AQA

General Certificate of Education
Advanced Subsidiary Examination
January 2011

Geography　　　　　GEOG2

Unit 2　Geographical Skills

Friday 21 January 2011　1.30 pm to 2.30 pm

For this paper you must have:
- a pencil
- a rubber
- a ruler
- a protractor
- compasses

You may use a calculator.

Time allowed
- 1 hour

Instructions
- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The maximum mark for this paper is 50.
- The marks for questions are shown in brackets.
- You will be marked on your ability to:
  – use good English
  – organise information clearly
  – use specialist vocabulary where appropriate.

Advice
- Where appropriate, credit will be given for the use of diagrams to illustrate answers and where reference is made to your personal investigative work. You are advised to allocate your time carefully.

GEOG2

Answer **all** questions in the spaces provided.

1 (a) Study **Figure 1** on page 3 which represents the numbers of migrants who permanently settled in the UK in 2006 by country of origin. Eight of the top ten countries of origin are shown. Data for the other two are given in the table below.

Country of origin	Number of migrants who permanently settled in the UK in 2006
India	12 030
Nigeria	4735

1 (a) (i) Use the scale given to show the data for India and Nigeria on **Figure 1**.

(2 marks)

1 (a) (ii) Describe the pattern now shown in **Figure 1**.

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(4 marks)

Extra space ....

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Figure 1

Key

Scale for bars:
1 mm = 1000 people

In	India
Pa	Pakistan
Af	Afghanistan
Ne	Nepal
Ir	Iraq
Ph	Philippines
SA	South Africa
Ni	Nigeria
B	Bulgaria
Aus	Australia
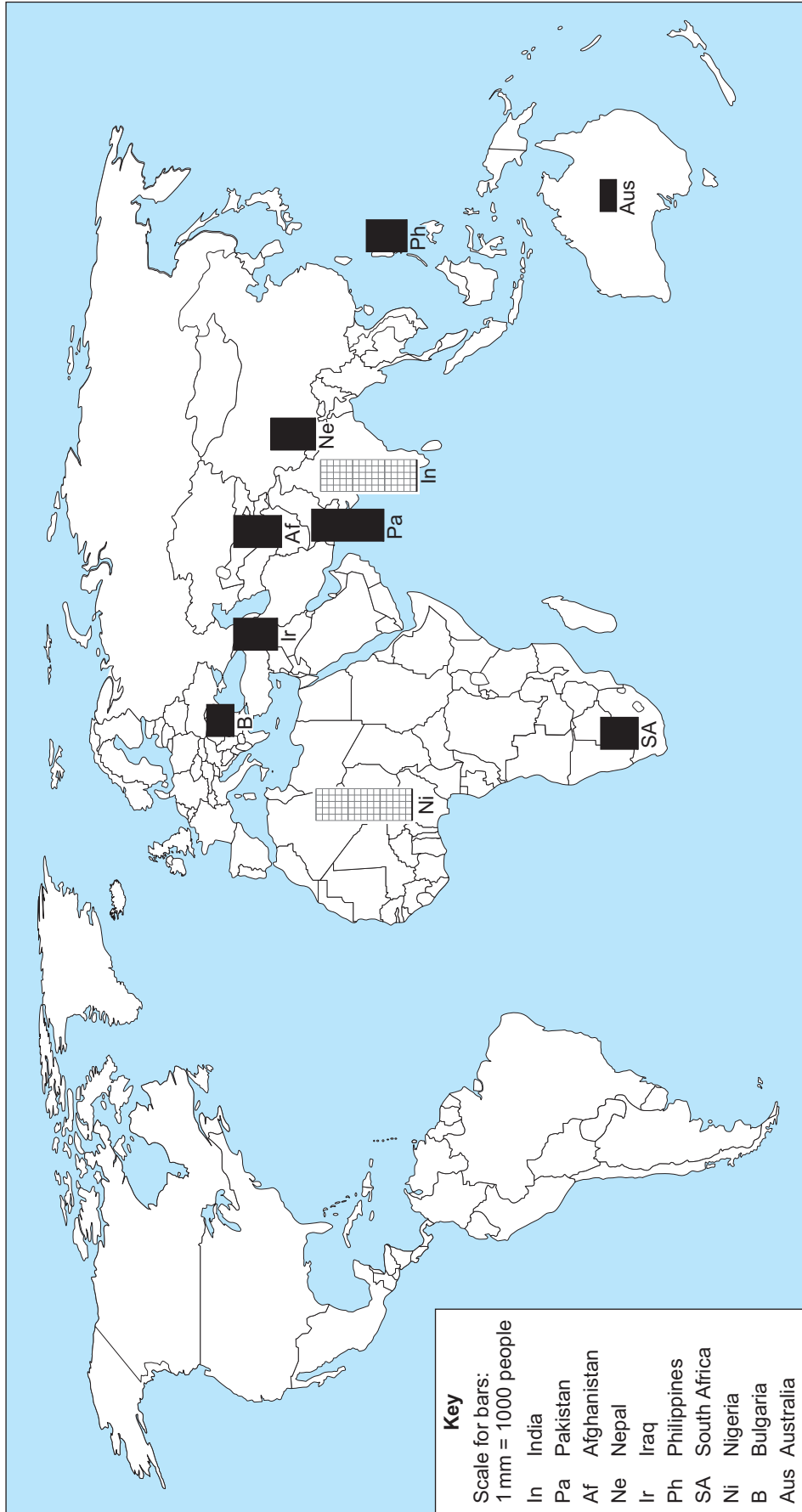
Question 1 continues on the next page

Turn over ▶

1 (b) The relationship between the number of migrants to the UK in 2006 and the distance between the UK and country of origin is being investigated.
Here is the null hypothesis:

'There is no relationship between the number of migrants to the UK and the distance between country of origin and the UK.'

1 (b) (i) A Spearman's Rank Correlation test has been started in **Figure 2** below.

Complete **Figure 2** and then use the data in the formula below the table to calculate the value of r_s to **three** decimal places. Show your working in the space opposite.

Figure 2

Country of origin	Distance from the UK (km)	Rank distance	Number of migrants who permanently settled in the UK in 2006	Rank number of migrants	Difference (d)	d^2
Afghanistan	5 500	7	7 410	3	4	16
Australia	15 200	1	2 695	10	–9	81
Bulgaria	2 248	10	4 270	9	1	1
India	7 436	4	12 030	1	3	9
Iraq	4 100		6 880	5		
Nepal	7 209	5	6 940	4	1	1
Nigeria	4 900		4 735	8		
Pakistan	6 140	6	11 235	2	4	16
Philippines	11 100	2	6 360	6	–4	16
South Africa	9 400	3	5 860	7	–4	16

Note: Rank order is descending with highest value ranked 1

$$\sum d^2 =$$

$$r_s = 1 - \left(\frac{6 \sum d^2}{n^3 - n} \right)$$

Where: $\sum d^2$ = sum of d^2

n = the number of paired data

$r_s =$

(6 marks)

1 (b) (ii) Using the critical values provided in **Figure 3**, assess the statistical significance of the calculated value of r_s.

Figure 3

Number of paired data in sample (*n*)	0.05 level of significance	0.01 level of significance
10	0.648	0.794

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(2 marks)

Question 1 continues on the next page

Turn over ▶

1 (c) Study **Figure 4** which shows immigration, emigration and net migration for the UK between 1991–2007.

Figure 4
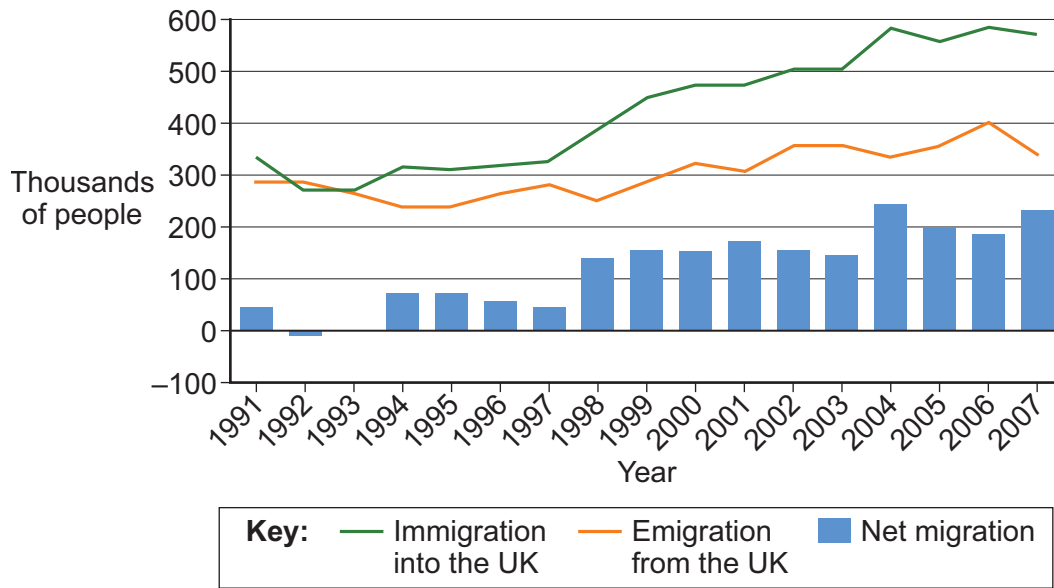
1 (c) (i) Describe the trends shown in **Figure 4**.

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(6 marks)

Extra space ....

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1 (c) (ii) Suggest implications of these trends for the UK.

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(5 marks)

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2 You have experienced geographical fieldwork as part of the course.
Use this experience to answer the following questions.

2 (a) (i) Describe the purpose of your fieldwork enquiry.

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(5 marks)

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2 (a) (ii) In the box provided below, draw an annotated sketch map of the location of your study area to show its basic characteristics.

(5 marks)

2 (b) Distinguish between primary and secondary sources of data used in your fieldwork enquiry.

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(3 marks)

Question 2 continues on the next page

Turn over ▶

2 (c) With reference to **one** technique you chose to present data in your enquiry, justify the choice of this technique.

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(6 marks)

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2 (d)   Explain how your fieldwork enquiry could have been improved.

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(6 marks)

Extra space ....

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END OF QUESTIONS

There are no questions printed on this page

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ANSWER IN THE SPACES PROVIDED