

International General Certificate of Secondary Education
CAMBRIDGE INTERNATIONAL EXAMINATIONS

GEOGRAPHY
PAPER 3

0460/3

OCTOBER/NOVEMBER 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 10 printed pages, 2 blank pages, an insert and a survey map.

- 1 Study the map extract of Zvishavane (Zimbabwe) and answer the following questions. The scale of the map is 1:50 000.
- (a) (i) Give the six figure grid reference of the bridge carrying the gravel or earth road over the River Shavi near the centre of the map. [1]
- (ii) Measure the distance between the trigonometrical station on Poromora Hill (973498) and the summit of Samanye Hill (004469). Give your answer in metres. [1]
- (iii) State the compass direction of Samanye Hill *from* Poromora Hill. [1]
- (b) Study the town of Zvishavane and *using map evidence only*:
- (i) state **two** different recreational facilities in the town, [1]
- (ii) identify the feature which has mainly influenced the site and layout of the town. [1]
- (c) State **two** ways in which the railway, in the south-west of the map, is kept as level as possible. [1]
- (d) The river Shavi passes over several weirs. Fig. 1 shows two of these weirs which are situated approximately 4550 metres apart. The height of weir X is 875 metres above mean sea level and that of weir Y is 850 metres. Calculate and state the average gradient of the River Shavi between these two weirs. Show all your working. [2]

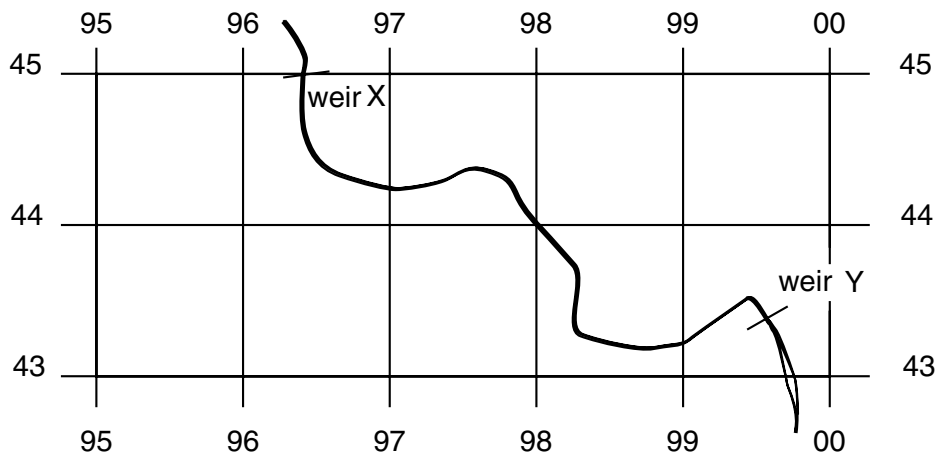
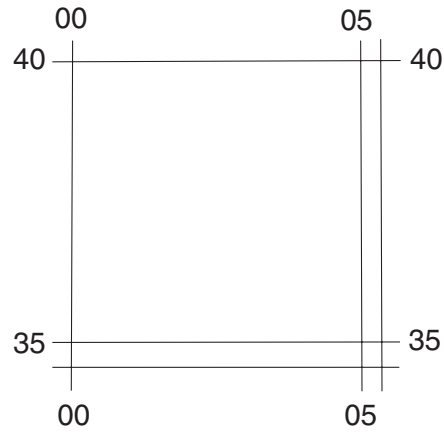


Fig. 1

- (e) State the map evidence which suggests that Zvishavane is a mining and industrial town. [4]

- (f) Describe the physical features of the channel of the River Shavi including gradient and direction of flow. [4]
- (g) Describe the distribution of settlement in the south-east corner of the map in the area bounded by Easting 00 and Northing 40. In your answer you should give details of where it is and where it is not found. [4]



2 Fig. 2 shows the population of two countries, **A** and **B**, by age and sex.

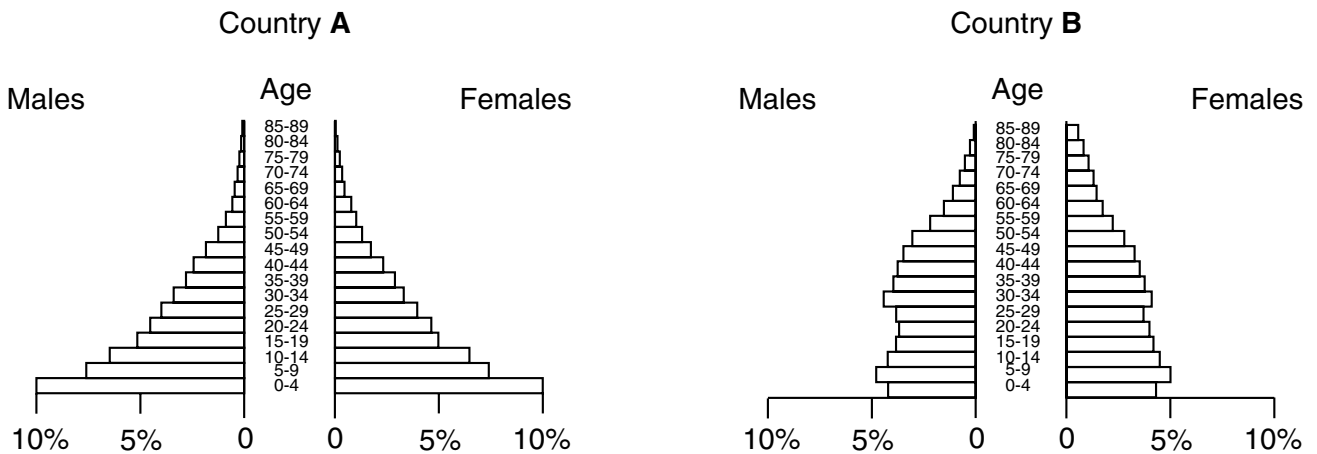


Fig. 2

- (a) What percentage of the female population in country **A** is aged 15 to 19 years? [1]
- (b) Which of the two countries, **A** or **B**, has the higher death rate? [1]
- (c) State which country's population is increasing at the faster rate and give **one** piece of evidence, shown on Fig. 2, which supports your answer. [2]
- (d) Which age group in country **B** contains the highest proportion of the country's population? [1]
- (e) Which of the countries, **A** or **B**, is a developing country? [1]

3 Fig. 3 (Insert) is a field sketch of part of a river's course.

- (a) What name is used to describe the large bends on this river? [1]
- (b) State the river process which is taking place at **P** and give **one** reason why this process takes place at **P**. [2]
- (c) State **two** pieces of evidence, shown on the field sketch, which suggest that the process you have named in (b) is taking place. [2]
- (d) In the space provided (Fig. 4, Insert), draw a simple section from **P** to **Q** to show the shape of the river's channel. On the section label both the river cliff and the slip off slope. [2]

4 Study Photograph **A** of an agricultural scene in Africa.



- (a) Name the season of the year when the photograph was taken. [1]
- (b) Name the system of agriculture shown in the photograph. [1]
- (c) Describe the main features of the farm area shown in the photograph. [4]

- 5 (a) Table 1 below shows the employment structure of three towns **A**, **B** and **C**.

Table 1

Town	A	B	C
Primary Industry	4%	5%	54%
Secondary Industry	56%	14%	9%
Tertiary Industry	40%	81%	37%

Write down **A**, **B**, **C** as a list and state which of the towns is a holiday resort, which is a town engaged in manufacturing industry and which is a mining town. [2]

- (b) Study the pie charts in Fig. 5 (Insert).

(i) What percentage of the work force is employed in service industries in country **A**? [1]

(ii) Complete the pie graph for country **B** using the following figures and the key provided.

Agriculture 75% employed,

Manufacturing 10% employed,

Services 15% employed. [2]

(iii) Which of the two pie charts, **A** or **B**, shows the employment structure of a developed country? [1]

(iv) How does the employment structure of country **A** differ from that of country **B**? [2]

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6 (a) Fig. 6 shows an instrument used at a weather station to record temperature.

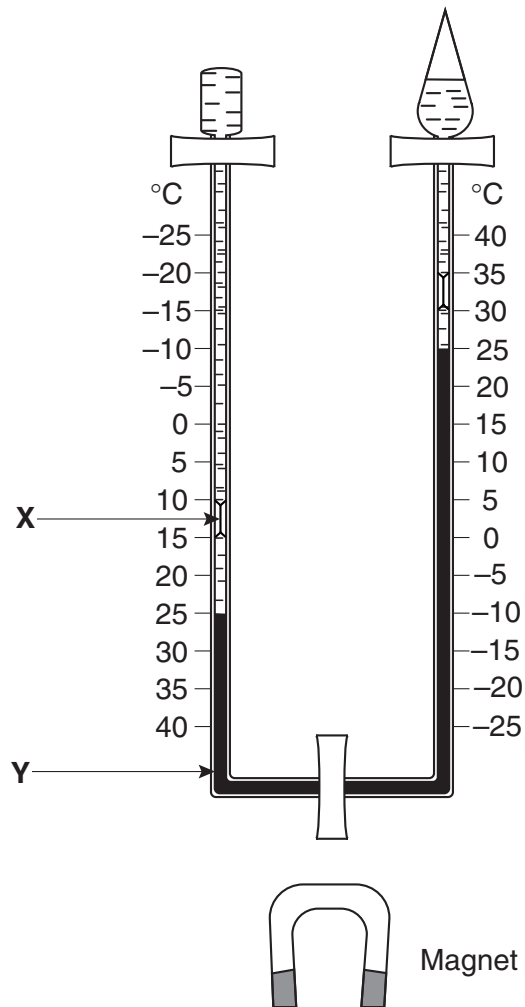


Fig. 6

- (i) Write down **X** and **Y** as a list and identify the features of the instrument labelled on Fig. 6. [1]
- (ii) State the minimum temperature which was recorded by this instrument. [1]
- (iii) What is the purpose of the magnet? [1]

(b) Fig. 7 is a graph of some readings taken by the instrument shown in Fig. 6.

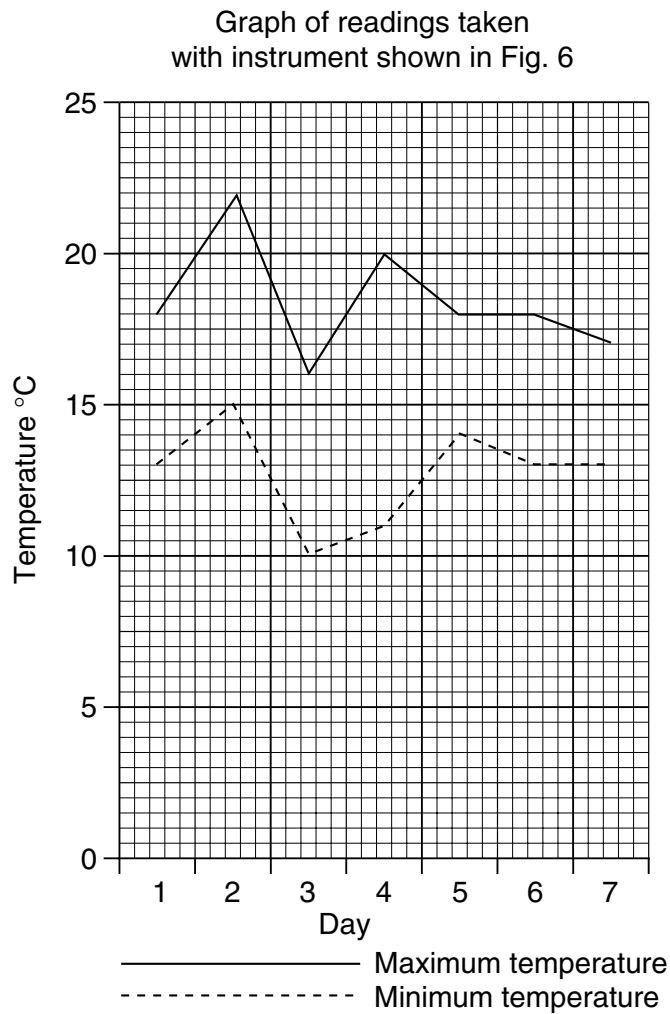


Fig. 7

- (i) State on which day the largest diurnal (daily) range of temperature occurred. [1]
- (ii) State the diurnal range of temperature for the day you have selected in (b)(i). [1]
- (iii) Describe how a weather observer would obtain the information from the instrument to be recorded on the graph shown in Fig. 7. [2]

7 Study Fig. 8 which is a plan of part of a capital city in Africa.

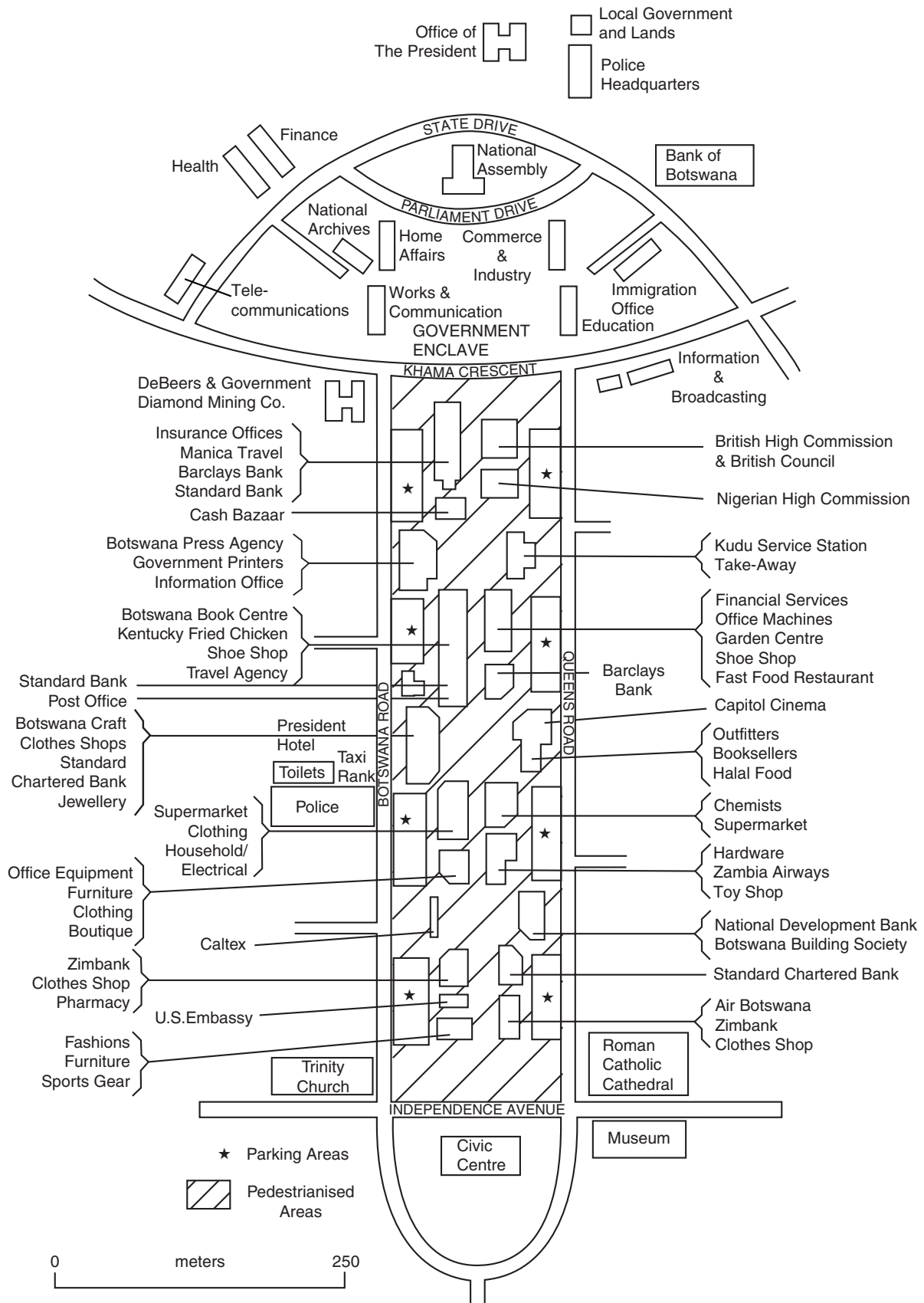


Fig. 8

- (a) *Using evidence from Fig. 8 only*, describe what has been done to solve the problem of traffic congestion in this part of the city. [2]
- (b) Describe, in your own words, the evidence which suggests that the area shown in the plan is the CBD of this city. [4]

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Copyright Acknowledgements:

Question 4. Agriculture scene in Africa. © Mr R F Sharpe

Question 7 Fig 8. Margaret Mackintosh. *Primary Geographer*. © Geographical Association.

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