

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

**GEOGRAPHY**

**0460/5**

PAPER 5 Alternative to Coursework

**OCTOBER/NOVEMBER SESSION 2002**

1 hour 45 minutes

Additional materials:

Answer paper  
Protractor  
Ruler

**TIME** 1 hour 45 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.

At the end of the examination, attach the insert to your answer papers.

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**This question paper consists of 3 printed pages, 1 blank page and an insert.**

- 1 Students collected weather data on 14 consecutive days in June at their school in the southern hemisphere. One aim was to investigate the link between rainfall and cloud cover to test the following hypothesis:

*'The greater the cloud cover the higher the rainfall'.*

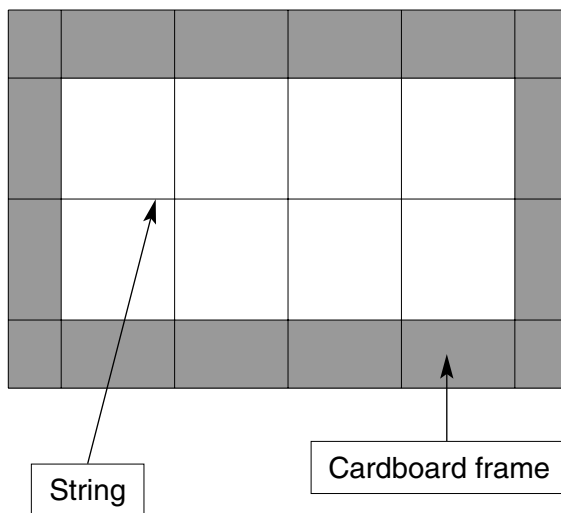
- (a) The students used a rain gauge to measure the rainfall.

State the ideal location for a rain gauge. Give reasons for your answer. [3]

- (b) The results of the investigation are shown in Table 1 (Insert).

Accurately complete the bar graph on Fig. 1 (Insert) to show the rainfall results. [2]

- (c) A cloud cover recorder was made and used following the instructions shown below.



Instructions to make and use a cloud cover recorder.

Join four strips of cardboard together to make a frame. Attach string with tape to divide the frame into eight equal sections.

Hold the frame close to the eye and look vertically up to the sky. Count the number of sections covered with cloud within the frame. Record this number as oktas (eighths). Repeat the measurement at the same time each day.

- (i) Why must the observer look vertically up to the sky? [1]
- (ii) Why must the recording be taken at the same time each day? [1]
- (iii) Using the information from Table 1, complete the cloud cover symbol on Fig. 1 (Insert) for 4th June. [1]
- (d) (i) Using data from Fig. 1, describe any relationship between cloud cover and rainfall. [4]
- (ii) Using your knowledge of cloud types and the formation of rain, explain why
- I total cloud cover produced differing amounts of rain,
  - II low cloud cover (0 – 4 oktas) produced no rain. [6]
- (iii) Write a brief conclusion to the investigation. You should refer to the original aim and hypothesis. [2]
- (e) Additional weather observations were measured and recorded in Table 1.
- (i) Complete the line graph for maximum temperature on Fig. 1 (Insert). [4]
- (ii) Describe the pattern of maximum temperature change during the 14 days. [4]
- (f) State **two** sources of weather statistics that could support the fieldwork data. [2]

- 2 Students studied their local town to investigate the effect of tourism. It was decided to study buildings in the town to calculate the percentage often used by tourists. The buildings used by tourists in the town were recorded by groups of students. The results were combined to produce a land use map showing the buildings used by tourists in the town.
- (a) (i) Describe **three** possible advantages or disadvantages of completing fieldwork in groups. [3]
- (ii) Deciding on the use of a building can be difficult. Suggest **two** possible problems that the students found during the land use survey. [2]
- (b) Table 2 (Insert) shows the 24 buildings used by tourists recorded by the students. The results are shown on a pie chart (Fig. 3, Insert).
- (i) Describe how to calculate the number of degrees to draw each segment of a pie chart. [2]
- (ii) Complete the pie chart (Fig. 3) by drawing the segments to show the proportion of Banks, Hotels, the Market and Cafes/Restaurants. Use the correct symbol to label each segment. [3]
- (c) Study the land use map Fig. 2 (Insert).
- (i) Describe the distribution of tourist facilities in the town. [4]
- (ii) Suggest **two** reasons why some hotels are located away from other tourist buildings. [2]
- (iii) Some buildings used by tourists close for several months of the year. Give reasons for this and describe the effects of closure on the town. [4]
- (d) Study the results of the investigation. What conclusions may the students suggest about the effect of tourism on the land use of the town? [2]
- (e) A new hotel is to be built at location X. Suggest the possible advantages and disadvantages for the residents and the environment of this town. [8]

