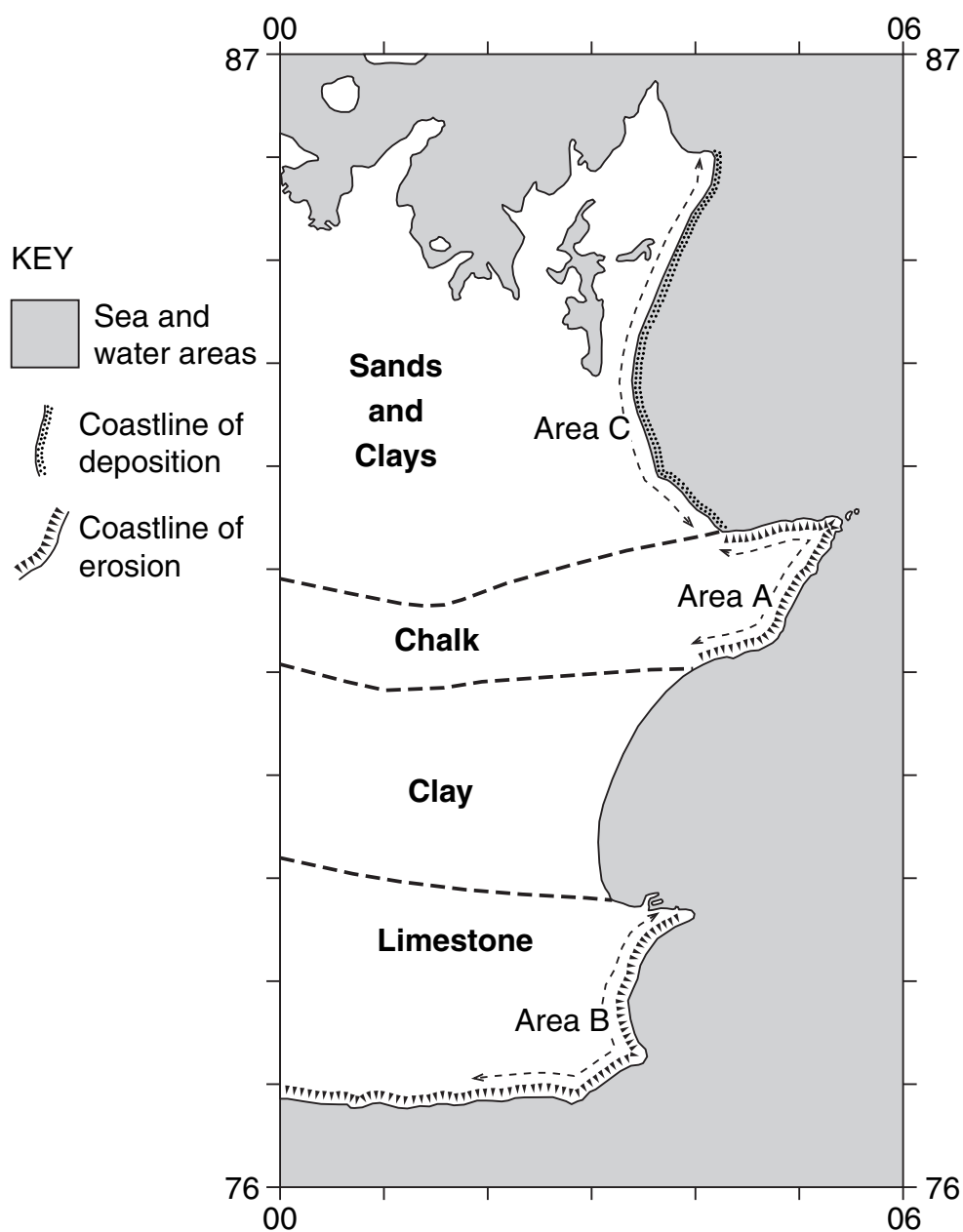
- (i) Areas A and B are areas of coastal erosion, and
- (ii) Area C is an area of coastal deposition.

12

(b) With the aid of annotated diagrams, **explain** the various stages and processes involved in the formation of **either** a stack **or** a sand bar.

8

Reference Map Q1

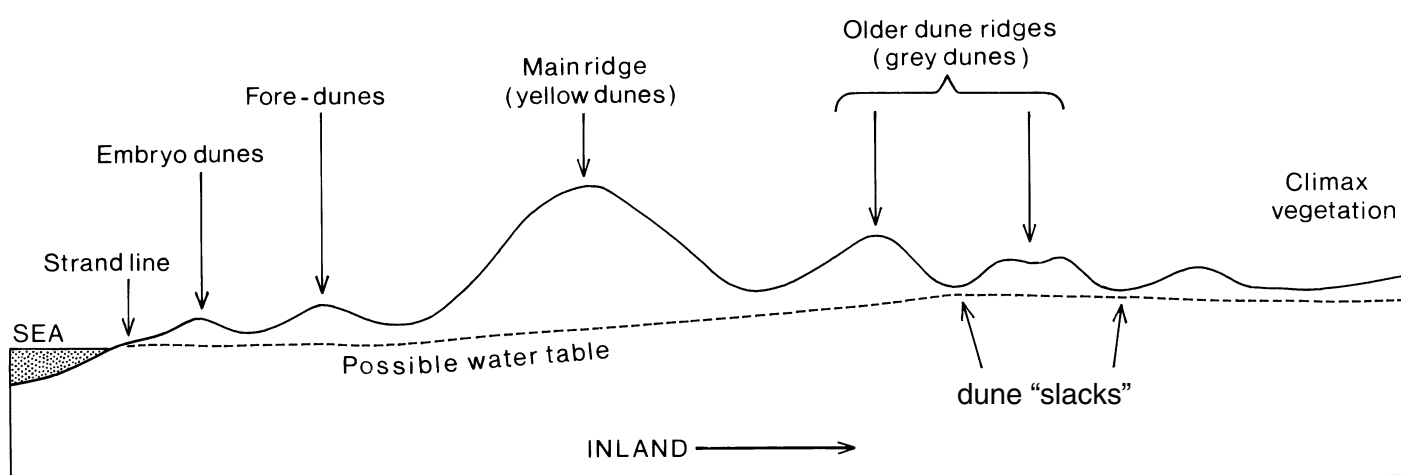


Question 2: Biosphere

Study Reference Diagram Q2.

Describe and **give reasons for** the changes in plant types likely to be observed across the transect as you move inland from the coast.

You should refer to named plant species likely to be found growing at different sites and to influencing factors **such as** shelter, pH and distance from the sea.

16**Reference Diagram Q2 (Transect across sand dune coastline)****[Turn over**

Question 3: Population Geography

Study Reference Diagram Q3 which shows the five stages of the Model of Demographic Transition.

(a) **Describe** and **explain** the changes in the **total population** in stages 1, 2 and 3 of the model.

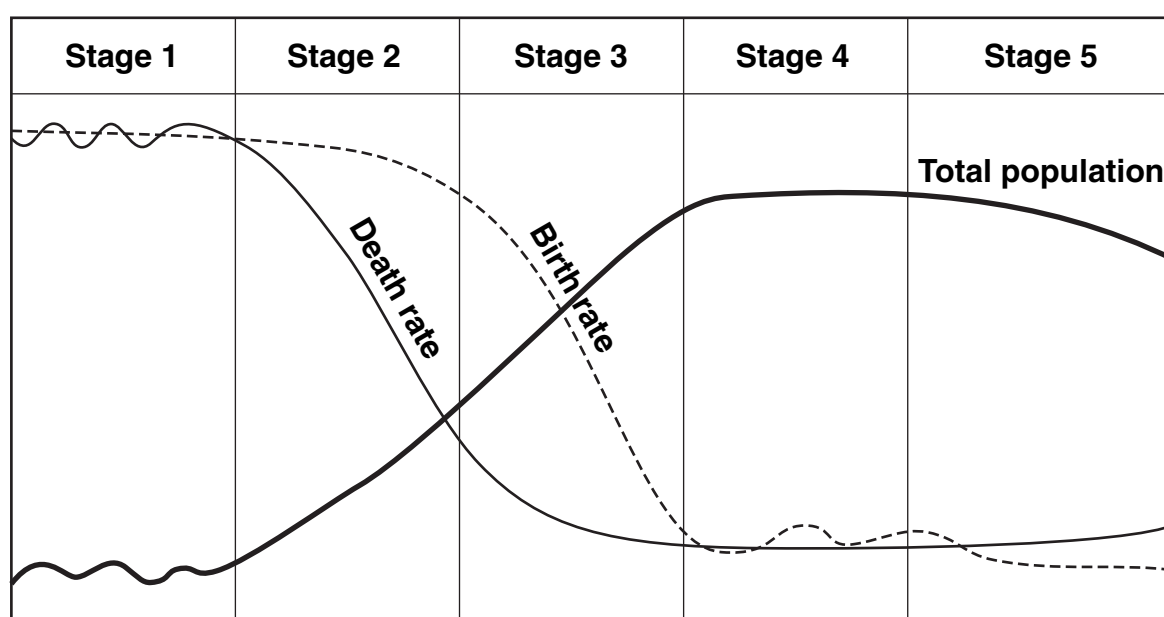
10

(b) The total population levels off in stage 4 and starts to fall in stage 5.

Describe the problems which a government may face when a country is in stage 5.

8

Reference Diagram Q3 (Model of demographic transition)



Question 4: Urban Geography

- (a) For a named city which you have studied in an EMDC (Economically More Developed Country), **explain** the ways in which the site and situation have contributed to its growth.

8

- (b) Study Reference Photograph Q4.

“Traffic congestion is now a major problem facing many cities in EMDCs”.

Describe and **explain** schemes which have been introduced to reduce problems of traffic management in any named city you have studied in an EMDC.

10

Reference Photograph Q4 (Traffic congestion)**[Turn over**

**SECTION B: Answer ONE question from this section,
ie either Question 5 or Question 6.**

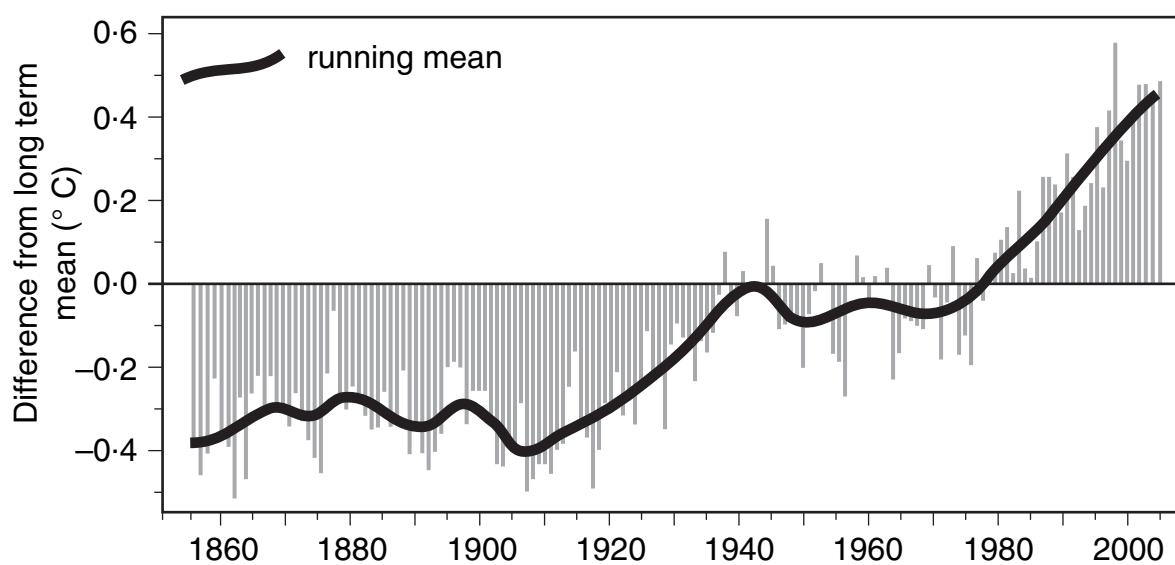
Question 5: Atmosphere

Study Reference Diagram Q5.

Explain the physical **and** human factors that might have led to the changes in global air temperatures shown in the diagram.

14

Reference Diagram Q5 (Global air temperatures 1855–2005)



**DO NOT ANSWER THIS QUESTION IF YOU HAVE
ALREADY ANSWERED QUESTION 5**

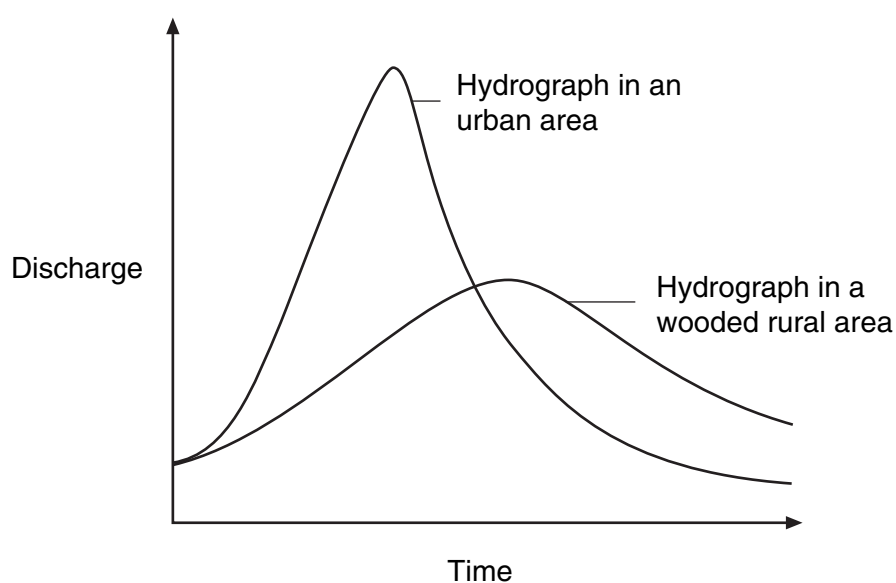
Question 6: Hydrosphere

(a) With the aid of a diagram, **describe** the global hydrological cycle. **6**

(b) Study Reference Diagram Q6.

Explain the **differences** in discharge between the urban and rural hydrographs shown in the diagram following a heavy rain storm. **8**

Reference Diagram Q6 (Flood hydrographs)



[Turn over

**SECTION C: Answer ONE question from this section,
ie either Question 7 or Question 8.**

Question 7: Rural Geography

Study Reference Diagram Q7 which shows three different farming systems.

Choose **one** of these farming systems and:

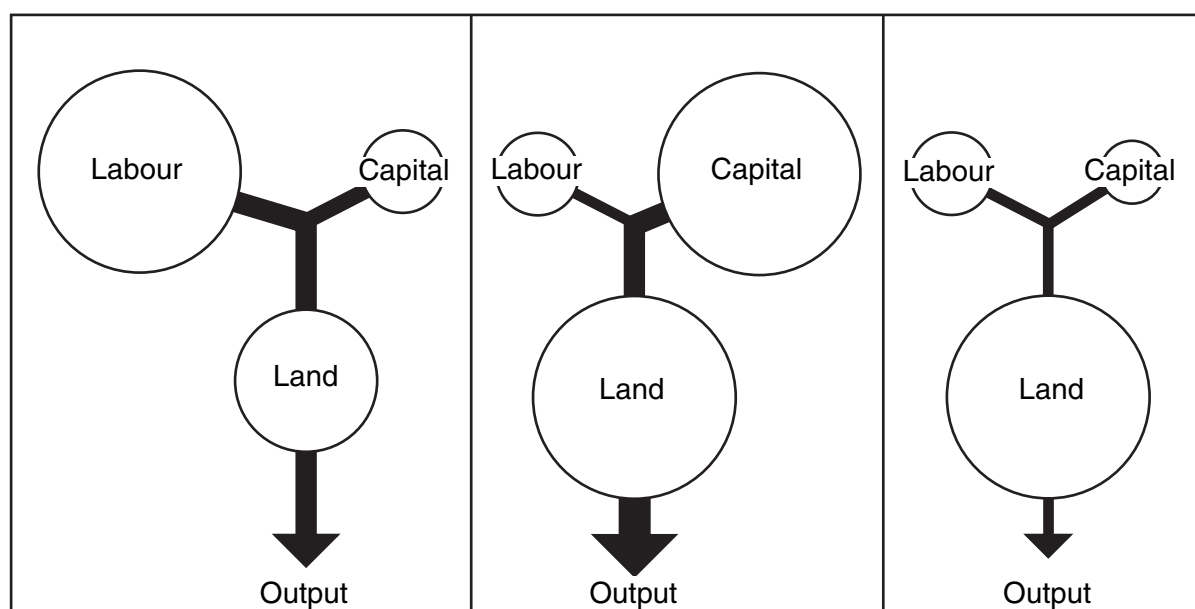
- (i) **explain** the ways in which the diagram reflects the main features of your chosen system; 6
- (ii) referring to a **named** area where **your chosen system** is carried out, **describe** the changes in farming practices that have taken place in recent years. 8

Reference Diagram Q7 (Farming systems)

Intensive peasant farming

Commercial arable farming

Shifting cultivation



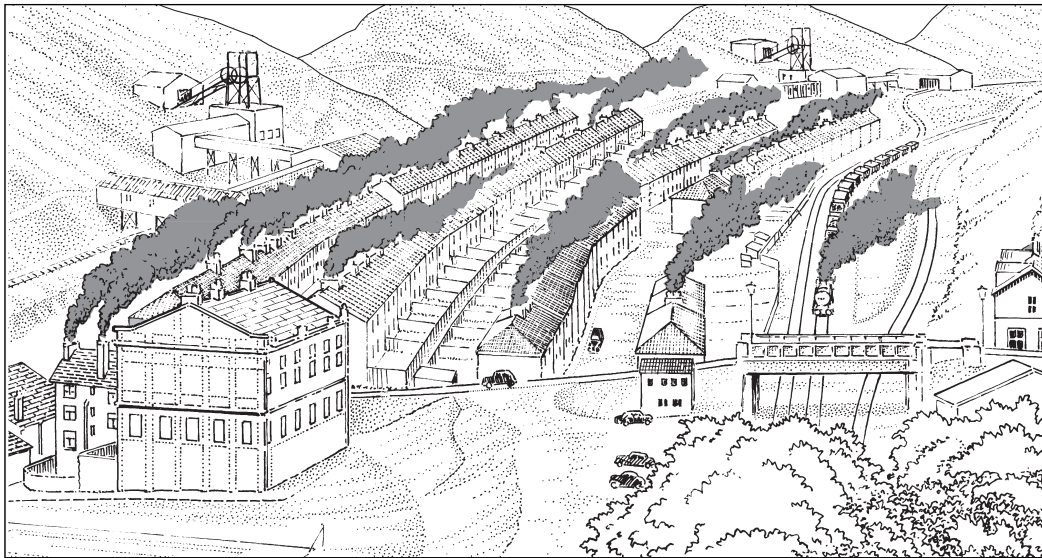
Question 8: Industrial Geography

(a) Study Reference Diagram Q8A.

Describe and **explain** the impact of industry on the environment of an old industrial area such as that shown in Reference Diagram Q8A.

6

Reference Diagram Q8A (Old industrial landscape—South Wales)

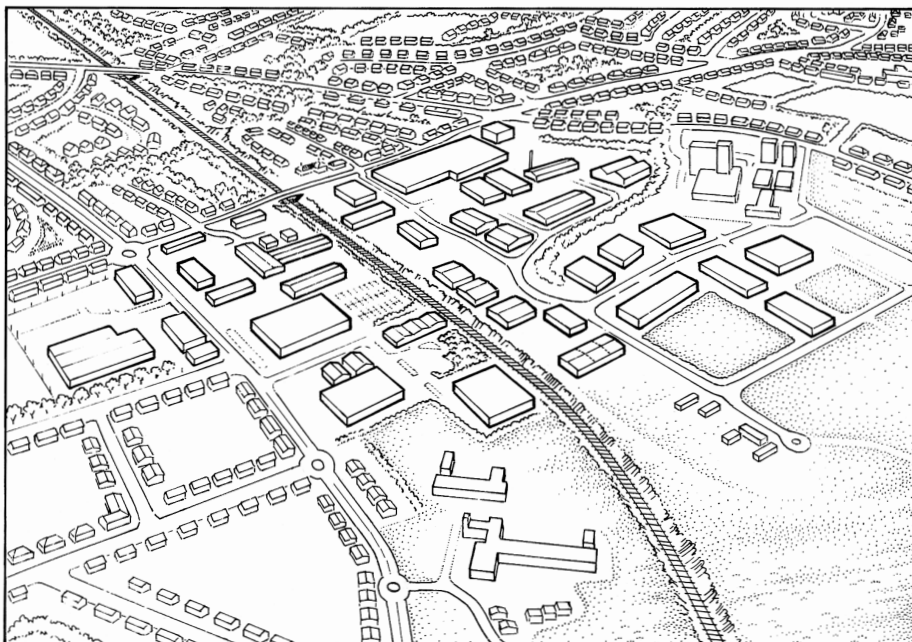


(b) Study Reference Diagram Q8B.

For South Wales, or any other industrial concentration in the EU, **describe** and **explain** the main location factors that influence the location of new industrial developments.

8

Reference Diagram Q8B (New industrial landscape—South Wales)



[END OF QUESTION PAPER]

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ACKNOWLEDGEMENTS

Paper 1 Question 5—Graph of *Global air temperatures 1855-2005* taken from Climate Research Unit. Reproduced by kind permission of Climate Research Unit.

Paper 1 Question 6—Diagram—Flood Hydrographs taken from page 17 of *New Key Geography 2002* by David Waugh and Tony Bushell. ISBN 0748765816. Published by Nelson Thornes. Reproduced with the permission of Nelson Thornes Ltd from *New Key Geography for GCSE*, David Waugh and Tony Bushell, 978-0-7487-6581-2, first published in 2002.

X208/303

NATIONAL
QUALIFICATIONS
2008

THURSDAY, 22 MAY
10.50 AM – 12.05 PM

GEOGRAPHY
HIGHER
Paper 2
Environmental
Interactions

Two questions should be attempted, namely:

one question from **Section 1** (Questions 1, 2, 3) and
one question from **Section 2** (Questions 4, 5, 6).

Write the numbers of the **two** questions you have attempted in the marks grid on the back cover of your answer booklet.

The value attached to each question is shown in the margin.

Credit will be given for appropriate maps and diagrams, and for reference to named examples.

Questions should be answered in sentences.

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SECTION 1

You must answer ONE question from this Section.

Question 1 (Rural Land Resources)

- (a) The Peak District and Yorkshire Dales National Parks are two areas of Upland Limestone.

Study Reference Diagram Q1A.

Describe and **explain** the physical features associated with upland limestone landscapes. Both surface and underground features should be included in your answer.

20

- (b) For the Peak District National Park, **or** a named upland area you have studied:

(i) **describe** the opportunities which this landscape provides for a variety of land uses; and

8

(ii) **explain** the environmental problems and conflicts which may arise from the competing demands of these different land uses.

14

- (c) Study Reference Diagram Q1B.

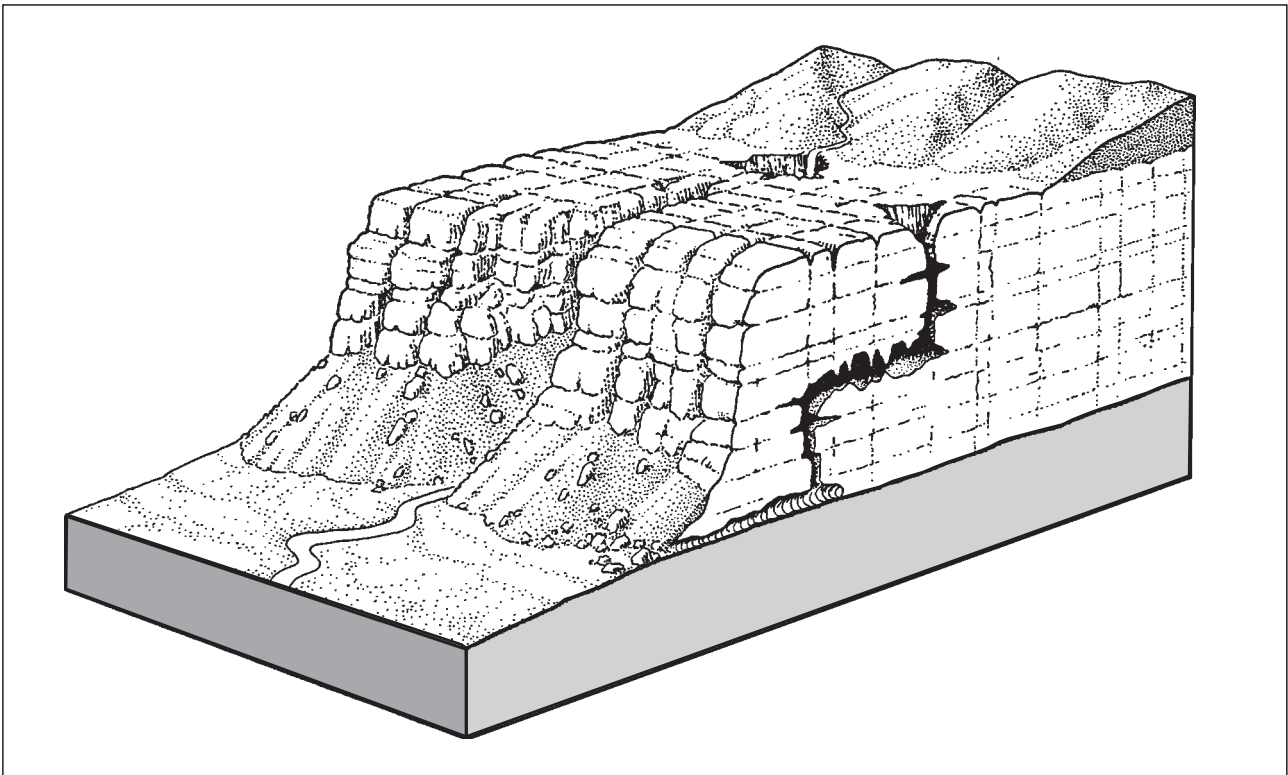
Select **one** of the conservation strategies and **explain** the ways in which it helps to protect the landscape.

8

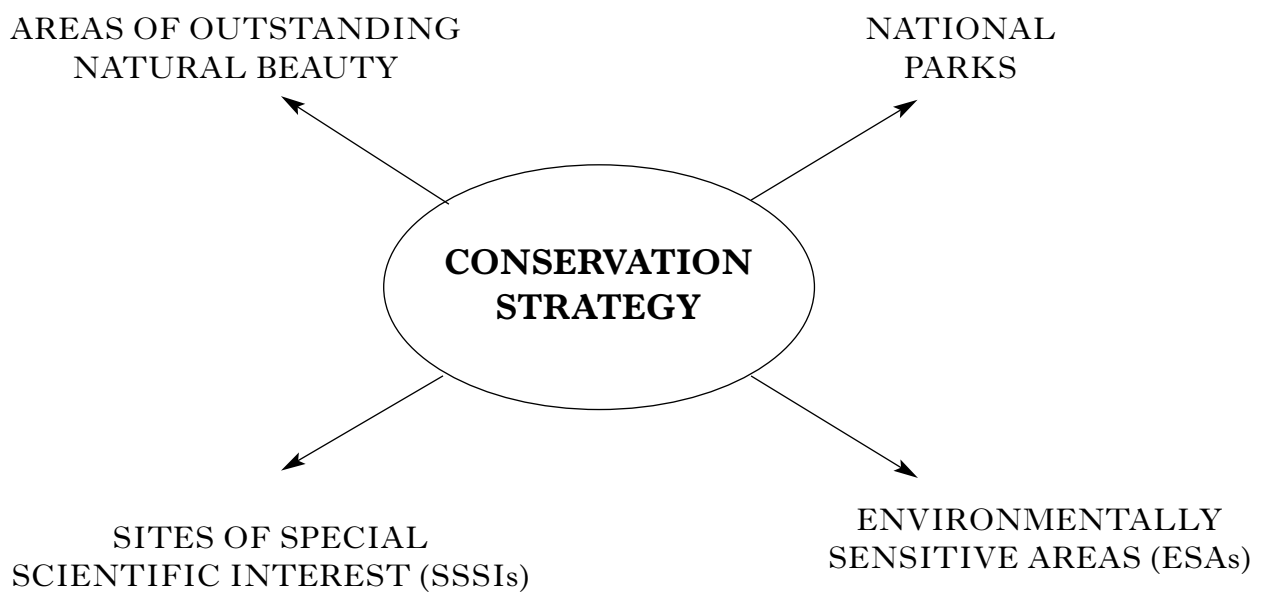
(50)

Question 1 – continued

Reference Diagram Q1A (Carboniferous Limestone Landscape)



Reference Diagram Q1B (Conservation Strategies)



[Turn over

Question 2 (Rural Land Degradation)

- (a) Study Reference Map Q2A and Reference Maps Q2B.

Describe the climatic conditions found in Burkina Faso, and **explain** why such conditions may lead to the degradation of rural land.

16

- (b) **Explain** how inappropriate farming activities such as overcultivation, monoculture, overgrazing, poor irrigation techniques and inappropriate cultivation of marginal land have led to land degradation in some named areas of North America.

8

- (c) Study Reference Statements Q2A and Q2B.

Select **one** of the statements and **explain** how degradation has impacted on the social and economic ways of life in that area.

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- (d) Referring to named areas in North America that you have studied, **describe** and **explain** ways in which changes in farming methods have reduced land degradation.

16
(50)**Reference Statement Q2A (The Sahel)**

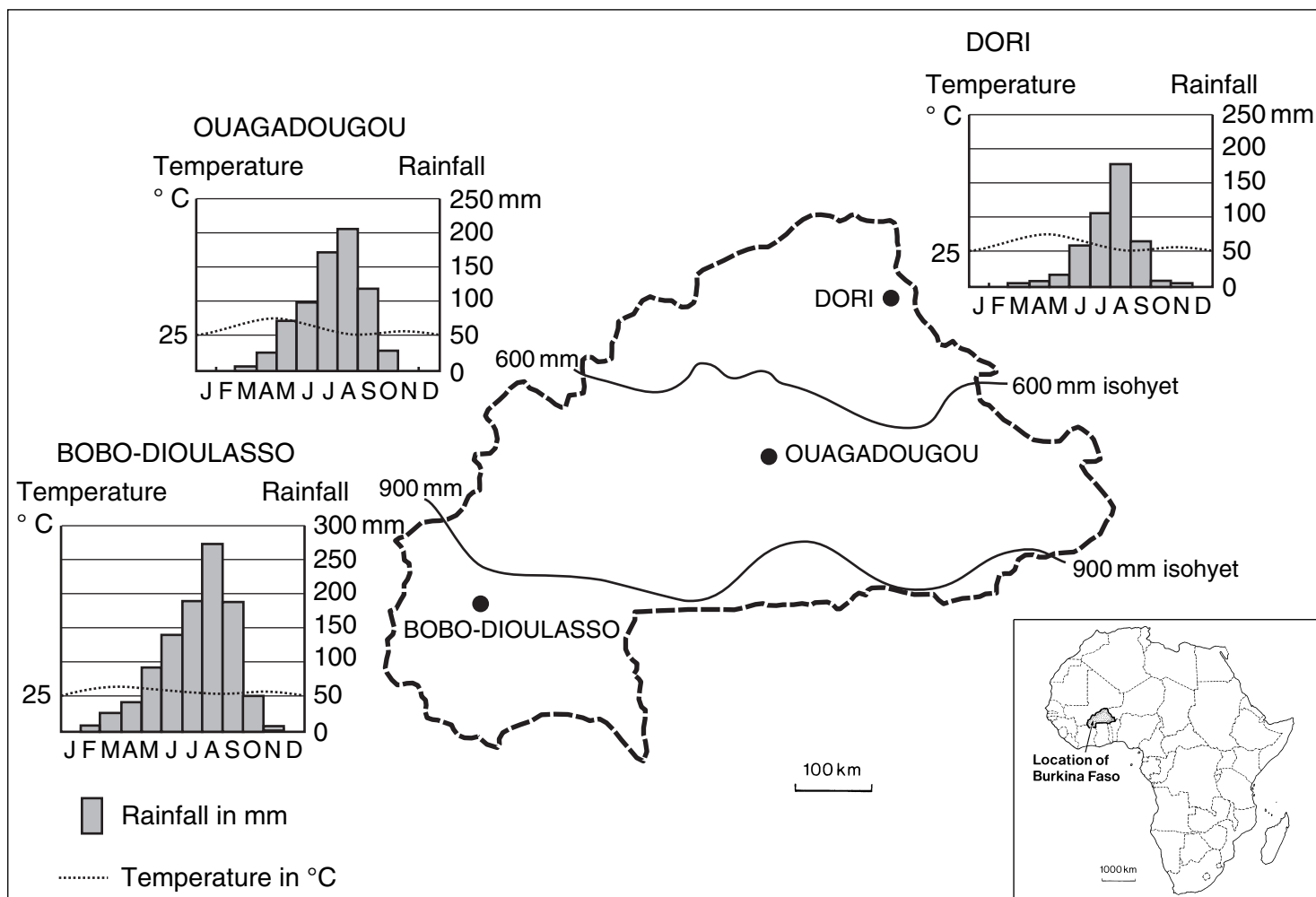
28.5 MILLION PEOPLE ARE AFFECTED BY DESERTIFICATION IN THE SAHEL REGION OF AFRICA.

Reference Statement Q2B (The Amazon Basin)

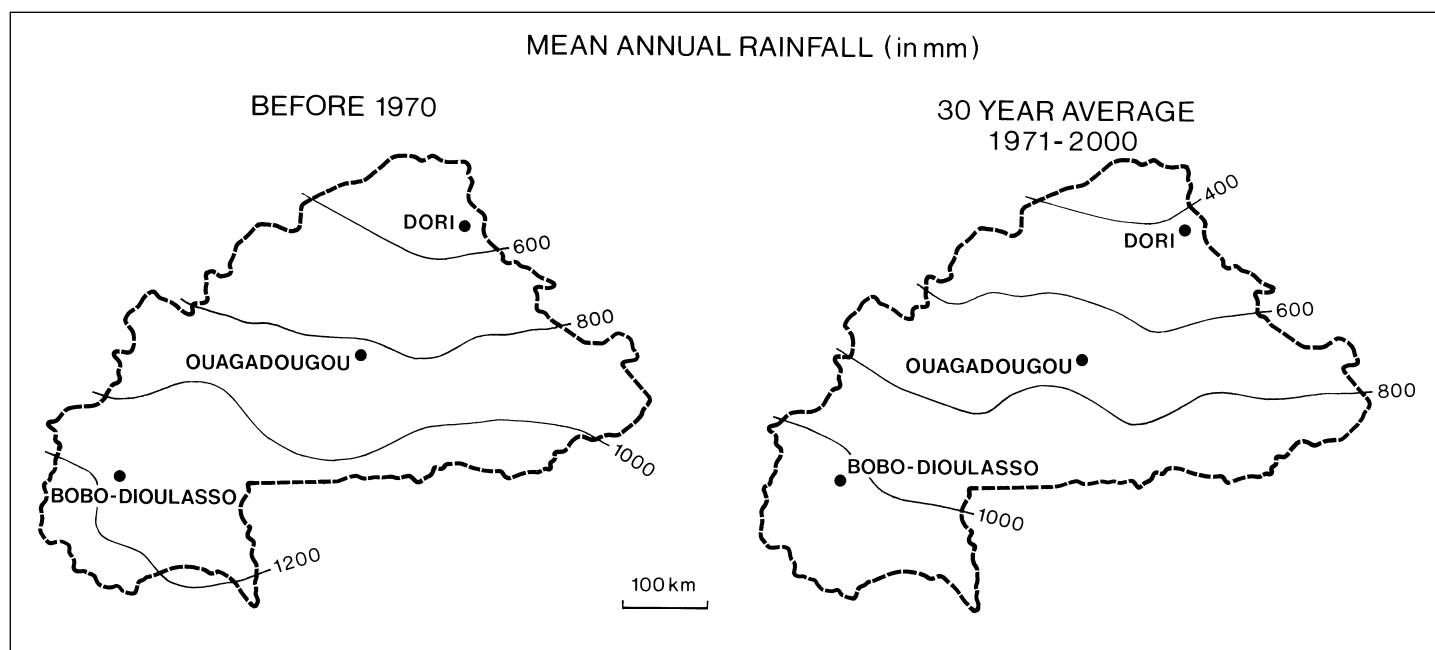
179 000 SQUARE KILOMETRES OF RAINFOREST HAVE DISAPPEARED IN THE AMAZON BASIN SINCE 1997, EQUIVALENT TO 78% OF THE TOTAL AREA OF BRITAIN.

Question 2 – continued

Reference Map Q2A (Climatic Regions of Burkina Faso)



Reference Maps Q2B (Burkina Faso: mean annual rainfall patterns)



Question 3 (River Basin Management)

- (a) Study Reference Map Q3 and Reference Diagram Q3.

Explain why there is a need for water management in Egypt.

10

- (b) For the Aswan High Dam **or** any dam you have studied in Africa **or** North America **or** Asia, **explain** the **physical** factors which should be considered when selecting the site for the dam and associated reservoir.

10

- (c) **Describe** and **explain** the social, economic and environmental benefits **and** adverse consequences of a named major water control project in Africa **or** North America **or** Asia.

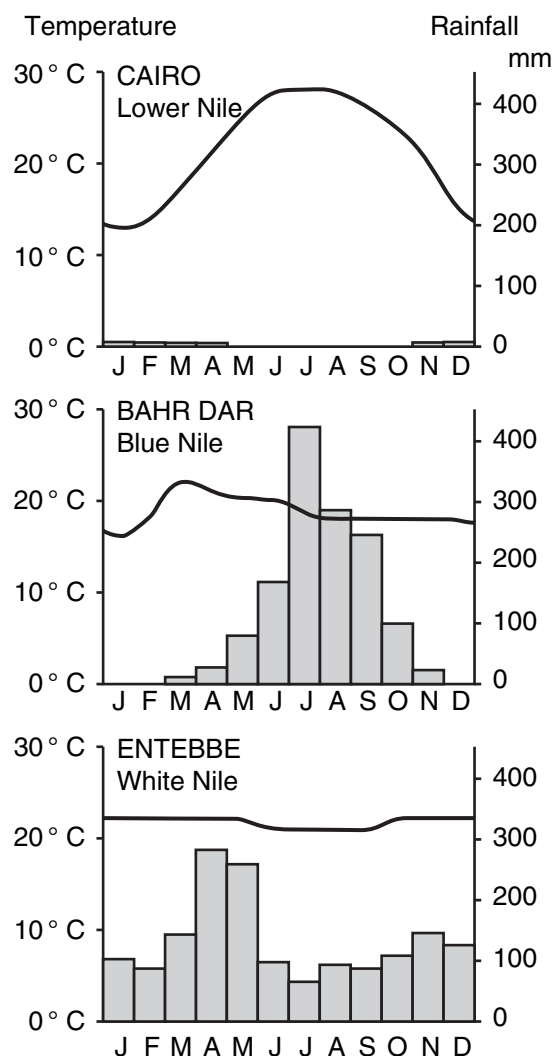
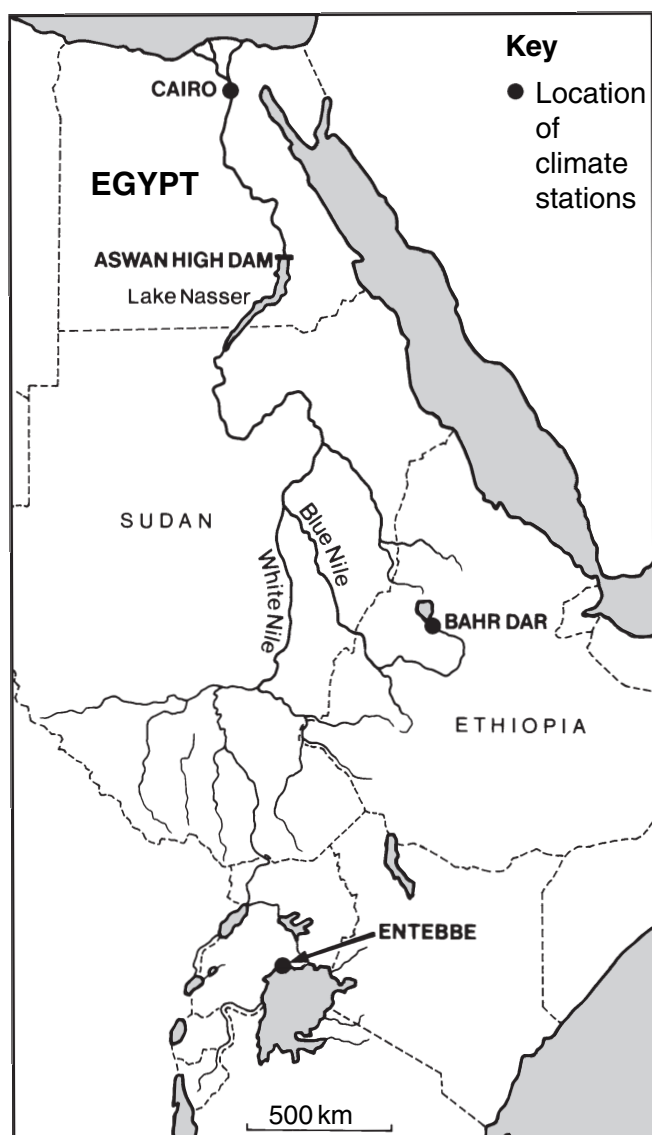
24

- (d) “Potential ‘water wars’ are likely in areas where rivers and lakes are shared by more than one country or state, according to a UN Development Programme (UNDP) report.”

Explain why political problems can occur in the development of water control projects.

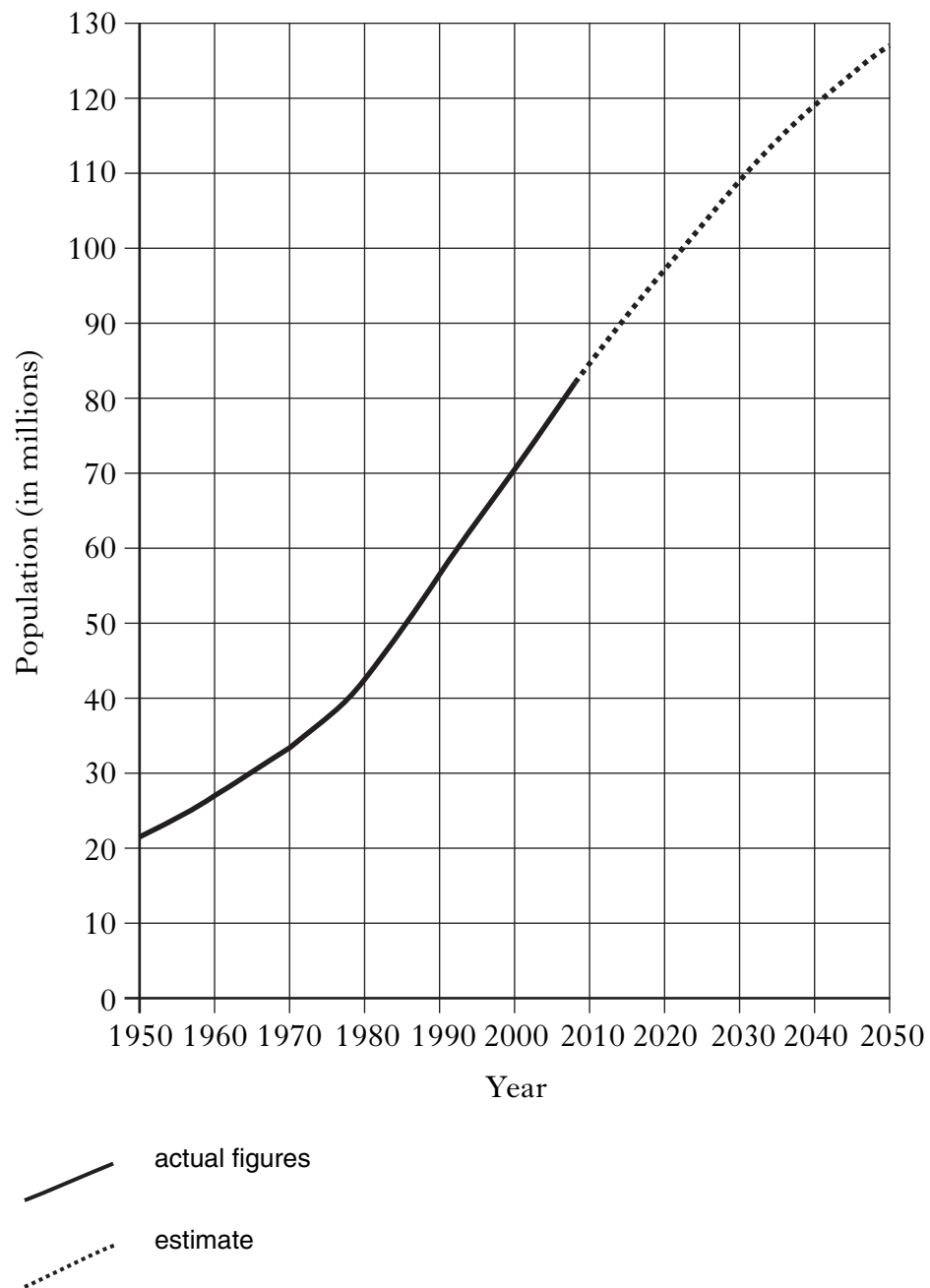
6
(50)

Reference Map Q3 (The Nile Basin)



Question 3 – continued

Reference Diagram Q3 (Population of Egypt (1950–2050))



[Turn over

SECTION 2

You must answer ONE question from this Section.

Question 4 (Urban Change and its Management)

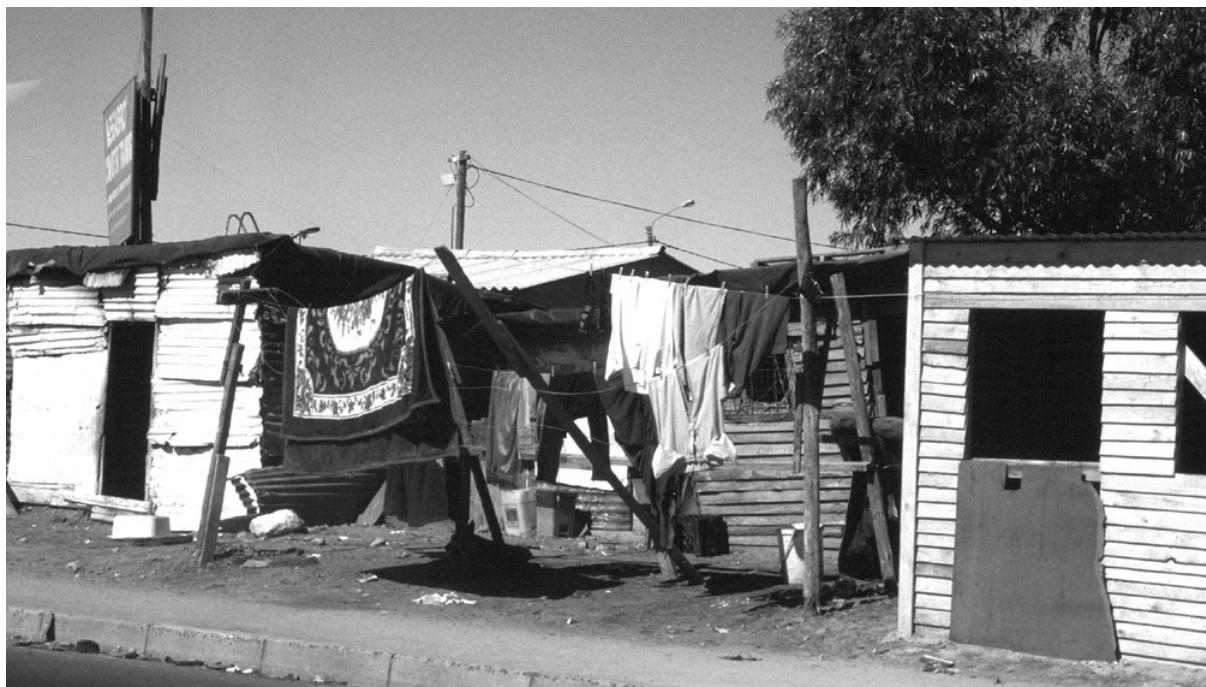
- (a) Study Reference Table Q4A.
- (i) **Describe** the changes shown in the table.
 - (ii) **Suggest** reasons for the differences between more developed and less developed regions. **14**
- (b) With the aid of Reference Photograph Q4 and referring to a named city which you have studied in an **ELDC (Economically Less Developed Country)**:
- (i) **describe** the social, economic and environmental problems created by shanty towns; and
 - (ii) **describe ways** in which such problems are being tackled. **18**
- (c) Study Reference Table Q4B which highlights problems which have occurred in cities in **EMDCs (Economically More Developed Countries)** over the last fifty years. Choose **one** of these problems and, with reference to a named city in an EMDC:
- (i) **suggest** reasons for the problem;
 - (ii) **describe** strategies used to solve the problem; and
 - (iii) **comment** on the success of these strategies. **18**
- (50)**

Question 4 – continued

Reference Table Q4A (Percentage of total population living in urban areas)

Region	Urban population (%)		
	1970	1994	2025
More developed regions	67	75	84
Europe	64	73	83
North America	74	76	85
Less developed regions	25	37	57
Africa	23	33	54
South and Central America	57	74	85

Reference Photograph Q4 (A Shanty Town in Cape Town, South Africa)



**Reference Table Q4B (Selected problems facing cities in EMDCs
(Economically More Developed Countries))**

- **Housing change in the Inner City**
- **The decline of traditional industries**
- **The rise of out of town shopping**

Question 5 (European Regional Inequalities)

- (a) Study Reference Map Q5.

The European Union (EU) is often said to fit the “Core and Periphery” model. Ten of the twelve countries which joined the EU since 2004 have formed a new “Eastern Periphery”.

Suggest both physical **and** human reasons for the lack of prosperity in the new “Eastern Periphery”.

10

- (b) Study Reference Table Q5 which shows a range of indicators for six European Union countries.

Describe and **explain** the ways in which the information shows the **differences** between the three **groups** of countries shown in the table.

12

- (c) “There are marked differences in economic development within the United Kingdom (UK).”

Describe and **explain** both the physical **and** human factors that have led to regional inequalities within the UK.

14

- (d) For **either** the UK **or** another named country in the EU which has marked regional differences in economic development, **discuss** ways in which the National Government **and** the EU have tried to tackle problems in less prosperous regions.

14

(50)

Question 5 – continued

Reference Map Q5 (The Core and Eastern Periphery of the European Union)



Reference Table Q5 (Selected indicators of development)

Economic group	Country	Infant mortality rate (per 1000 live births)	GDP per capita (\$)	Employment (%)		
				Primary	Secondary	Tertiary
Euro-Core Countries	Germany	4	30 400	2	26	72
	Netherlands	5	30 500	2	19	79
Pre-2004 Periphery Countries	Greece	5	22 200	12	20	68
	Portugal	5	19 300	10	30	60
Eastern Periphery Countries	Estonia	8	16 700	11	20	69
	Slovakia	7	16 000	6	29	65

Question 6 (Development and Health)

(a) Study Reference Map Q6.

(i) **Describe** clearly **two** economic and **two** social indicators of development which could be used to produce a map such as this. **8**

(ii) **Suggest reasons** for the wide variations in development which exist **between** Economically Less Developed Countries (ELDCs).

You should refer to named ELDCs you have studied. **12**

(iii) There are often considerable differences in levels of development and living standards **within** a single country.

Referring to a named ELDC which you have studied, **suggest reasons** why such regional variations exist. **10**

(b) For **either** malaria **or** bilharzia **or** cholera:

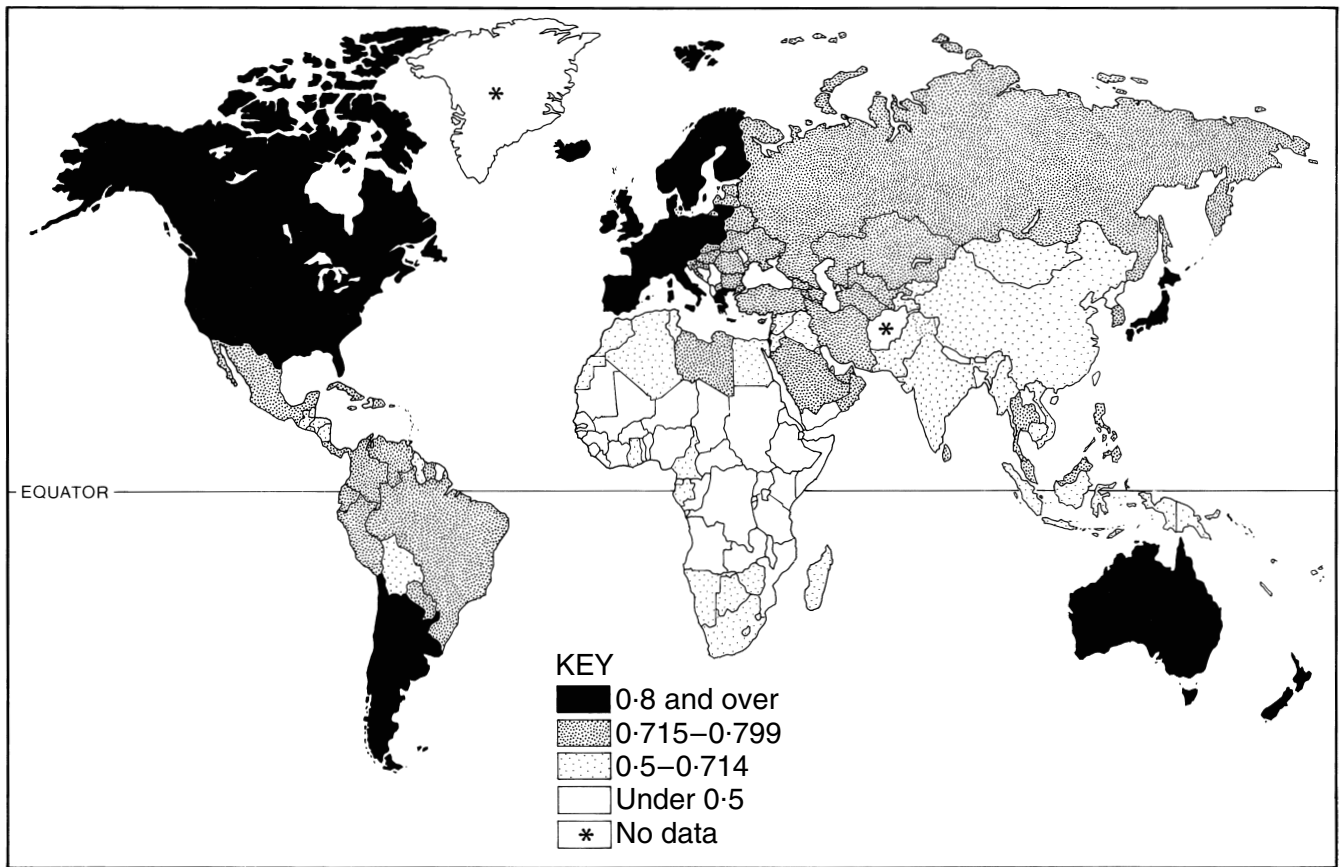
(i) **describe** the environmental **and** human factors which put people at risk of contracting the disease; and **8**

(ii) **describe** and **evaluate** the methods used to control the spread of the disease. **12**

(50)

Question 6 – continued

Reference Map Q6 (The World: Human Development Index (HDI))



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