



National
Qualifications
2016

X733/76/11

Geography

FRIDAY, 6 MAY

9:00 AM – 11:15 AM

Total marks — 60

SECTION 1 — PHYSICAL ENVIRONMENTS — 15 marks

Attempt ALL questions.

SECTION 2 — HUMAN ENVIRONMENTS — 15 marks

Attempt ALL questions.

SECTION 3 — GLOBAL ISSUES — 20 marks

Attempt TWO questions.

SECTION 4 — APPLICATION OF GEOGRAPHICAL SKILLS — 10 marks

Attempt the question.

Credit will be given for appropriately labelled sketch maps and diagrams.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not you may lose all the marks for this paper.



SECTION 1 — PHYSICAL ENVIRONMENTS — 15 marks

Attempt ALL questions

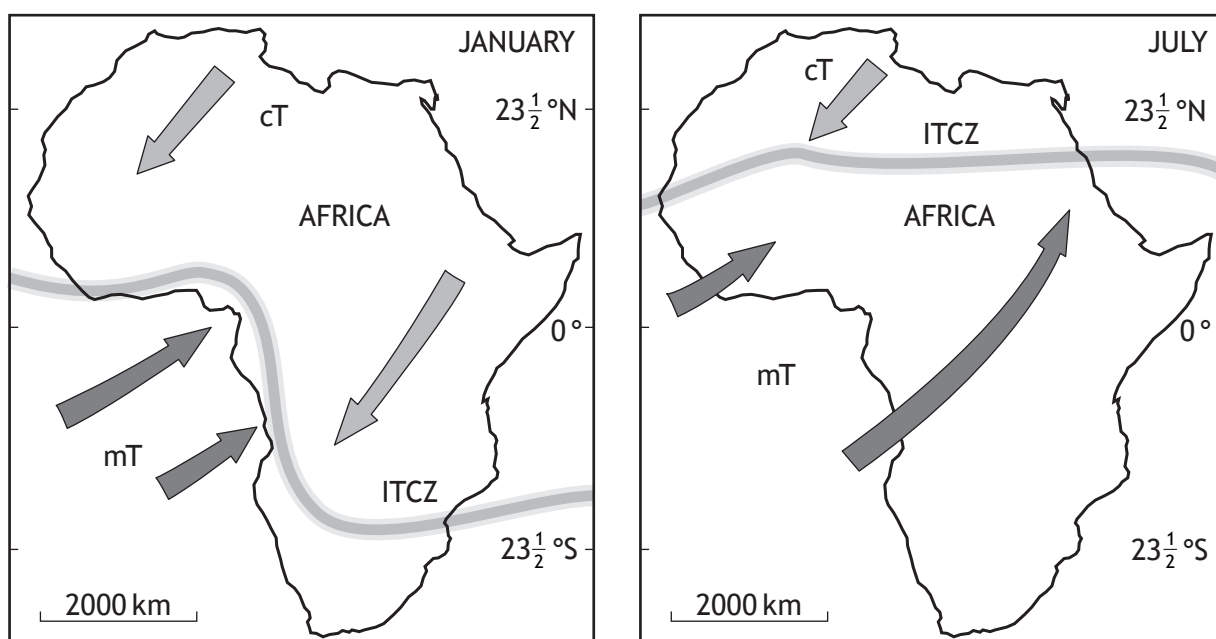
Question 1

Study Maps Q1A and Q1B before answering this question.

- (a) Compare the rainfall patterns across West Africa; and
- (b) suggest reasons for the variations.

5

Map Q1A: Location of selected air masses and the ITCZ in January and July

**Key:**

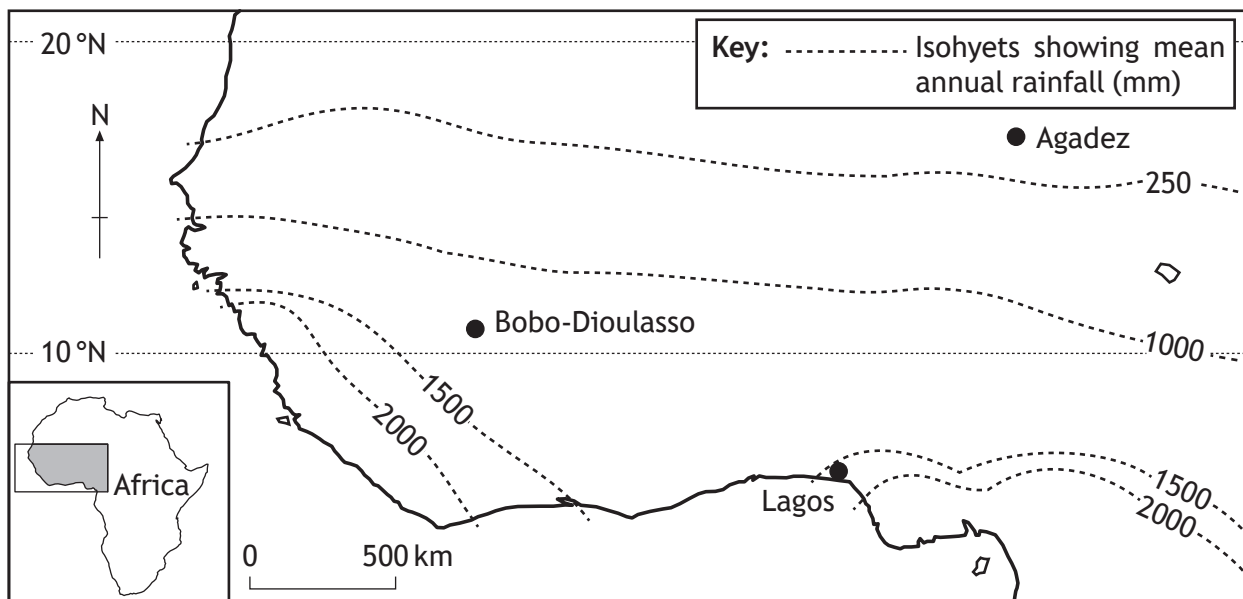
mT = Maritime Tropical

cT = Continental Tropical

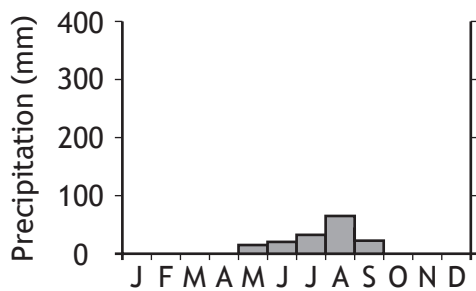
ITCZ = Inter Tropical Convergence Zone

Question 1 (continued)

Map Q1B: Rainfall patterns in West Africa



Agadez



Bobo-Dioulasso



Lagos



[Turn over

Question 2

Read Diagram Q2.

Diagram Q2: Extract from Lake District Management Plan

The Lake District's varied scenery and historic environment provide for a wide range of sport, recreational and leisure activities . . . this has grown and changed over time.

As the National Park continues to change, we need to monitor how access and recreation is being managed to ensure that a balance exists between the needs of everyone.

State of the Park Report 2005: Access and Recreation

Referring to a glaciated upland area you have studied:

- | | | |
|-----|---|----------|
| (a) | explain the environmental conflicts caused by the various land uses; | 5 |
| (b) | (i) explain the strategies used to manage these conflicts; and | |
| | (ii) comment on the effectiveness of these strategies. | 5 |

SECTION 2 — HUMAN ENVIRONMENTS — 15 marks

Attempt ALL questions

Question 3

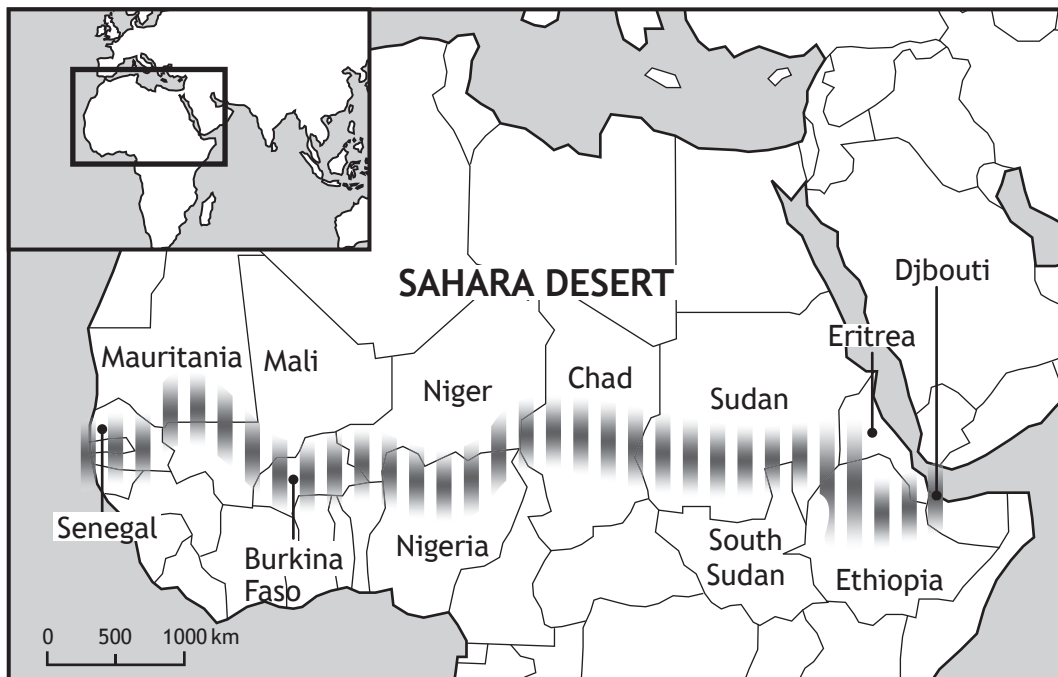
Look at Map Q3 before answering this question.

The Great Green Wall Initiative aims to reduce the impact of land degradation in the Sahel zone of Northern Africa.

- (a) **Explain** techniques employed to manage rural land degradation in a rainforest or semi arid area that you have studied; **and**
- (b) **comment on** the effectiveness of these techniques.

6

Map Q3: The Great Green Wall Initiative



“Great Green Wall” of trees

Total distance: 7,775 km

Total area: 11,662,500 hectares

[Turn over

Question 4

In November 2013, the Chairperson of Nigeria's National Population Commission resigned after questioning the accuracy of the data gathered about the country's population.

- (a) **Discuss** how countries gather accurate population data. 3
- (b) **Explain** why it is difficult to gather accurate population data in developing world countries. 6

SECTION 3 — GLOBAL ISSUES — 20 marks

Attempt TWO questions

Question 5	River Basin Management	Page 8
Question 6	Development and Health	Page 10
Question 7	Global Climate Change	Page 11
Question 8	Trade, Aid and Geopolitics	Page 12
Question 9	Energy	Page 13

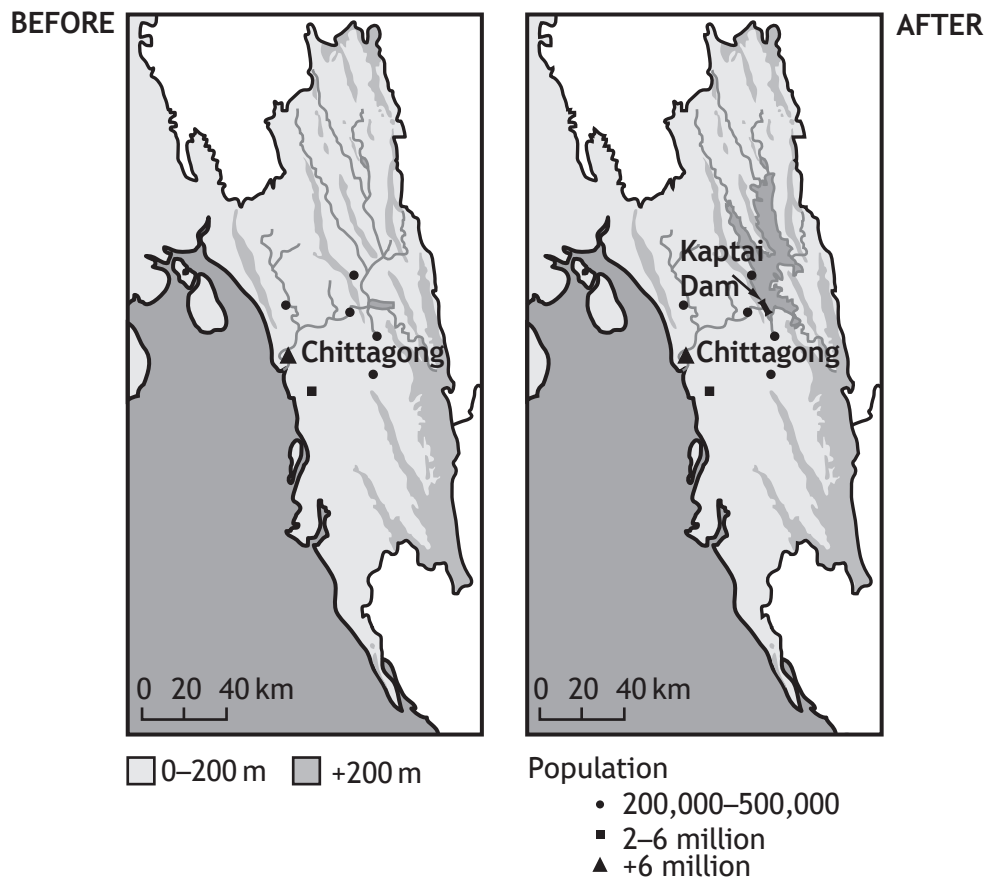
[Turn over

Question 5: River Basin Management

Map Q5A: Bangladesh



Map Q5B: Karnafuli River Basin



Question 5: (continued)

Diagram Q5A: Climate Graph, Chittagong, Bangladesh

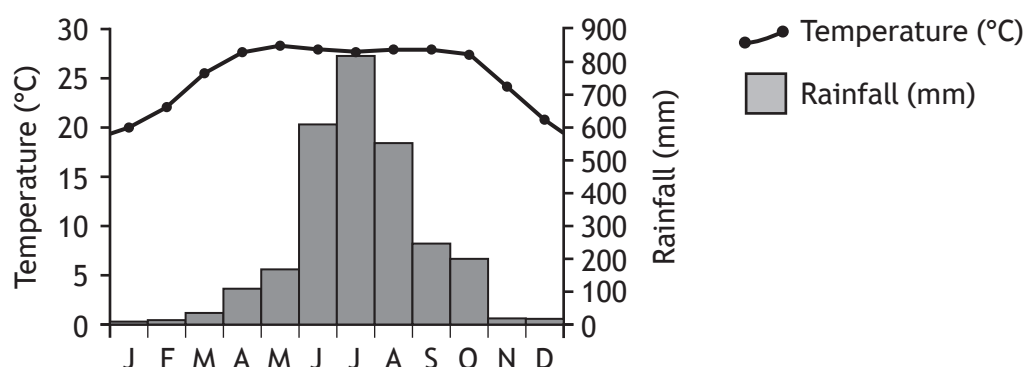


Diagram Q5B: Population growth in Bangladesh

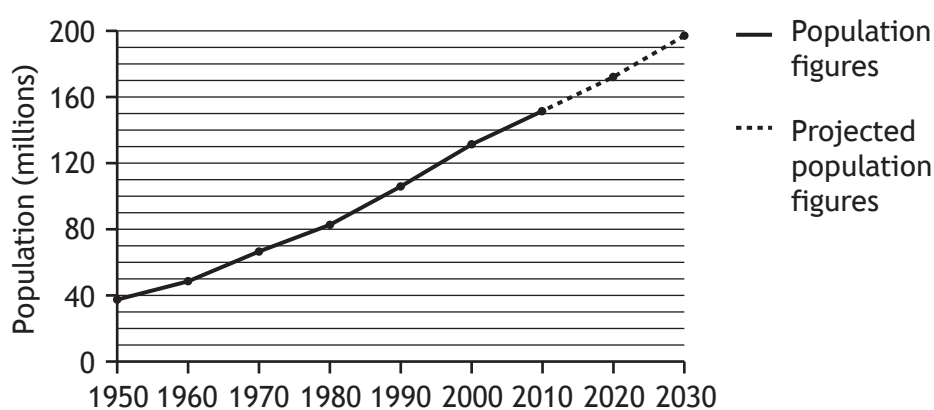


Diagram Q5C: Selected statistics, Bangladesh

Access to Improved drinking water	84%
Access to Improved sanitation	55%
Access to Electricity	62%
Main Industries	Textiles; Agriculture (rice/jute); Construction

- (a) Study Map Q5A, Map Q5B, Diagram Q5A, Diagram Q5B, and Diagram Q5C.

Explain why there is a need for water management in the Karnafuli River Basin.

6

- (b) Referring to a water control project you have studied, **discuss** the positive and negative **environmental** impacts created by the construction of a major dam and its associated reservoir.

4

Question 6: Development and Health

Look at Table Q6.

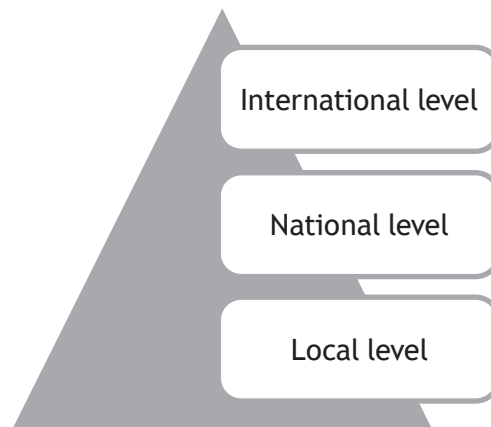
Table Q6: Selected Developing Countries

Country	GNI (Gross National Income) per capita (US\$)
Venezuela	13,600
Nigeria	2,800
Malawi	900

- (a) **Explain** why using only **one** development indicator, such as Gross National Income (GNI) per capita, may fail to reflect accurately the true quality of life within a country. 3
- (b) Referring to specific Primary Health Care strategies you have studied:
- (i) **explain** how these strategies meet the health care needs of the people in a developing country; **and**
- (ii) **comment on** the effectiveness of these strategies. 7

Question 7: Global Climate Change

- (a) Explain the **physical** causes of climate change. 4
- (b) Study Diagram Q7.
Explain possible strategies for managing climate change. 6

Diagram Q7: Levels of managing Climate Change

[Turn over

Question 8: Trade, Aid and Geopolitics

Table Q8: Trade Patterns of Selected Countries

Country	Population (millions)	GDP per Capita (US\$)	Exports (billions US\$)	Imports (billions US\$)	Balance of Trade (billions US\$)
Australia	23	67,304	252	245	+7
USA	318	51,704	1,575	2,273	-698
Germany	81	41,866	1,493	1,233	+260
UK	64	39,161	475	646	-171
Saudi Arabia	30	24,524	376	147	+229
Botswana	2	16,400	3	7	-4
Russia	144	14,302	515	341	+174
Brazil	201	11,358	245	241	+4
South Africa	53	7,525	91	99	-8
China	1,361	6,071	2,210	1,772	+438
Ghana	25	3,500	13	18	-5
India	1,241	1,499	318	516	-198
Zimbabwe	13	600	7	4	+3

(Data from CIA World Fact book — 2013)

- (a) Study Table Q8 above.

To what extent does the data in the table show inequalities in the pattern of world trade?

4

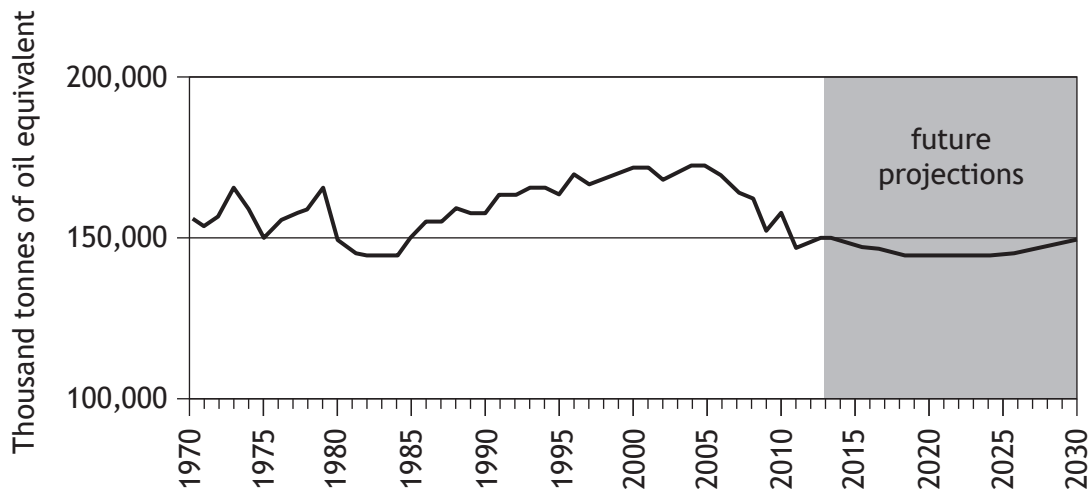
- (b) Give reasons for the inequalities in the pattern of trade shown in the table or between other countries that you have studied.

6

Question 9: Energy

Graph Q9A: Total UK energy consumption (1970–2030)

MARKS

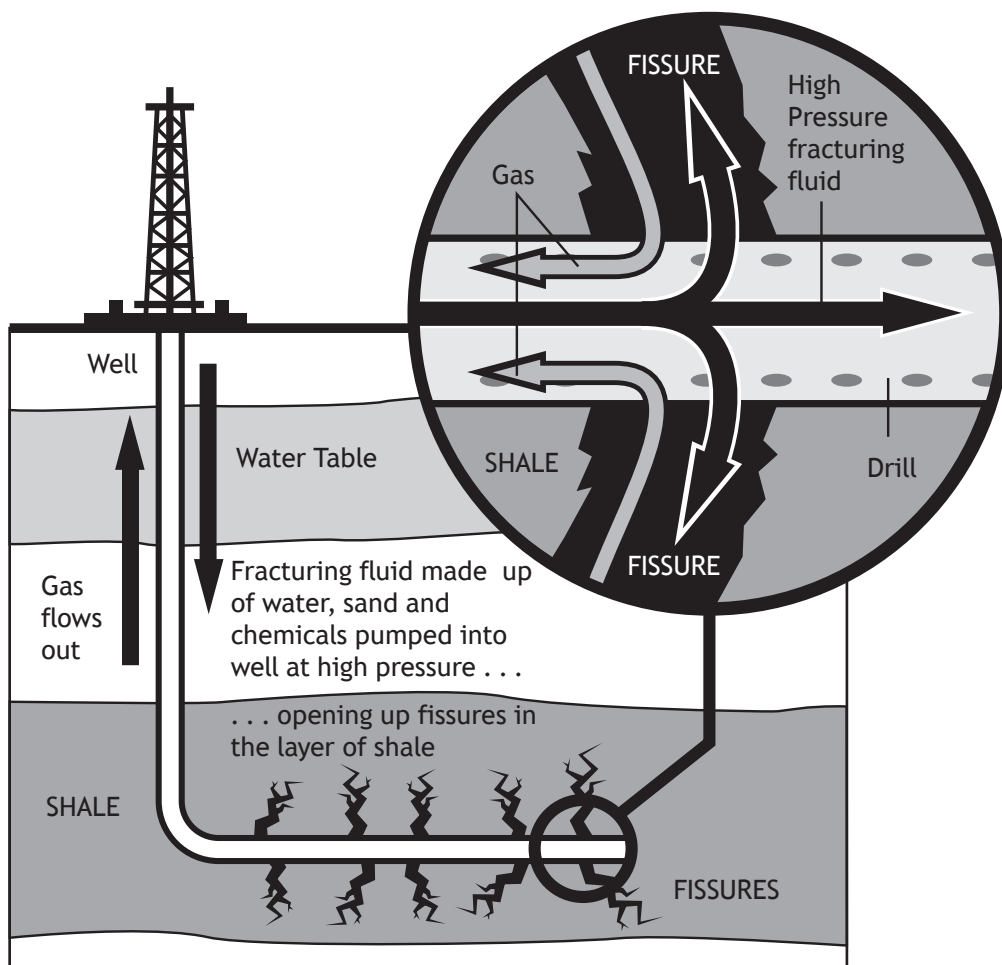


(a) Look at Graph Q9A above.

Suggest reasons for the changes in energy consumption in the UK.

5

Diagram Q9B: Hydraulic Fracturing (“Fracking”) to extract shale gas



(b) Look carefully at Diagram Q9B above.

Discuss the advantages and disadvantages of hydraulic fracturing (“fracking”), or any other **non-renewable** source of energy you have studied, in meeting the energy demands of a country.

5

SECTION 4 — APPLICATION OF GEOGRAPHICAL SKILLS — 10 marks

Attempt the question

Question 10

East Sussex County Council is building a new by-pass from 743091 to 776111 (The Bexhill–Hastings Link Road), however, not everyone is pleased with this decision.

Study the OS Map (Extract No 2214/EXP124: Hastings and Bexhill), Map Q10, Diagram Q10A, Diagram Q10B, Diagram Q10C and Diagram Q10D, before answering this question.

Referring to evidence from the OS map extract, and other information from the sources, **discuss**:

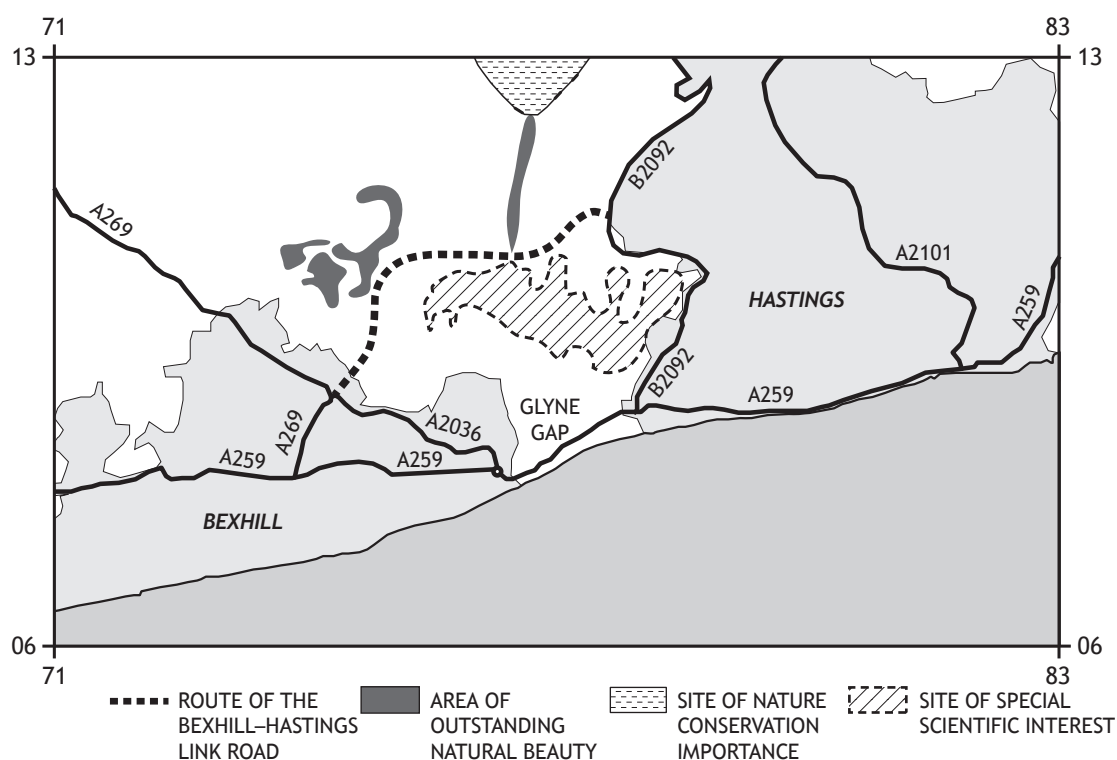
- (a) the advantages **and** disadvantages of the proposed route; **and**
- (b) any possible impacts on the surrounding area.

10

Diagram Q10A: Part of Sussex Wildlife Trust's response to the new road proposal

"Sussex Wildlife Trust strongly objects to the Bexhill–Hastings Link Road Scheme. The proposals do not represent sustainable development. The scheme will result in unacceptable environmental damage."

Map Q10: Route of the Bexhill to Hastings Link Road



Question 10 (continued)

Diagram Q10B: Average Hourly Traffic Flow on the A259 at Glyne Gap 768082 June 2012

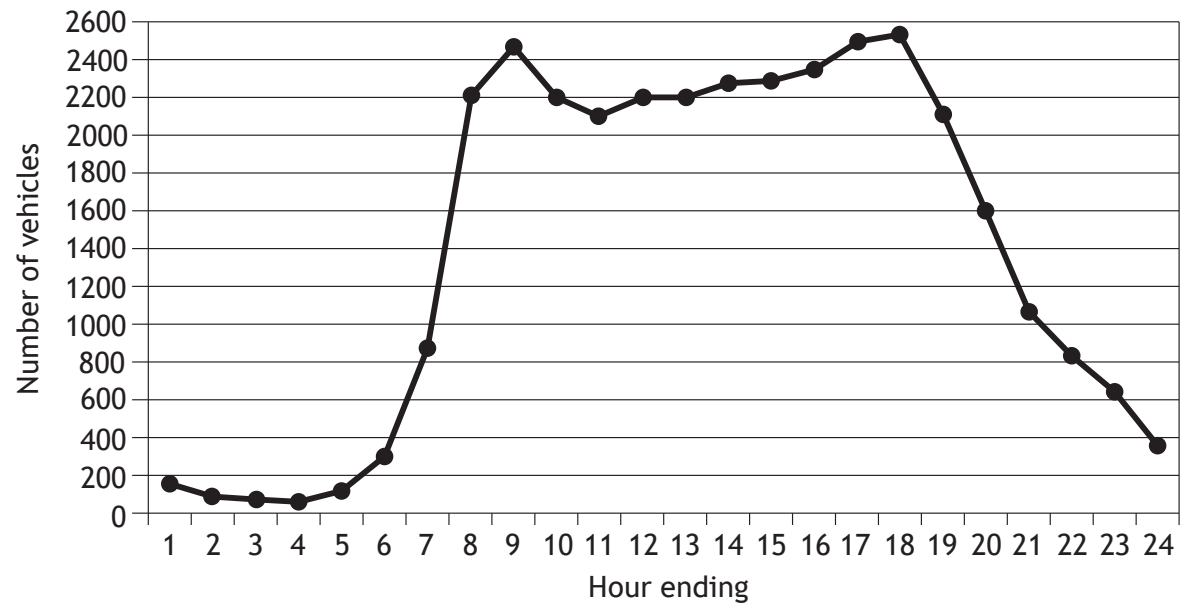


Diagram Q10C: Number of days that safe air pollution levels were exceeded at Glyne Gap 768082 June 2011 to June 2013

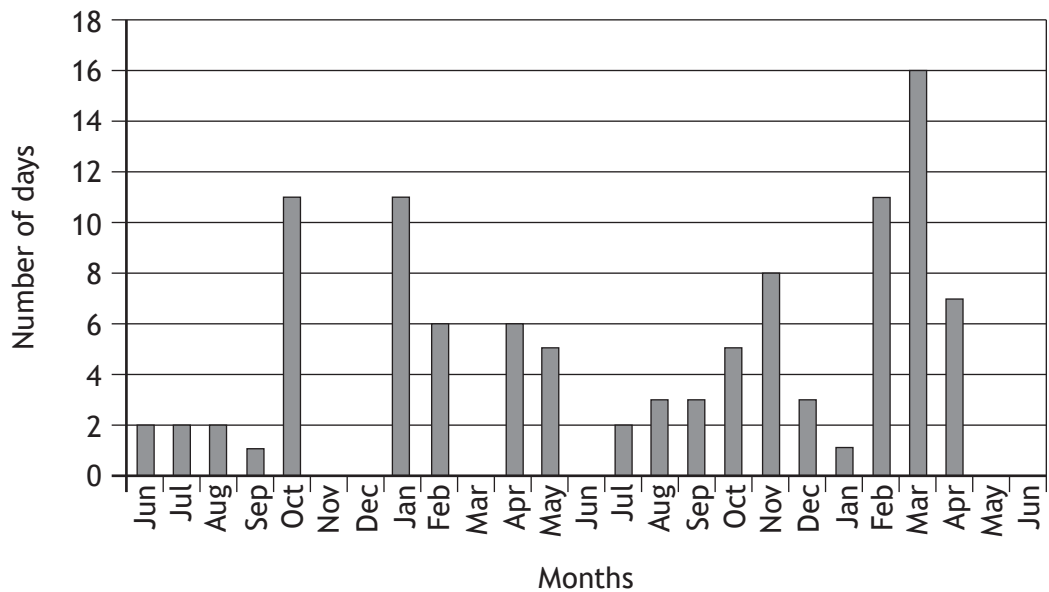


Diagram Q10D: Predicted visual impact on the Combe Havan Valley (View East from 757107) towards Adam's farm



[END OF QUESTION PAPER]