

GEOGRAPHY

Paper 1

0460/01 May/June 2007 1 hour 45 minutes

Additional Materials:

Answer Booklet/Paper Ruler

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet. Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer three questions.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer. The Insert contains Fig. 3 for Question 2, Photographs A, B and C for Question 3 and Photograph D for Question 4.

At the end of the examination, fasten all your work securely together. The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 14 printed pages, 2 blank pages and 1 Insert.



[Turn over

BLANK PAGE

1 (a) Study Fig. 1, a map which shows birth and death rates in different parts of the world in 2005.





- (i) What is meant by 'death rate'? [1]
- (ii) Identify:
 - A the area with the highest rate of natural population increase,
 - **B** an area of natural population decline.
- (iii) Suggest reasons why:
 - A there are higher death rates in Western Europe and North America than in Latin America and the Caribbean,
 [3]
 - **B** there are higher birth rates in Central and Southern Africa than in East Asia. [4]

[2]

(b) Study Figs 2A and 2B, population pyramids for Norway in 2000 and 2025 (projected).



Population (thousands)

Fig. 2A





Population (thousands)

Fig. 2B

- (i) What evidence in the population pyramids suggests that Norway has an ageing population? Support your answer with figures. [3]
- (ii) Describe the likely effects of an ageing population in an MEDC such as Norway. [5]
- (c) Overpopulation occurs when there are too many people living in an area for the resources which are available.

What problems are caused by overpopulation? You should refer to a country or area which you have studied. [7]

- 2 (a) Study Fig. 3 (Insert), a map of land use in the city of Kolkata, India.
 - (i) What is meant by 'residential land use'? [1]
 (ii) Briefly describe the location of the industrial areas in Kolkata. [2]
 (iii) Suggest reasons for the location of the industrial areas in Kolkata. [3]

 - **(b)** Study Fig. 4, which shows the growth of the population of Kolkata.



Fig. 4

- (i) What does Fig. 4 show about changes in the population of Kolkata between 1950 and 2005? Support your answer with dates and figures. [3]
- (ii) It is estimated that over 25% of the population of Kolkata lives in slums (squatter settlements). Suggest reasons for this.

(iii) Read the extracts below, which describe two methods by which the authorities of Kolkata have dealt with slum housing.

Method A

On 15 December 2003, 75 000 people along the canal-side slums at the Bagbazar and Cossipore areas of Kolkata were forcibly evicted. The West Bengal Government and the Kolkata Municipal Corporation did not warn the residents about the eviction, or re-house them. The operations were conducted while the men were out of the community working and only the women and children were left to face the heavily armed policemen.

Method B

The Kolkata Metropolitan Development Authority (KMDA) carried out improvements within slum settlements in Kolkata. These included:

- A water tap connection for every 100 persons;
- A latrine (toilet) for every 25 persons;
- Surface drainage;
- Paving of roads and pathways along with security lighting;
- Rubbish bins.

Which method, A or B, do you think is more likely to improve the quality of life in Kolkata? Give reasons for your answer. [5]

(c) International migration is the movement of people from one country to another.

Choose any example of international migration and name the countries between which people moved. Explain why many people made the decision to migrate. You should refer both to pull and to push factors. [7]

3 (a) Study Fig. 5, which shows where major earthquakes have taken place in California, USA.





- (i) How many earthquakes took place on the San Andreas Fault? [1]
- San Francisco was affected by an earthquake in 1989. (ii)

0

km

What was the distance and direction of this earthquake from San Francisco? [2]

(iii) Explain briefly why earthquakes take place on or close to major faults, such as the San Andreas Fault. [3]

1979

Mexico

- (b) San Francisco is still at risk from earthquakes. Study Photographs A, B and C (Insert), which were taken in San Francisco.
 - (i) Suggest three likely impacts of a major earthquake on the areas shown in the photographs. [3]
 - (ii) The Transamerica Pyramid is marked by an 'X' on Photograph C. In the 1989 earthquake it shook for more than a minute but the building was undamaged and no one was seriously injured.

What measures can be taken to protect people from earthquakes? [4]

- (iii) Explain why many people continue to live in areas at risk from natural hazards. [5]
- (c) In many parts of the world the natural environment presents hazards to people.

Choose an example of **one** of the following:

- a volcanic eruption
- a tropical storm
- a drought

For a named area, describe the short-term and long-term effects of the example which you have chosen on people living in the area. [7]

4 (a) Study Photograph D (Insert), which is an aerial photograph of the area around the River Cuckmere in southern England.

(i)	How wide is the flood plain in the area shown?	[1]
-----	--	-----

- (ii) Which two river features are labelled A and B on Photograph D? [2]
- (iii) How can you tell that the course of the River Cuckmere has been changed? Suggest why it has been changed. [3]
- (iv) Explain how a river like the Cuckmere transports its load.
- (b) Study Fig. 6A, which shows the delta of the River Nile and Fig. 6B, which shows the delta of the River Mississippi.



Fig. 6A

[4]



Fig. 6B

- (i) Describe three differences between the deltas of the rivers Nile and Mississippi. [3]
- (ii) Explain how and why a delta is formed. You may refer to an example which you have studied and include labelled diagrams. [5]
- (c) Flooding occurs on the flood plains and deltas of some rivers.

For a river which you have studied, explain what has been done to reduce flooding. [7]

5 (a) Study Fig. 7A, which shows the percentage of the population employed in manufacturing industry in selected countries and Fig. 7B, which shows some of the impacts of closure of industries.



Fig. 7A



Fig. 7B

- (i) What percentage of the population of Thailand was employed in manufacturing industry in 2005? [1]
- (ii) Identify the country:
 - A with the lowest percentage employed in manufacturing in 2005,
 - **B** which had a higher percentage employed in manufacturing industry in 1991 than it did in either 1961 or 2005. [2]
- (iii) Suggest reasons for the decrease in employment in manufacturing industry in MEDCs such as the UK, USA and France. [3]
- (iv) With the help of Fig. 7B, explain why the closure of an industry may have a serious effect on the local community. [4]
- (b) Study Fig. 8, which shows an industrial system.





- (i) What is meant by:
 - A raw materials,
 - **B** processes,
 - **C** outputs?

- [3]
- (ii) Name **one** type of manufacturing or processing industry which you have studied. Use the ideas in Fig. 8 to describe the main features of this industrial system. [5]
- (c) For a named country or area which you have studied, explain why high technology industries were located there. [7]





- (i) How many hotel rooms were there in Havana in 1990?
- [1]

- (ii) Identify the resort which:
 - A had the largest number of hotel rooms in 2000,
 - **B** did not have any hotels in 1990 but by 2000 was an important tourist centre. [2]
- (iii) Suggest three problems which tourism could cause to people who live along the northern coast of Cuba.
 [3]
- (iv) How might the growth of tourism be likely to improve the lives of people who live in LEDCs such as Cuba? [4]

(a) Study Fig. 9, which shows the number of hotel rooms in the main tourist resorts in Cuba, an

6

CORAL REEFS THREATENED BY TOURISM

PLANS ANNOUNCED TO RECLAIM COASTAL WETLANDS FOR RUNWAY EXTENSION TO INTERNATIONAL AIRPORT

100 ROOM RESORT AND CASINO TO OPEN IN SANDY BAY

Fig. 10

- (i) Explain three different ways in which the tourist developments described in the headlines could damage the natural environment. [3]
- (ii) Explain how tourism on the island could be developed in a sustainable way. [5]
- (c) Human activities often pose a threat to the natural environment.

These include economic activities such as:

- mining and quarrying
- agriculture
- transport
- providing energy

Choose **one** of the activities from the list above and name an area where the environment is at risk from this activity. Explain how it has affected the natural environment of your chosen area. [7]

BLANK PAGE

16

Copyright Acknowledgements:

 Question 1
 Fig. 1 © UN Population Reference Bureau.

 Question 1
 Fig. 2A & Fig. 2B © http://www.census.gov/cgi-bin/ipc/idbpyrs.pl?cty=NO&out=s&ymax=250

 Photograph A
 S. Sibley © UCLES.

 Photograph C
 S. Sibley © UCLES.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.