

**International General Certificate of Secondary Education
CAMBRIDGE INTERNATIONAL EXAMINATIONS**

GEOGRAPHY

PAPER 3

0460/3

MAY/JUNE SESSION 2002

1 hour 30 minutes

Additional materials:

Answer paper

Protractor

Ruler

Set square

1:50 000 survey map is enclosed with this question paper.

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **all** questions.

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part question.

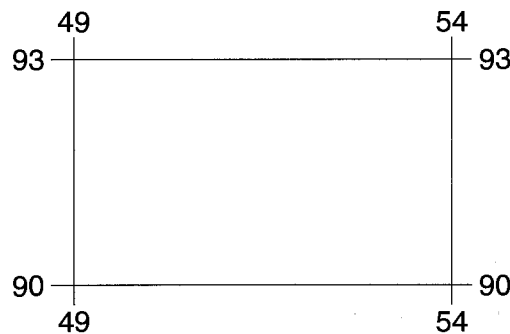
Sketch-maps and diagrams should be drawn whenever they serve to illustrate an answer.

The insert contains the diagrams referred to in the question paper.

This question paper consists of 8 printed pages, an insert and a survey map.

1 Study the map extract of part of the island of Jamaica (scale 1:50 000) and answer the following questions.

- (a) (i) Give the six figure grid reference of the police station at Ironshore on the northern coast of the map. [1]
- (ii) What type of public building is found at grid reference 579939? [1]
- (iii) Measure the distance along the railway line from the railway station (terminus) in Montego Bay at grid reference 523019 to the point where it crosses the Class C road at grid reference 527984. Give your answer in metres. [1]
- (iv) Describe the land use, other than roads, tracks, railways and buildings, in the south-west of the map in the area bounded by Easting 54 and Northing 93. [4]



(b) *Using map evidence only*

- (i) give **two** reasons why developers built an hotel at grid reference 543063, [2]
- (ii) describe the advantages of the site of Sangster International Airport. [3]
- (c) Name **four** physical features of the coastline (including natural vegetation) south of the town of Montego Bay. [4]

(d) **EITHER**

State the services provided in the built up area of Providence (Square 5405).

OR

Describe the facilities in the area of the map for recreation and tourism. [4]

2 Study Fig. 1 (opposite) which shows three types of power station.

- (a) (i) Write down **A** and **B** as a list and name the types of power station shown in Figs 1A and 1B. [1]
- (ii) Using the diagram to help you, explain how the power station, shown in Fig. 1A, produces electricity. [3]
- (b) For the power station shown in Fig. 1C:
- (i) state what is meant by the term 'head of water' and give the height of the head of water at that power station in metres; [2]
- (ii) write down **W**, **X**, **Y** and **Z** as a list and, *for each*, name the feature labelled on Fig. 1C. [3]

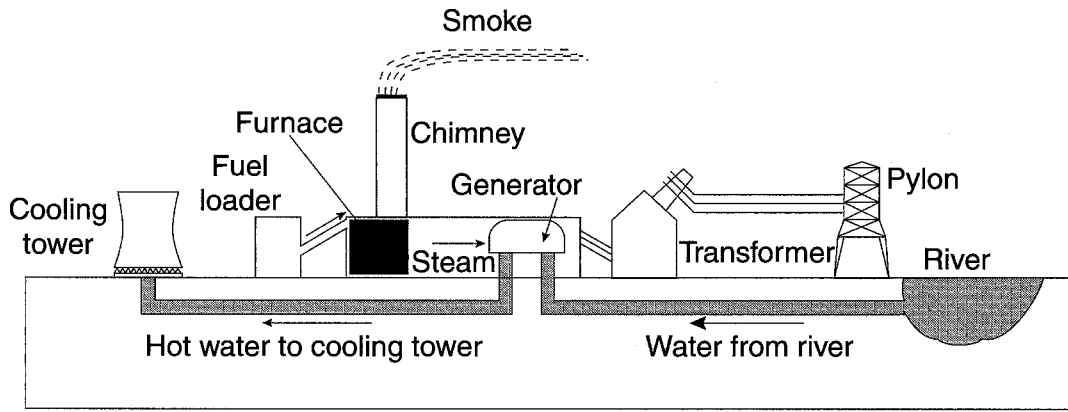


Fig. 1A

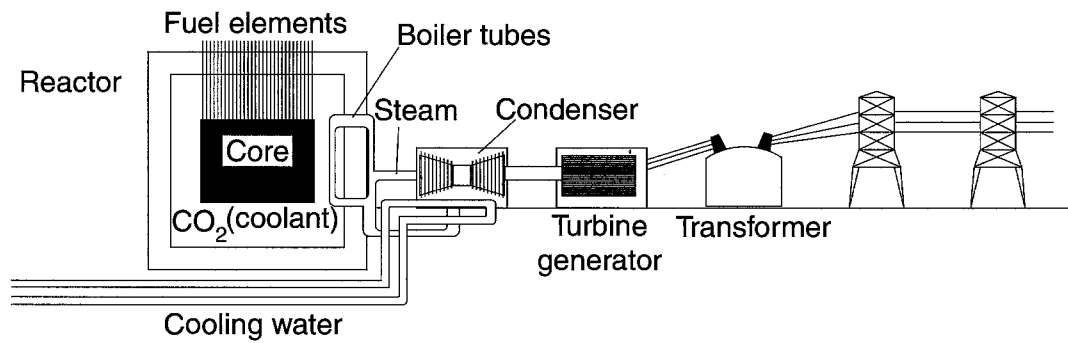


Fig. 1B

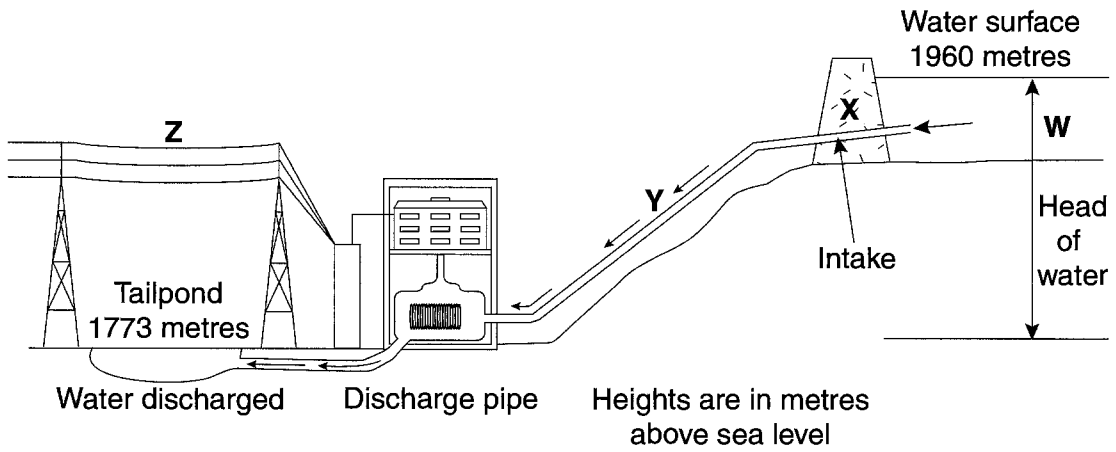


Fig. 1C

3 Study Fig. 2 (Insert) which shows the long profile of a river.

Complete Table 1 (Insert) to show

- (i) the main river process, [2]
- (ii) the shape of the valley, [2]
- (iii) two features (landforms), [2]

which you would expect to find in the different parts of the river shown.

4 Study Fig. 3 which shows a rural settlement pattern.

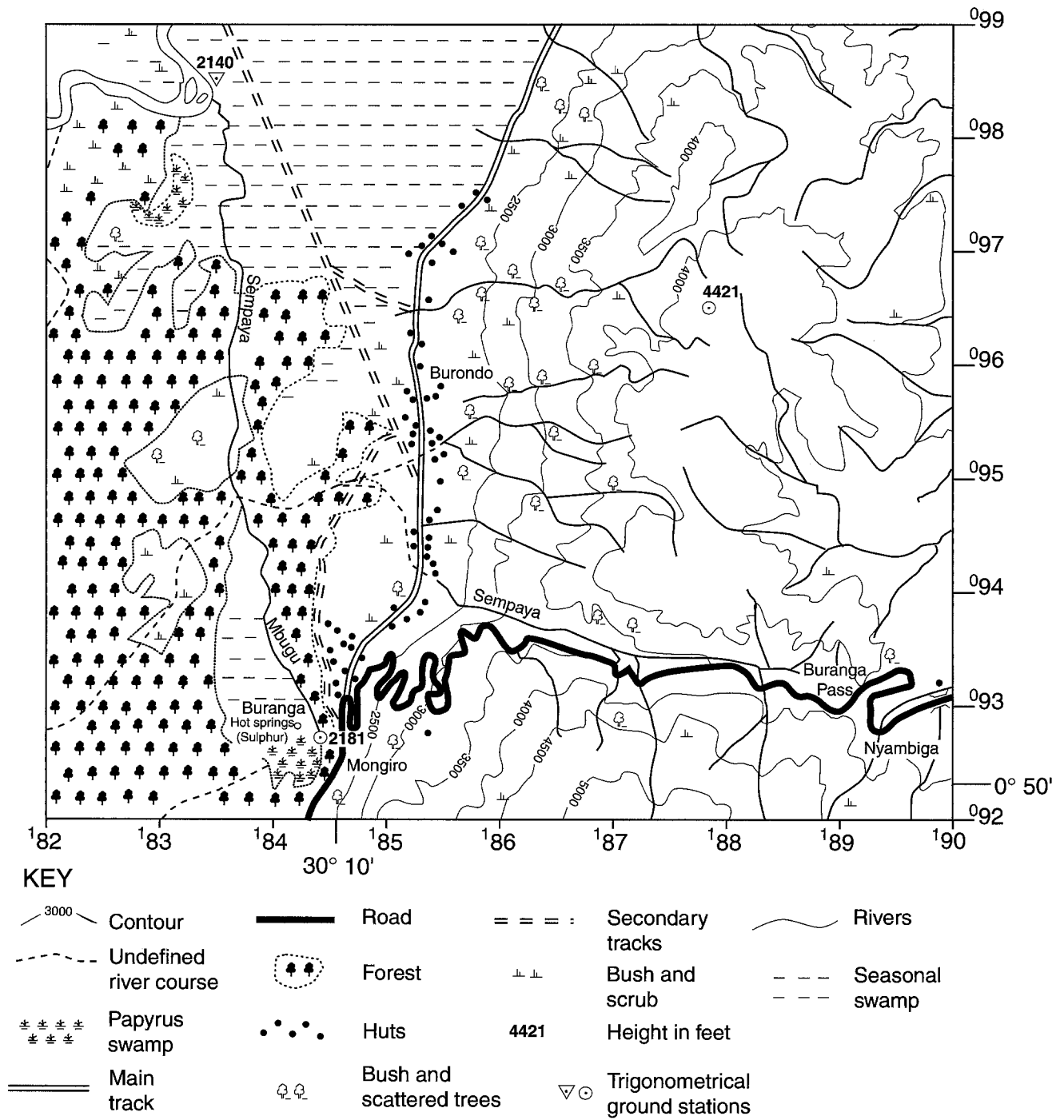


Fig. 3

- (a) What is the height of the trigonometrical ground station marked ∇ in the north-west corner of the map? [1]
- (b) (i) Describe the location of the huts. [3]
- (ii) Suggest reasons why much of the area has no settlement. [3]

5 Fig. 4 gives details of recordings taken at a weather station from 1 August to 14 August.

Using the information in Fig. 4:

- (a) state the diurnal (daily) range of temperature on 11 August, [1]
- (b) describe how, during the period 1 August to 14 August, precipitation may be related to each of the following,
- I wind direction, [2]
 - II pressure, [2]
 - III daily range of temperature. [2]

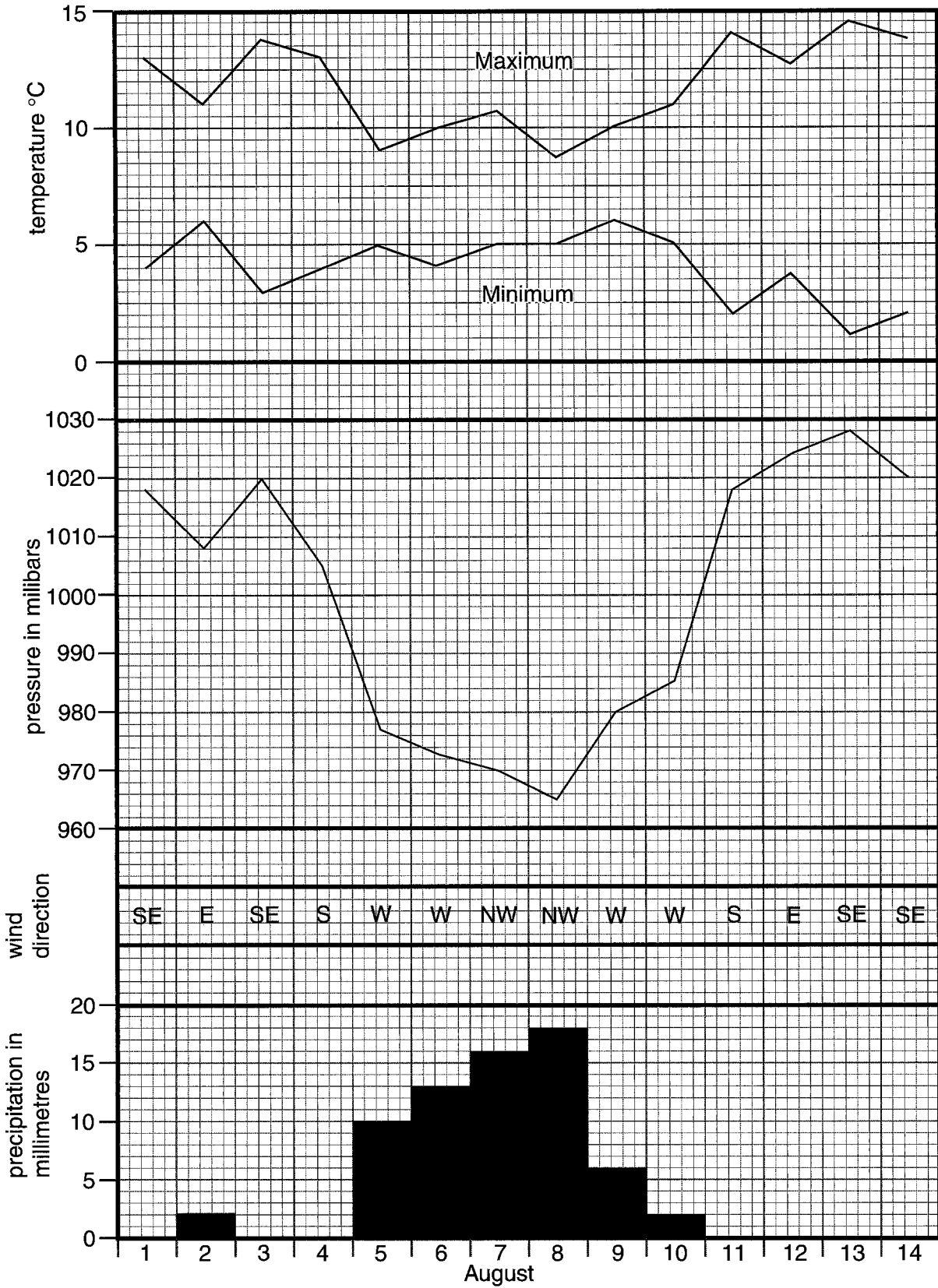


Fig.4

6 The graph, Fig. 5 (Insert), gives information about the percentage (%) of the working population in primary, secondary and tertiary industries in selected countries.

(a) Look at the position of Peru on Fig. 5. The dot shows that 40% of Peru's working population are employed in primary industry.

State the percentage employed in tertiary industry.

[1]

(b) The figures in Table 2 below show the percentages of the working population in Brazil in each of the three types of industry.

Table 2

Type of industry	Percentage employed
Primary	30
Secondary	22
Tertiary	48

On Fig. 5, mark clearly by a small dot, labelled with the letter **C**, the position of Brazil.

[1]

(c) Look at the information on Fig. 5 for developed and developing countries. Describe the differences between developed and developing countries in the percentages of the working populations in the three types of industry.

[2]

7 (a) Fig. 6 (Insert) is a graph of birth rates plotted against death rates for selected countries in 1996.

(i) Name the country with the highest death rate and state its death rate per 1000.

[1]

(ii) What is the rate of natural increase in population in China?

[1]

(iii) On Fig. 6, using the information given in Fig. 7 (Insert), plot the birth rate against the death rate for India in 1996. Use a small dot, labelled India, to show the position.

[1]

(b) Using Fig. 7 (Insert), describe the changes in the birth rate in India between 1906 and 1996.

[4]