## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

## GEOGRAPHY

0460/02

Paper 2
October/November 2005

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Additional Materials: Answer Booklet/Paper, Ruler (cm:mm) Protractor Set square
1:25000 Survey Map Extract is enclosed with this question paper.
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1 hour 30 minutes

## 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 on both sides of the paper.
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 all questions.
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.
Insert 1 contains Fig. 2 for Question 2, Fig. 3 and Table 1 for Question 3 and Fig. 6 for Question 5. Insert 2 contains Photograph A for Question 4.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

1 Study the map extract provided, which is part of the island of Mauritius on the scale 1:25000 and answer the following questions.
(a) (i) What type of building is found at grid reference 909928 ?
(ii) Give the six figure grid reference of the prison situated along the northern coast near Petit Verger.
(b) (i) In which direction does the water flow out of La Ferme Reservoir?
(ii) What type of road is Rivière Noire Road which runs from Petite Rivière to Bambous? [1]
(c) State three types of agriculture shown on the map.
(d) Look at the Simonet Road which runs between the road junction at 882989 and the road junction at 896973.
(i) In which direction does the road run from grid reference 882989? Give your answer as a bearing from grid north.
(ii) The height of the road at grid reference 882989 is 30 metres and at reference 896973 it is 110 metres. Calculate the average gradient along the road.
(e) State the services provided in the settlement of Petite Rivière.
(f) Describe
(i) the relief of grid square 9193,
(ii) the physical features of the coast north of grid line 97.

2 (a) Two weather instruments, $\mathbf{A}$ and $\mathbf{B}$ are shown in Fig. 1.


Fig. 1
(i) Write down $\mathbf{A}$ and $\mathbf{B}$ as a list and name each of the weather instruments.
(ii) For what purpose is instrument $\mathbf{B}$ used at a weather station?
(iii) State the reading shown by the instrument in diagram $\mathbf{A}$.
(b) Fig. 2 (Insert 1) shows information about winds recorded at a weather station during one month.
(i) On Fig. 2 name the type of diagram used to give information about wind direction,
(ii) Complete the diagram Fig. 2 using the information provided in the table.
(iii) On Fig. 2 state the direction of the prevailing wind.

3 Study Fig. 3 (Insert 1) which shows the employment structure of selected countries.
(a) (i) Which of the countries shown on the graph (Fig. 3) has the smallest percentage employed in the tertiary industry?
(ii) Complete Table 1 (Insert 1) using information from Fig. 3.
(b) On the graph mark by a dot and name Korea which has $30 \%$ of the working population in primary industry, $23 \%$ in secondary industry and $47 \%$ in the tertiary industry.
(c) Compare the employment structure of India with that of the United Kingdom.

4 (a) Photograph A (Insert 2) shows part of the Fish River valley in Namibia. Describe the physical features of the valley shown in the photograph.
(b) Study Fig. 4 which shows a feature found in the lower course of a river.


Fig. 4
(i) Name the river feature found at $\mathbf{A}$ and that found at $\mathbf{B}$ on the diagram.
(ii) Describe how stream velocity varies in the river cross section labelled A-B.

5 Study the map (Fig. 5) which shows land use in Bogota, the capital city of Colombia, South America.


Fig. 5
(a) Why has the city not expanded towards the east?
(b) Describe the location of each of the following:
(i) squatter settlements,
(ii) other commercial centres.
(c) People living in the squatter settlements moved there from rural areas for a variety of reasons.
(i) Complete Fig. 6 (Insert 1) using the following information:

| moved for economic reasons | $38 \%$ |
| :--- | :--- |
| moved to be with relatives | $26 \%$ |
| moved to attend education/medical facilities | $14 \%$ |
| moved for other reasons | $22 \%$ |

Use the key provided to complete the graph.
(ii) In the space provided below Fig. 6, suggest one other reason why people moved from the rural areas to the city.

6 (a) Study the map (Fig. 7) which shows the location of some of the world's remaining rain forests and some of the threats to them.

The main threats to some major areas of rain forest


Fig. 7
(i) What location is common to all the rain forests?
(ii) What are the major threats, shown on Fig. 7, to the Amazon rain forest?
(iii) Name a country, shown on Fig. 7, where timber production (logging) is a threat to the rain forest.
(b) The pie chart (Fig. 8) shows the distribution of the world's major areas of remaining rain forest after much has been destroyed.

## The distribution of the world's major areas of remaining rain forest



Fig. 8
What percentage of the world's remaining rain forest is found
(i) in Africa,
(ii) in Brazil?
(c) Name one major threat, not shown on the map (Fig. 7), to the world's rain forest.

7 Study Fig. 9 which shows a number of different sources of energy $\mathbf{T}$ to $\mathbf{Z}$.


T


U


V


W


X


Y


Fig. 9
(a) Write down the letters of two diagrams which show renewable sources of energy and name the types of energy shown.
(b) State one of the diagrams which shows energy produced from a fossil fuel and name the type of fuel.
(c) Name one renewable energy source not shown in diagrams $\mathbf{T}$ to $\mathbf{Z}$.
(d) Why does the type of mining used in Fig. 10A have little harmful effect on the environment when mining has finished?


Fig. 10A
(e) State two problems for the environment, shown in Fig. 10B, which are the result of mining operations.


Fig. 10B

Key: |  | Coal seam |
| ---: | :--- |
|  | Sandstone |
|  | $=-3$ |
|  | Shale |

## Copyright Acknowledgements:

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Question 7 Figs 10A and B; © Norman Pantling and Geoff Bucktrout; Understanding Geography; Schofield \& Sims Ltd.
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