X208/301

NATIONAL QUALIFICATIONS 2007

MONDAY, 28 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.

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Marks

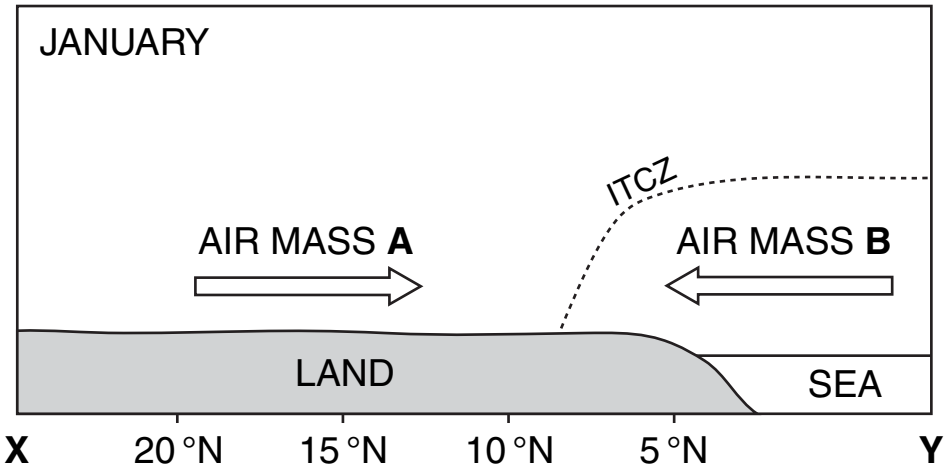
SECTION A: Answer ALL questions in this section

Question 1: Atmosphere

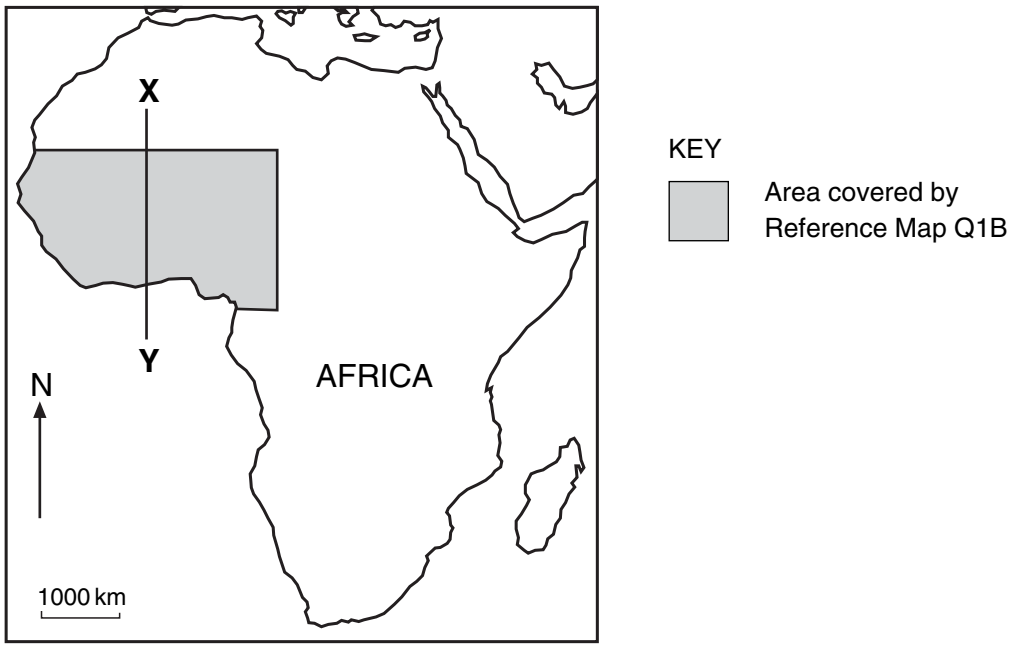
(*a*) Study Reference Diagram Q1A and Reference Map Q1A.

Identify air masses A and B, and **describe** their origin and nature. **3**

Reference Diagram Q1A (The Inter-tropical Convergence Zone (ITCZ))



Reference Map Q1A (Location of section X–Y)

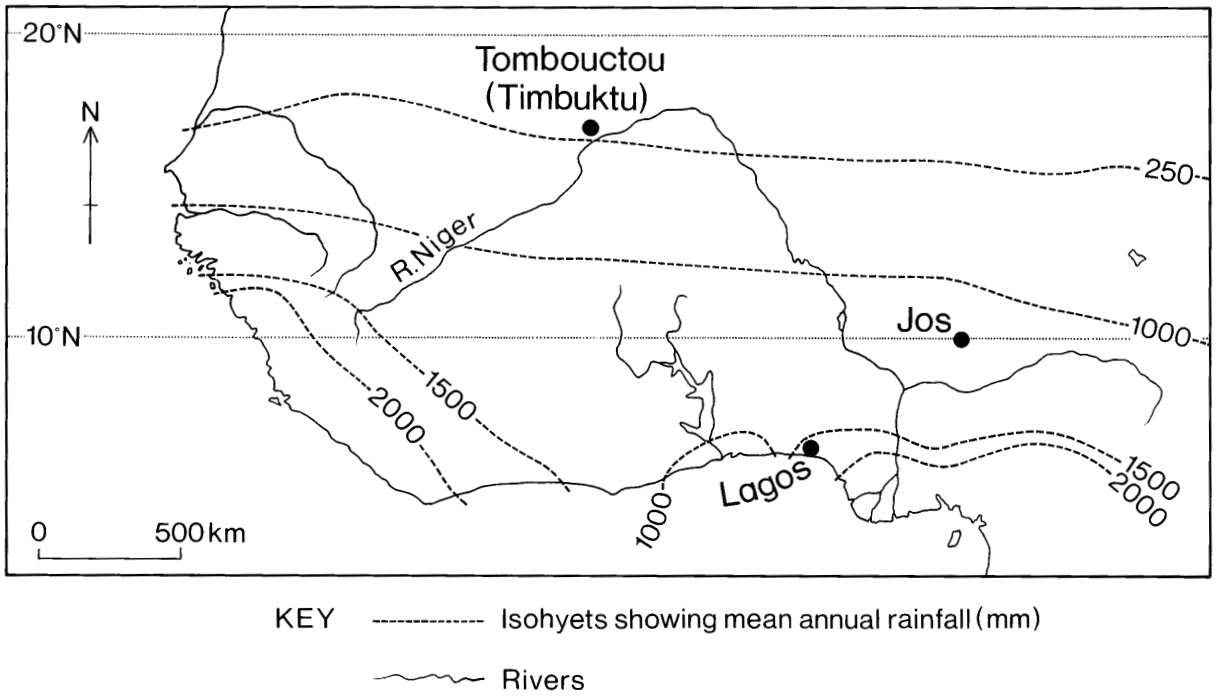


Question 1 (continued)

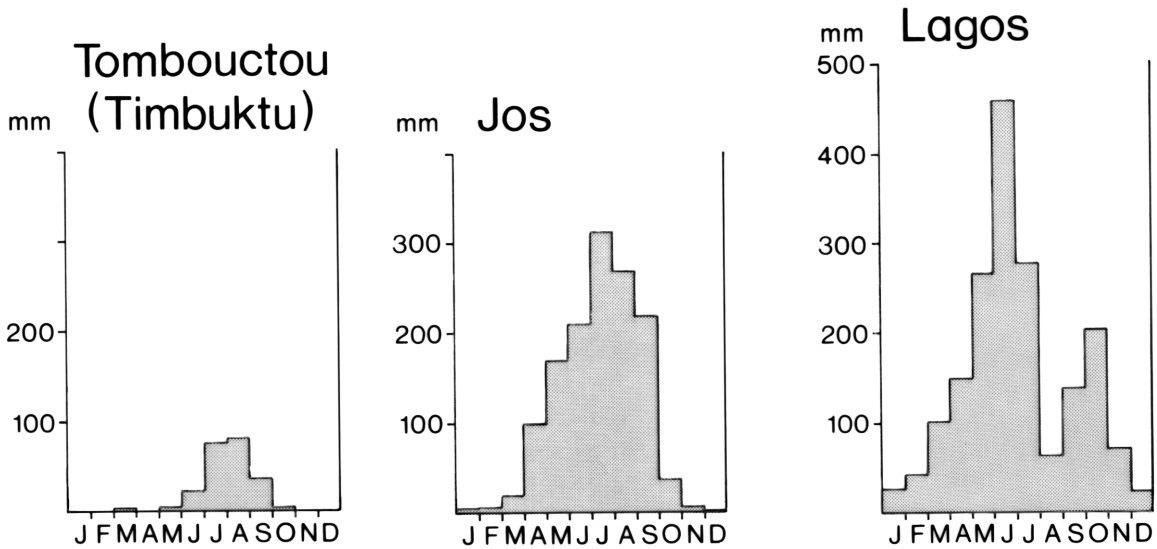
(*b*) Study Reference Map Q1B and Reference Diagram Q1B.

Describe and **explain** the varying rainfall patterns shown in Reference Diagram Q1B. **6**

Reference Map Q1B (Rainfall patterns in West Africa)



Reference Diagram Q1B (West Africa—selected rainfall graphs)



[Turn over

Marks

Question 2: Hydrosphere

Study OS Map Extract number 1560/150: Worcester (*separate item*).

(*a*) The River Teme is in the lower section of its course between 760545 and 850522. **Describe** the physical characteristics of the river and its valley in this section. **5**

(*b*) Select **one** of the features that you have described for part (*a*) and **explain**, with the aid of a diagram or diagrams, how this feature is formed. **4**

Marks

Question 3: Population Geography

(*a*) **Describe** the ways in which countries can obtain accurate population data. **3**

(*b*) **Explain**

(i) why **ELDCs** (Economically Less Developed Countries) may find the collection of such data more difficult, and

(ii) why the quality of data obtained may be less reliable than that gathered in an **EMDC** (Economically More Developed Country). **6**

[Turn over

Marks

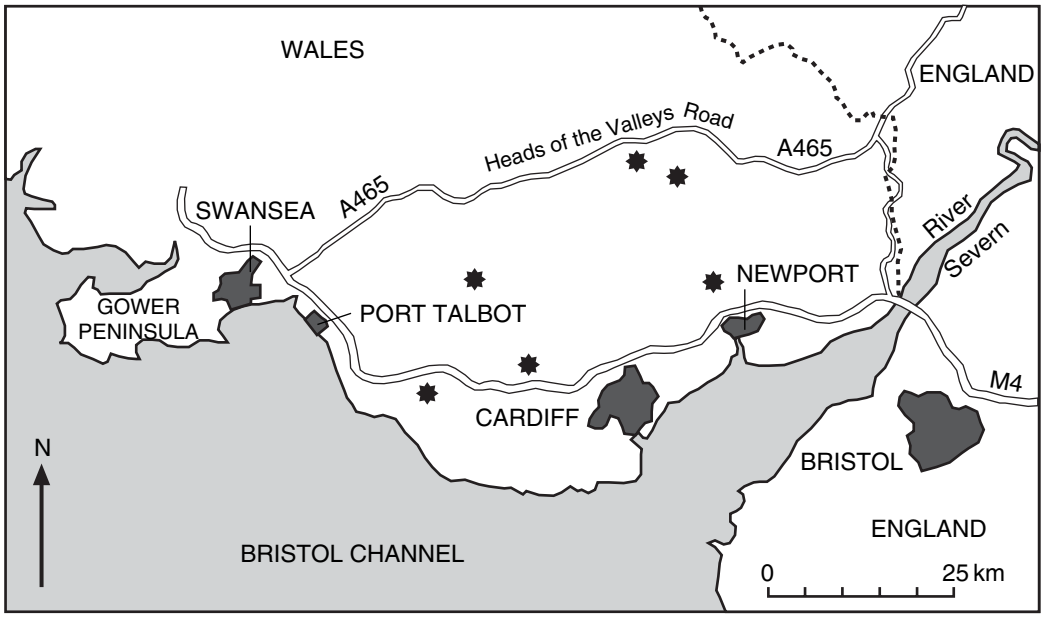
Question 4: Industrial Geography

(*a*) For South Wales, or any other industrial concentration in the European Union which you have studied, **describe** the physical and human factors which led to the growth of traditional industries before 1950. **4**

(*b*) Study Reference Map Q4.

Describe and **explain** the methods used to attract newer industries and investments to South Wales, or to any other industrial concentration in the European Union which you have studied. **5**

Reference Map Q4 (South Wales: Location of industrial developments since 1950)



✸ Location of industrial developments since 1950

Marks

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

Question 5: Lithosphere

Study Reference Photograph Q5 which shows a glaciated upland landscape in the Cairngorm Mountains.

(*a*) **Describe** the evidence which suggests that the area shown in the photograph has been affected by the processes of glacial erosion. **3**

(*b*) Choose **one** feature of glacial erosion visible in the photograph and, with the aid of an annotated diagram (or diagrams), **explain** how it was formed. **4**

Reference Photograph Q5

[Turn over

Marks

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

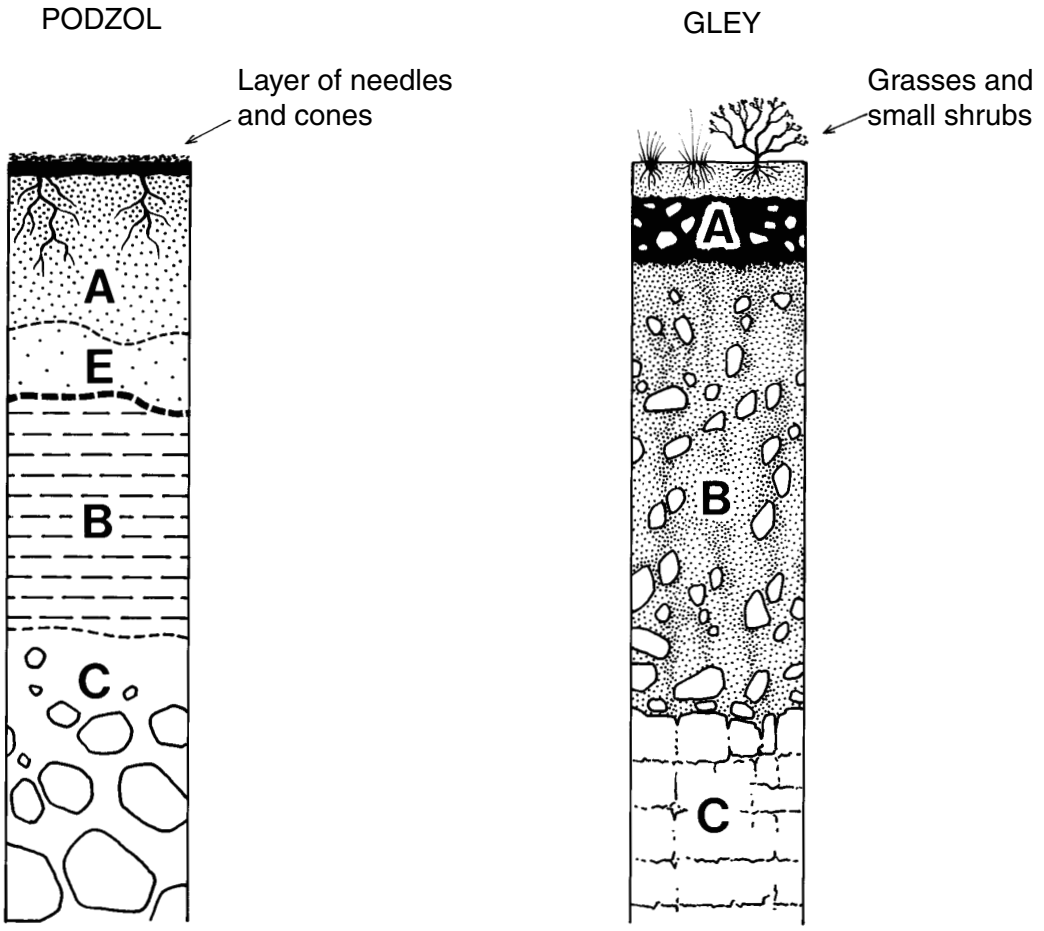
Question 6: Biosphere

Study Reference Diagram Q6A which shows two soil profiles.

Choose **one** of the soil profiles.

(i) **Describe** the characteristics of the soil, including horizons, colour, texture and drainage. **3**

Reference Diagram Q6A (Selected soil profiles)

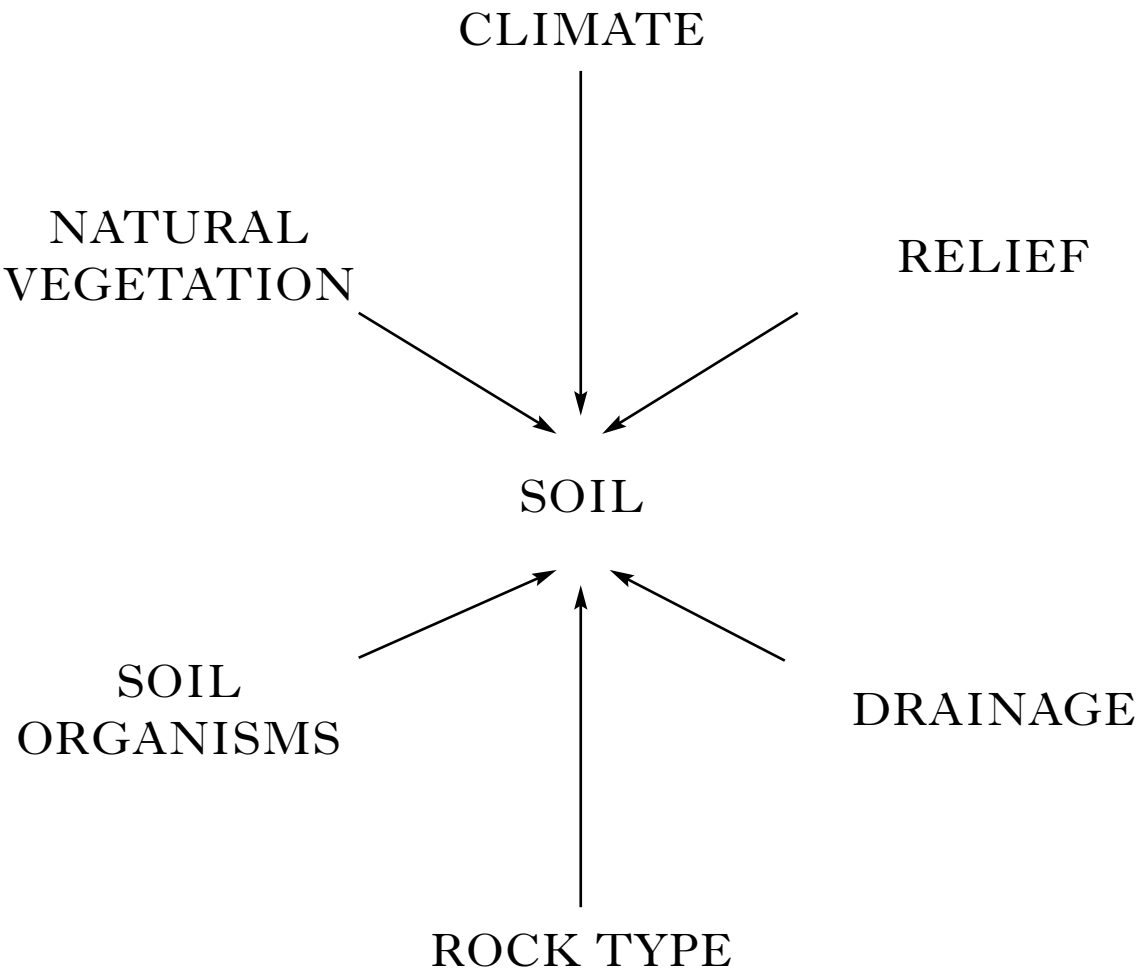


Question 6 (continued)

(ii) Study Reference Diagram Q6B.

Explain how the major soil forming factors shown in the diagram have contributed to the formation of your chosen soil profile. **4**

Reference Diagram Q6B (Main factors affecting soil formation)



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Marks

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

Question 7: Rural Geography

(*a*) **Describe** the main characteristics of **shifting cultivation**. **3**

(*b*) "*In Central America, population density and loss of rainforest cover are closely related. During the last two decades, human activities have caused the deforestation of more than 120 000 square kilometres each year.*"

Referring to a named area where shifting cultivation is carried out, **explain** the **impact** which deforestation and increased population density have had on the environment and way of life of the shifting cultivators. **4**

DO NOT ANSWER THIS QUESTION IF YOU HAVE ALREADY ANSWERED QUESTION 7

Question 8: Urban Geography

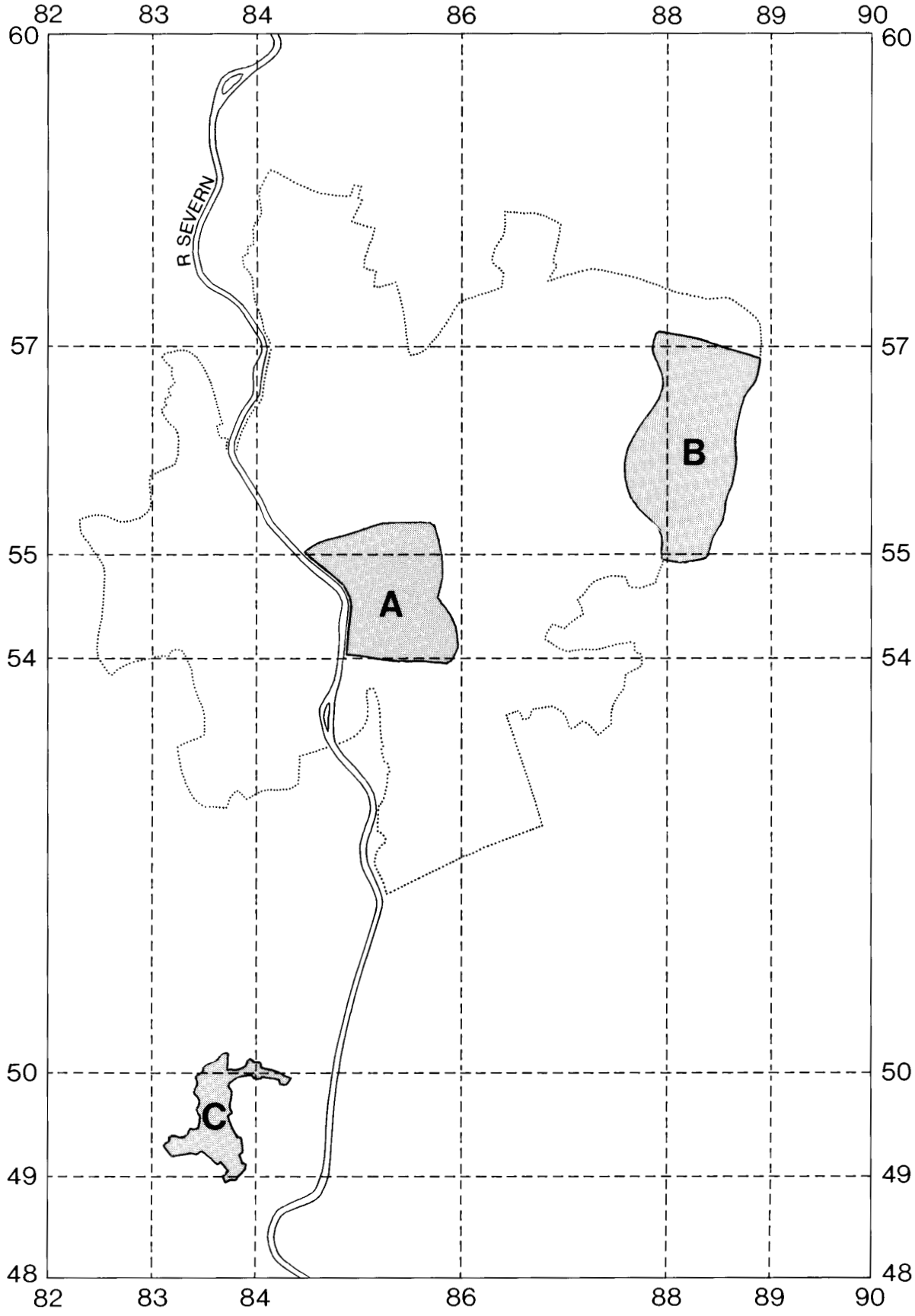
Study OS Map Extract number 1560/150: Worcester (*separate item*), and Reference Map Q8.

(*a*) **Describe** the urban environment of Area A and **explain** its location. **4**

(*b*) For **either** Area B **or** Area C, **explain** the advantages of the residential environment. **3**

Question 8 (continued)

Reference Map Q8 (Location of urban areas in Worcester)



[*END OF QUESTION PAPER*]

X208/303

NATIONAL QUALIFICATIONS 2007

MONDAY, 28 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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Marks

SECTION 1

You must answer ONE question from this Section.

Question 1 (Rural Land Resources)

(*a*) Study Reference Maps Q1A and Q1B.

Describe and **suggest reasons for** the location of Britain's National Parks. **5**

(*b*) Study Reference Diagram Q1 on *Page four*.

"*Tourism can bring benefits but also causes problems for National Parks*."

With the aid of Reference Diagram Q1 and referring to a specific National Park **or** other named upland **or** coastal landscape area which you have studied:

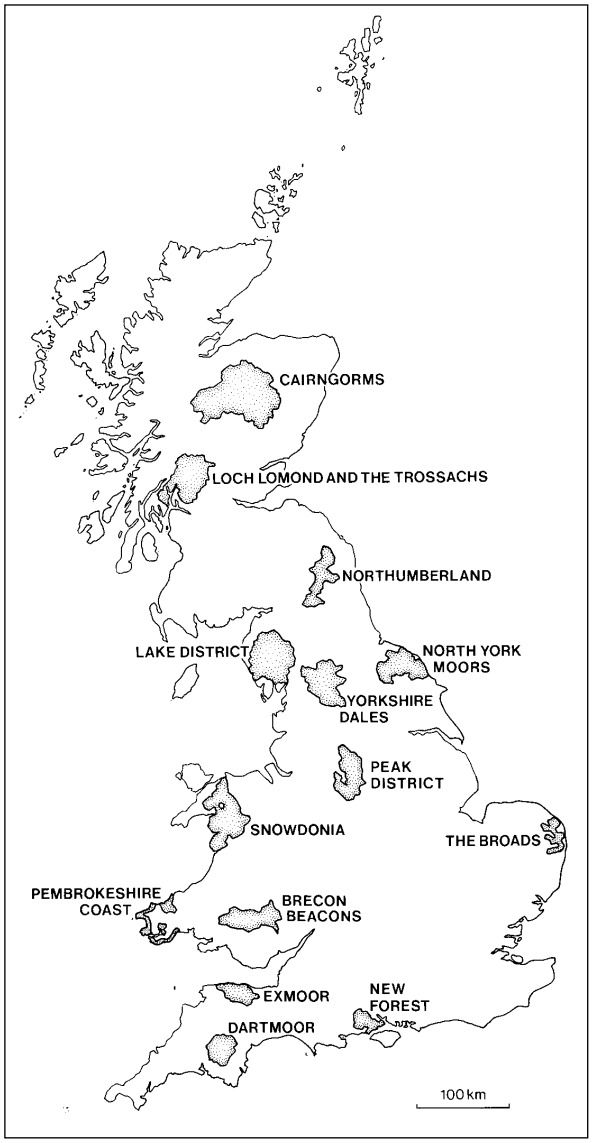
(i) **describe** some of the benefits which an influx of tourists has brought; and

(ii) **suggest** and **evaluate** ways in which the **negative** effects of tourism can be tackled. **10**

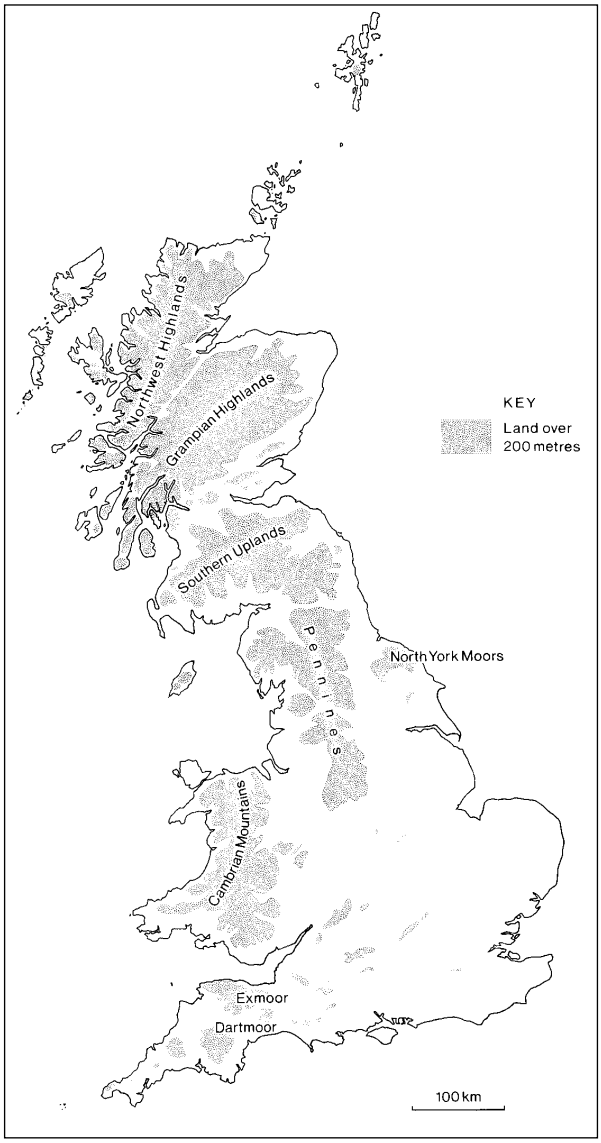
(*c*) With the aid of annotated diagrams, **describe** and **explain** the formation of the main features of any **coastal landscapes** which you have studied. You should refer to erosional **and** depositional features in your answer. **10**

(25)

Reference Map Q1A
(National Parks in Great Britain)

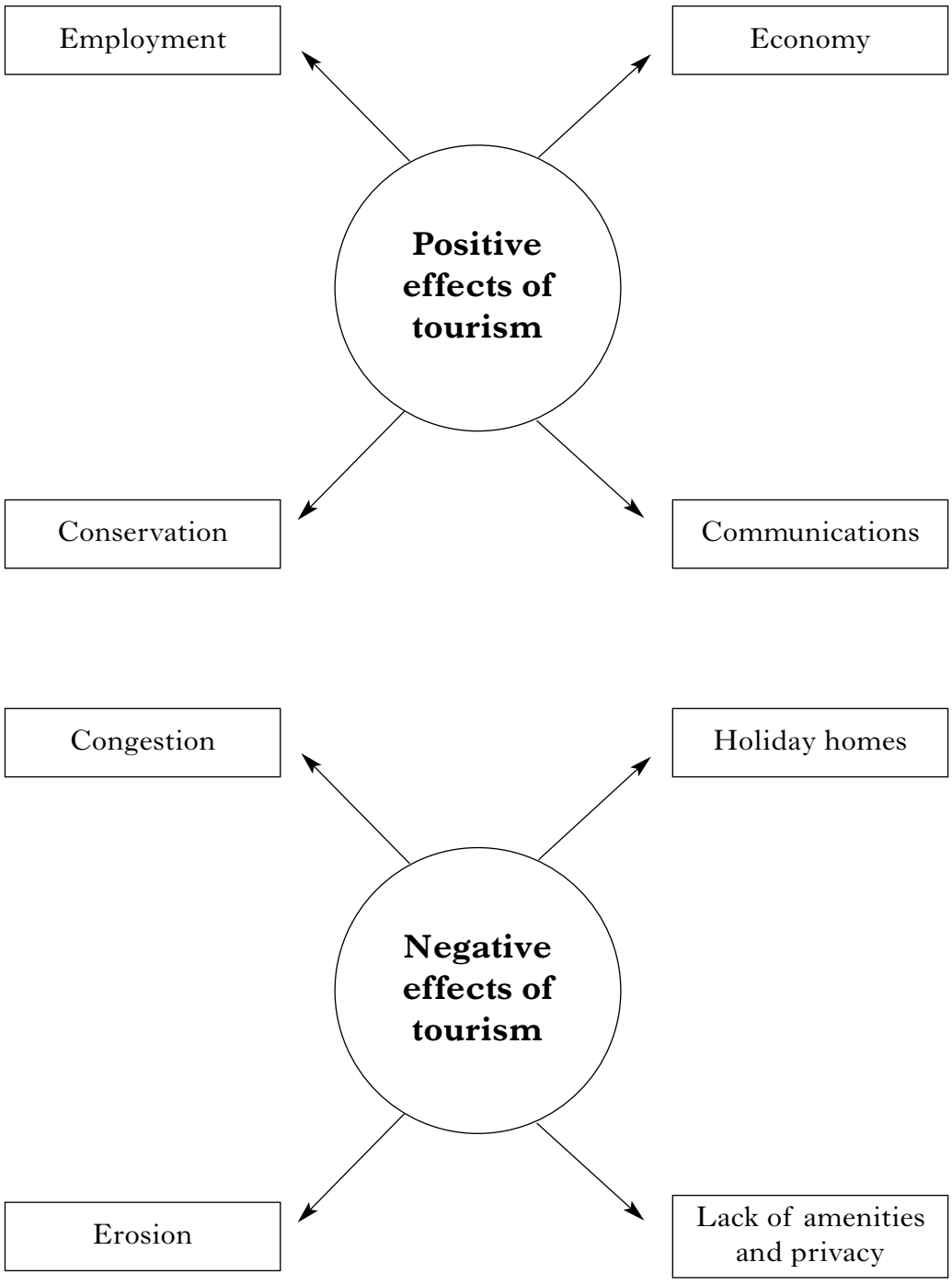


Reference Map Q1B
(Relief map of Great Britain)



[Turn over

Reference Diagram Q1 (Positive and negative effects of tourism)



Marks

Question 2 (Rural Land Degradation)

(*a*) Study Reference Table Q2.

Describe the processes of soil erosion by both water and wind. **5**

(*b*) **Describe** and **explain** the main human causes of land degradation in North America **and either** Africa north of the Equator **or** the Amazon Basin. **8**

(*c*) Referring to named locations in **either** Africa north of the Equator **or** the Amazon Basin, **describe** the social and economic impact of land degradation on the people. **5**

(*d*) Study Reference Diagram Q2.

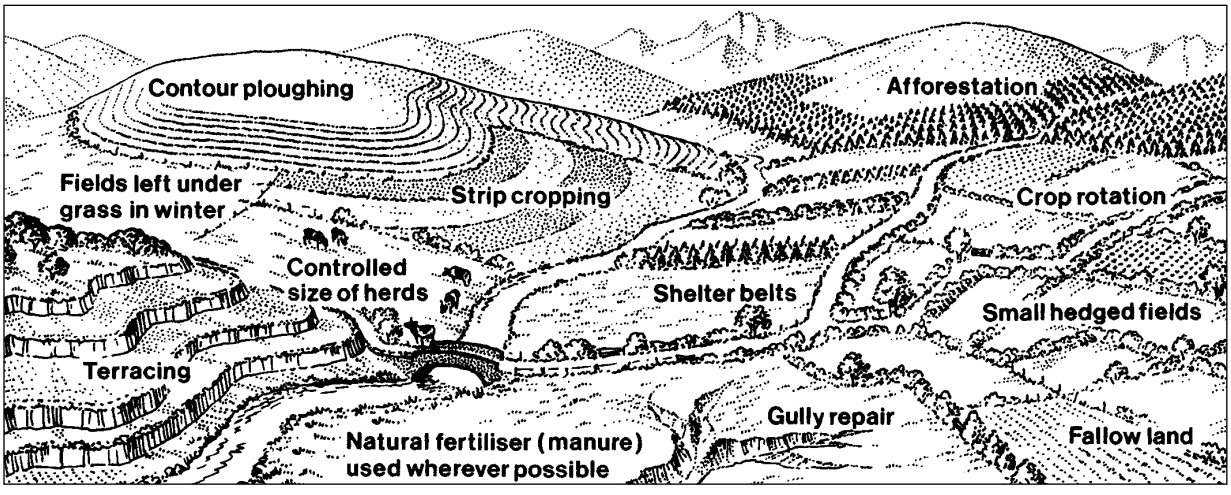
For any **four** methods of soil conservation, **explain** how each helps to conserve soil and reduce land degradation. **7**

(25)

Reference Table Q2 (Types of water and wind erosion)

Soil Erosion by Water	Soil Erosion by Wind
Rainsplash	Suspension
Sheet wash	Saltation
Rill erosion	Surface creep
Gully erosion	

Reference Diagram Q2 (Soil conservation strategies)



[Turn over

Marks

Question 3 (River Basin Management)

(*a*) Study Reference Maps Q3A, Q3B and Q3C.

For Asia **or** Africa **or** North America, **describe** and **explain** the general distribution of the main river basins. **5**

(*b*) "*Among the 30 largest dams planned for the Narmada river in India, the Sardar Sarovar is the largest. Most of the water held back by the dam will be used in the neighbouring state of Gujarat as it expands its rice and cotton production.*"

Study Reference Maps Q3D, Q3E and Reference Diagram Q3 on *Page eight*.

Explain why there is a need for water management in the Narmada River Basin and in Gujarat State. **5**

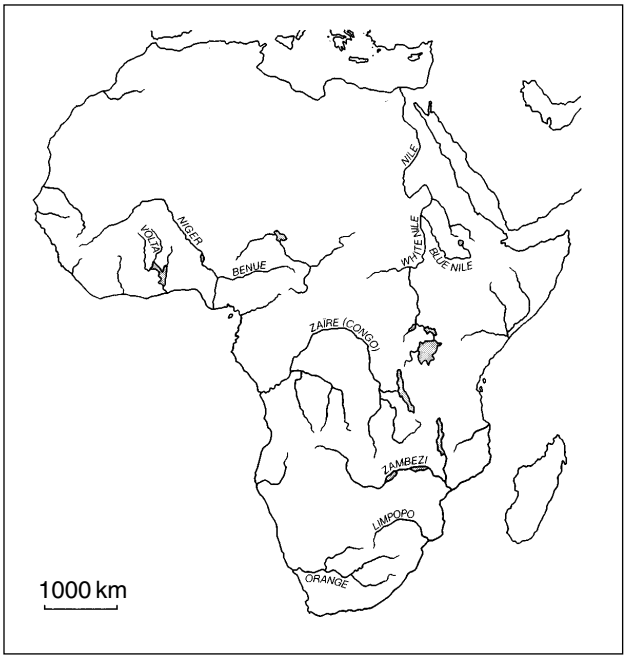
(*c*) For the Narmada River Project **or** any other river basin management project in Asia **or** Africa **or** North America, **explain** the political problems that may have resulted from the project. **3**

(*d*) **Describe** and **suggest reasons for** the social, economic and environmental benefits **and** adverse consequences of a named water control project in Asia **or** Africa **or** North America. **12**

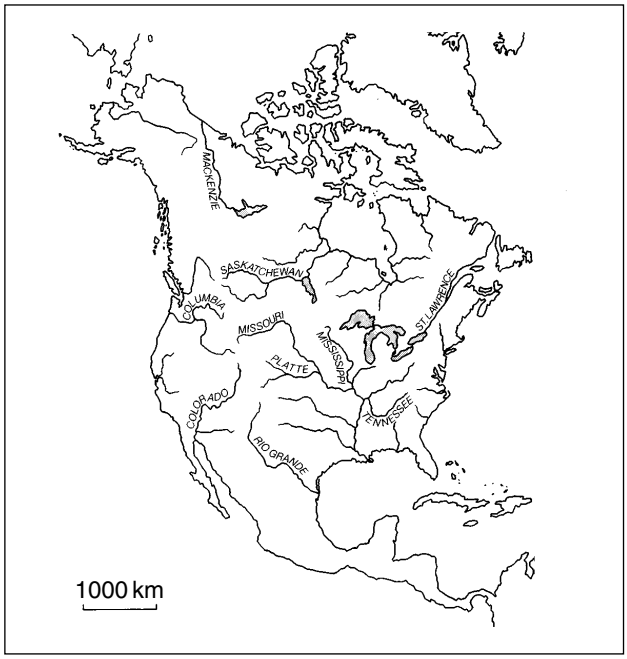
(25)

Question 3 – continued

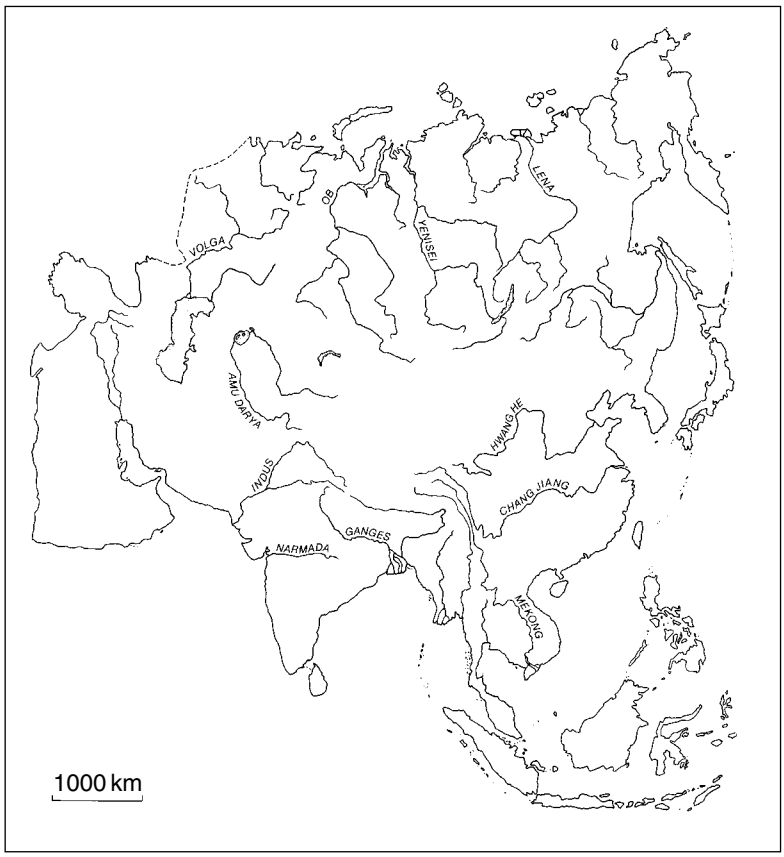
Reference Map Q3A
(Major river basins of Africa)



Reference Map Q3B
(Major river basins of North America)

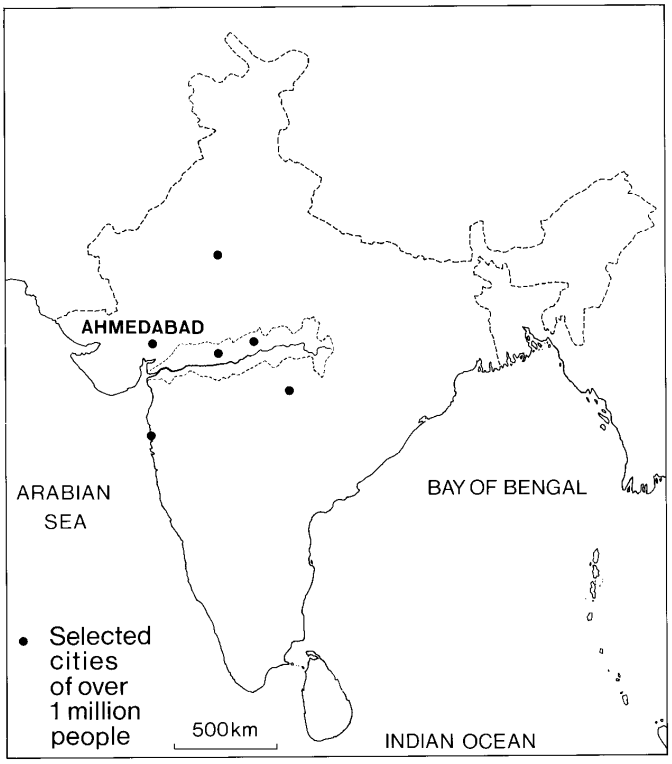


Reference Map Q3C (Major river basins of Asia)

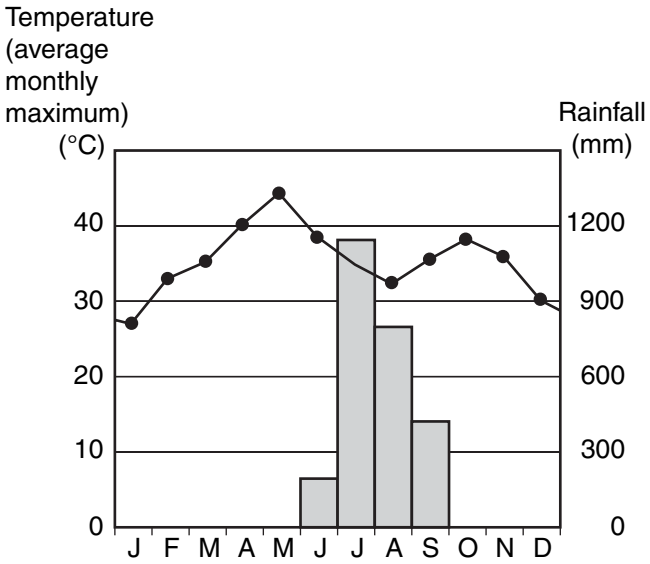


Question 3 – continued

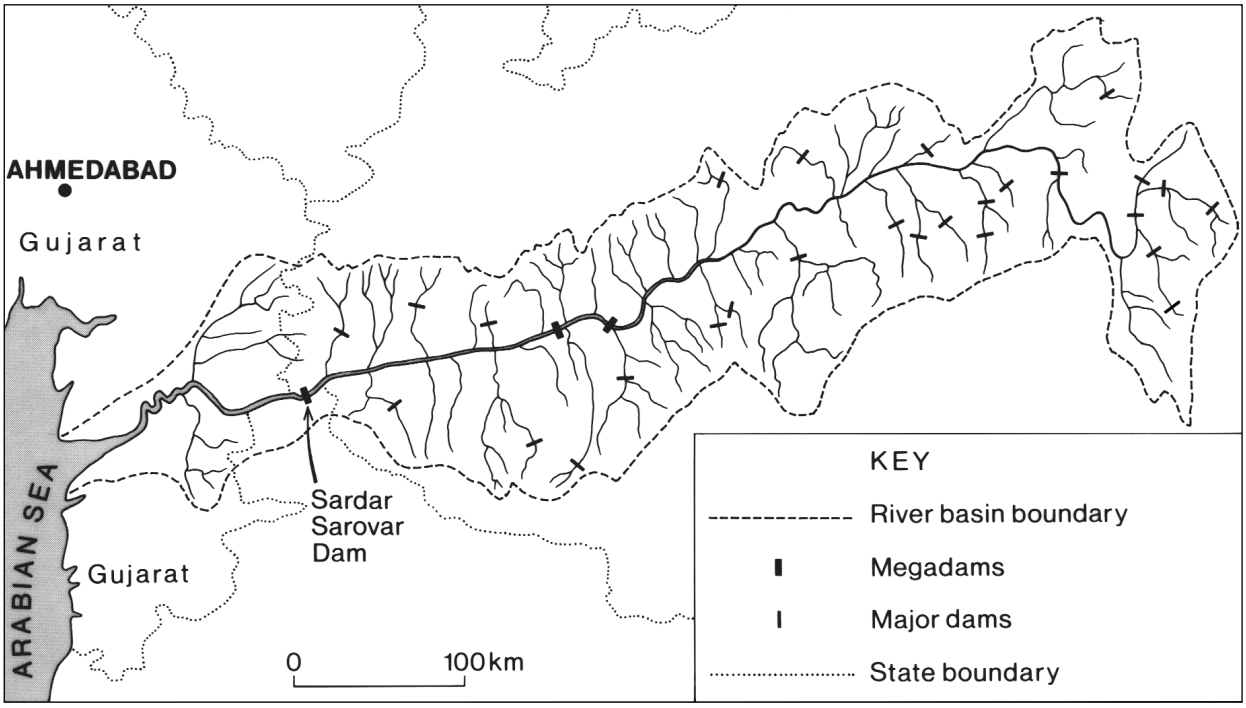
Reference Map Q3D
(Location of Narmada River Basin in India)



Reference Diagram Q3
(Climate graphs for Ahmedabad)



Reference Map Q3E (Basin of Narmada River)



[Turn over for Question 4 on *Page ten*

Marks

SECTION 2

You must answer ONE question from this Section.

Question 4 (Urban Change and its Management)

Study Reference Maps Q4A and Q4B.

(*a*) **Describe** and **suggest reasons** for the changing distribution of the world's largest urban areas over the last 50 years. **6**

(*b*) With reference to a named city which you have studied in an **ELDC** (Economically Less Developed Country):

(i) **describe** the social, economic and environmental problems which have resulted from its rapid growth;

(ii) **describe** some of the methods used to tackle these problems; and

(iii) **comment** on the effectiveness of the methods used. **10**

(*c*) The rural-urban fringe of many cities in **EMDCs** (Economically More Developed Countries) is frequently an area of land-use conflict.

Study Reference Map Q4C on *Page twelve*.

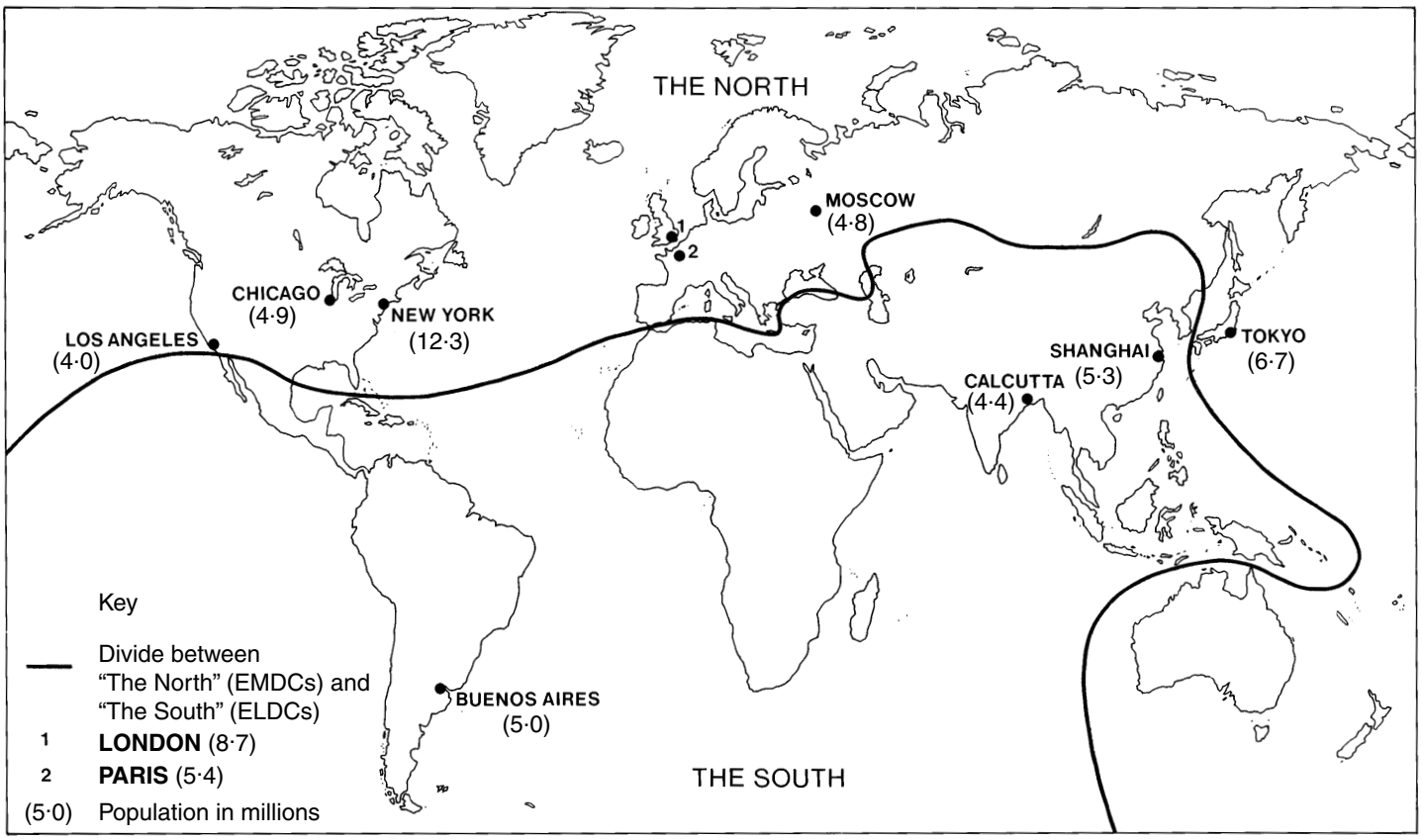
Referring to Edinburgh **or** any other named city which you have studied in an **EMDC**:

(i) **suggest** why land-use conflicts may have arisen; and

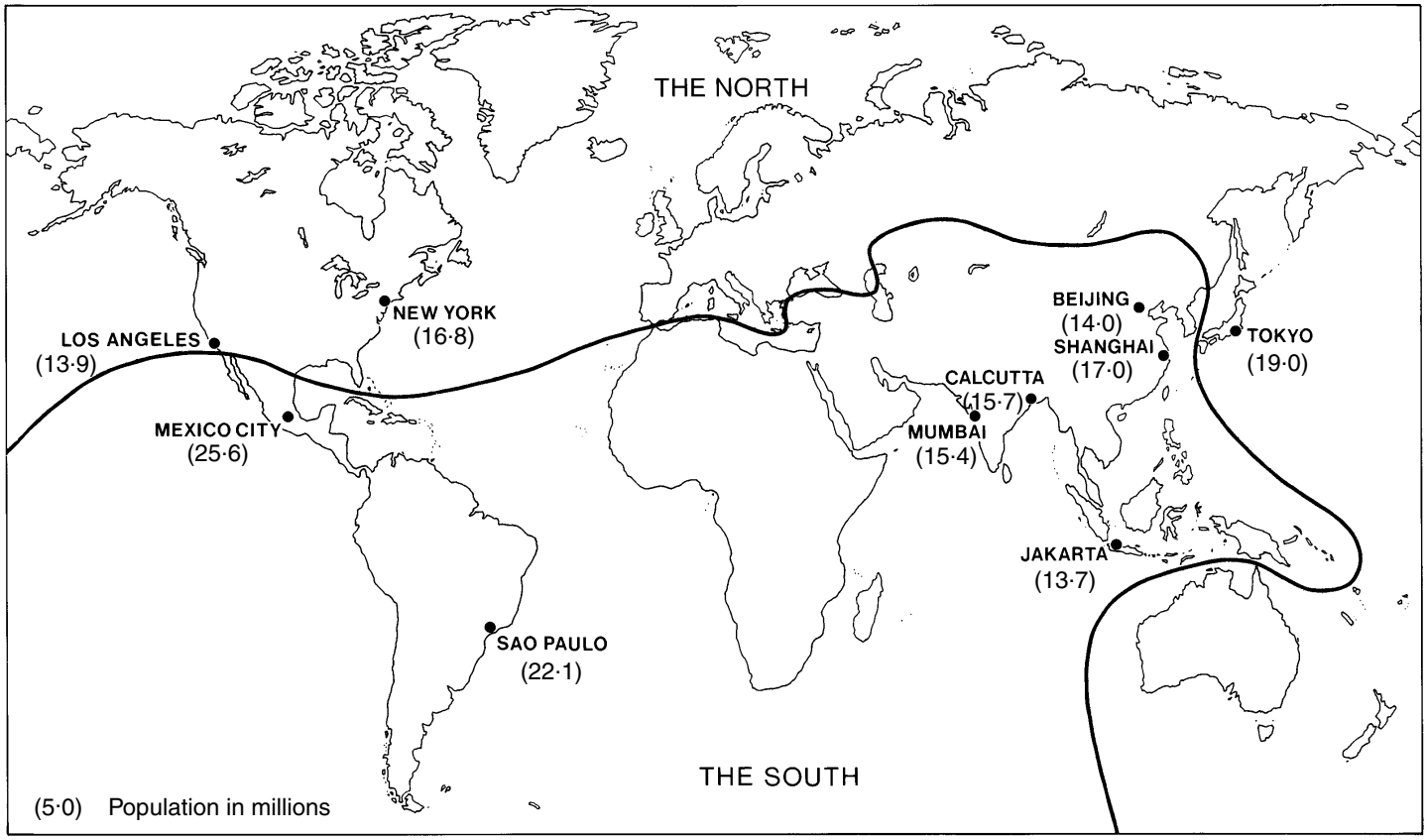
(ii) **comment** on the effectiveness of strategies such as the creation of Green Belts, in resolving these conflicts. **9**

(25)

Reference Map Q4A (Ten largest urban areas in the world in 1957)

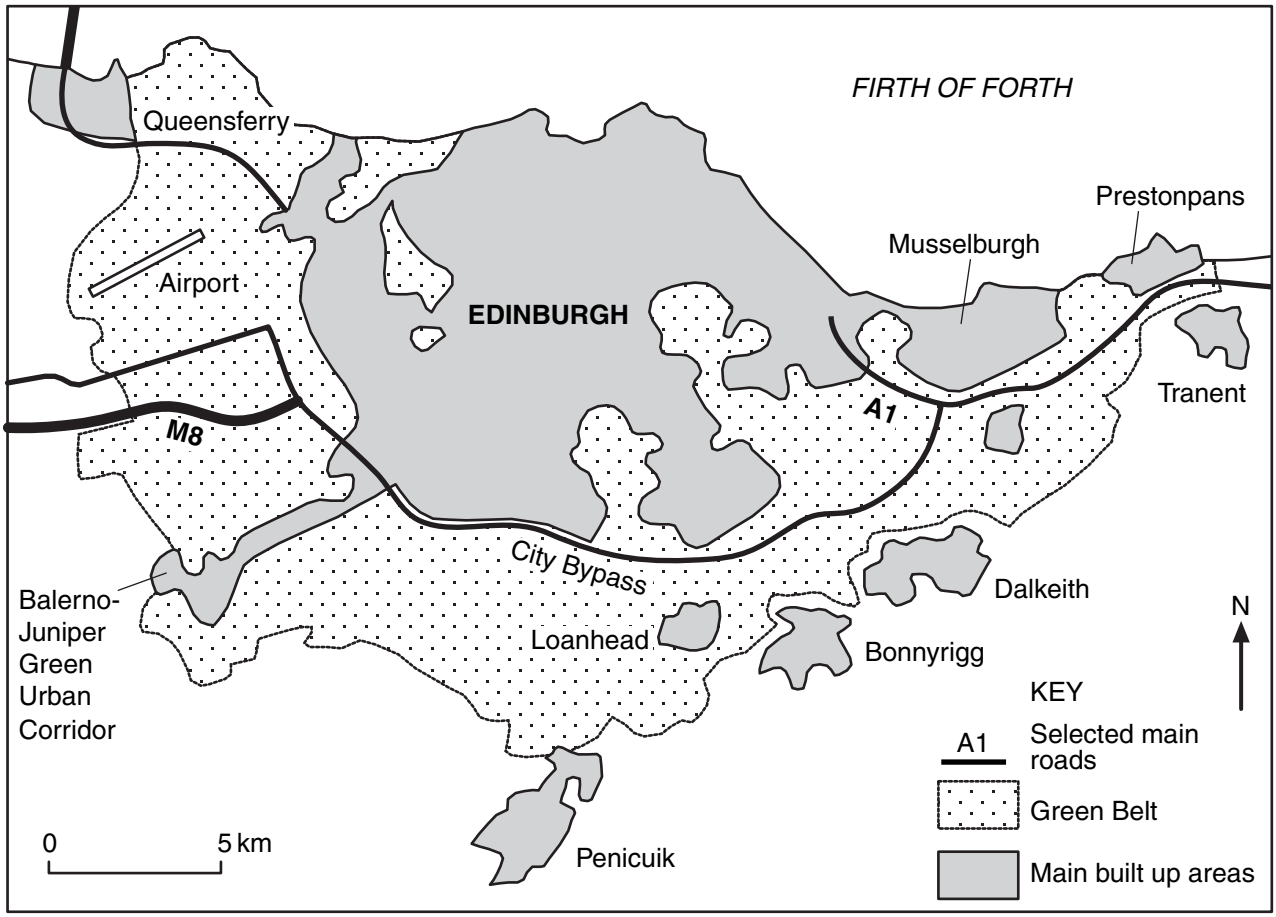


Reference Map Q4B (Ten largest urban areas in the world in 2007)



Question 4 - continued

Reference Map Q4C (Pressures on Edinburgh's Green Belt)



[Turn over for Question 5 on *Page fourteen*

Marks

Question 5 (European Regional Inequalities)

(*a*) Study Reference Table Q5A and Reference Map Q5A.

Describe and **suggest reasons** for the differences in levels of development between the countries shown. **5**

(*b*) Study Reference Map Q5B on *Page sixteen* and Reference Table Q5B.

To what extent does the data provide evidence of regional inequalities within Poland? **6**

(*c*) Many countries within the European Union (EU) have marked regional inequalities.

For a named country in the EU, select **one** less developed region and:

(i) **describe** and **account for** the social and economic problems faced by the region; **6**

(ii) **outline** the efforts being made by both the national government and European Union agencies to tackle the problems, and comment on their effectiveness. **8**

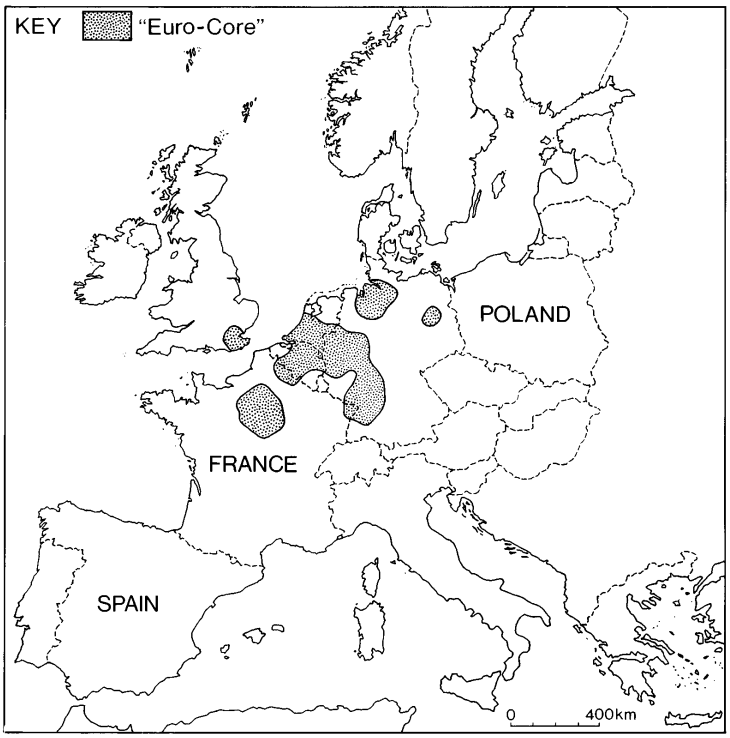
(25)

Reference Table Q5A (Selected EU country statistics)

	France	**Spain**	**Poland**
Population (millions)	60	41	39
GDP ($US per capita)	26 920	21 460	10 560
Life expectancy	79	79	74
Health expenditure ($US per capita)	2567	1607	629
Urban %	76	76	62
Date of EU membership	1957	1986	2004

Data: UN World Development Handbook

Reference Map Q5A (Selected European Union countries)



Reference Table Q5B (Polish Provinces—selected statistics)

Province	GDP per capita (in 1000 zloty) 2002	Private vehicles % national total 2003	Electricity production % total 2003
Lower Silesia	21·2	7	8
Cuiavia & Pomerania	18·6	5	2
Lublin	14·3	5	1
Lubusz	17·8	3	<1
Lódz´	18·5	7	20
Lesser Poland	17·7	8	6
Mazovia	31·1	15	13
Opole	16·7	3	6
Sub-Carpathia	14·6	5	2
Podlassia	15·7	3	<1
Pomerania	20·3	6	2
Silesia	22·6	12	20
Kielce	16·0	3	5
Varmia & Masuria	15·2	3	<1
Greater Poland	21·0	11	10
Western Pomerania	20·2	4	4

[Turn over to see map of Provinces

Question 5 – continued

Reference Map Q5B (Poland: Provinces)

[Turn over for Question 6 on *Page eighteen*

Marks

Question 6 (Development and Health)

(*a*) % Adult literacy is a social indicator of development. Identify one other social indicator of development **and** one economic indicator of development. For each indicator you have identified, **explain** how it might illustrate a country's level of development. **4**

(*b*) Study Reference Table Q6.

Reference Table Q6 (Adult literacy rates in selected Economically Less Developed Countries (ELDCs))

Country	% Adult Literacy
Afghanistan	35
Bolivia	85
Burkina Faso	22
Cuba	96
Kenya	81
Malaysia	87
Sri Lanka	91

The table shows that there are considerable differences in levels of development between Economically Less Developed Countries (ELDCs). Referring to these countries and/or to other ELDCs you have studied, **suggest reasons** why such differences exist **between** countries. **5**

(*c*) Many ELDCs have marked differences in levels of development **within** their borders. For a named ELDC, **explain** the differences found **within** the country. **4**

(*d*) Study Reference Map Q6 which shows the main areas of the world at risk from cholera.

Referring to cholera **or** malaria **or** bilharzia/schistosomiasis:

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

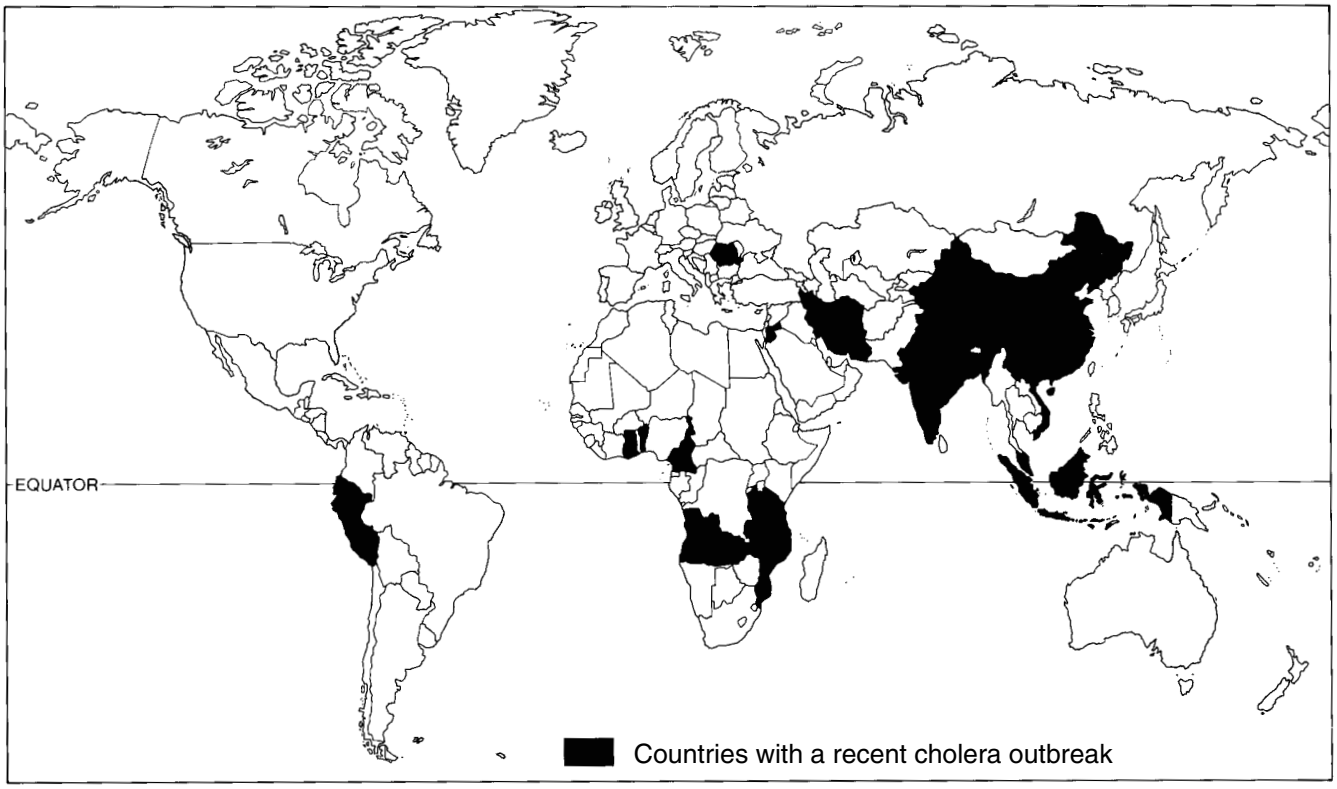
(ii) **describe** and **explain** the strategies used in controlling the spread of the disease; and

(iii) **explain** the benefits to ELDCs of controlling the disease. **12**

(25)

Question 6 – continued

Reference Map Q6 (Countries with a recent cholera outbreak)



[*END OF QUESTION PAPER*]