Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

3489976719

GEOGRAPHY **0460/22**

Paper 2 **February/March 2017**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Protractor
Plain paper
Calculator

1:50 000 Survey Map Extract is enclosed with this Question Paper.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces provided.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.

Write your answer to each question in the space provided.
If additional space is required, you should use the lined pages at the end of the booklet. The question number(s) must be clearly shown.

Answer **all** questions.

The Insert contains Photograph A for Question 3 and Photographs B and C for Question 6.
The Survey Map Extract and the Insert are **not** required by the Examiner.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

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.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **15** printed pages, **1** blank page and **1** Insert.

DC (LK/FD) 126009/5

CAMBRIDGE International Examinations

[Turn over

1 Study the map extract for Ballyvaghan, Ireland. The scale is 1:50 000.

(a) The map has blue grid lines which make squares. What area of land does one grid square show? Tick **one** answer below.

	Tick (✓)
1 km^2	
10 km^2	
20 km^2	
50 km^2	
100 km^2	

[1]

(b) **(i)** Height above sea level is shown by contour lines. What is the difference in height between the contour lines on this map? Tick **one** answer below.

	Tick (✓)
1 m	
10 m	
20 m	
40 m	
100 m	

[1]

(ii) What does the green shading in grid square 2807 show?

.....[1]

(c) Fig. 1 shows some of the features in the east of the map extract. Study Fig. 1 and the map extract, and answer the questions below.

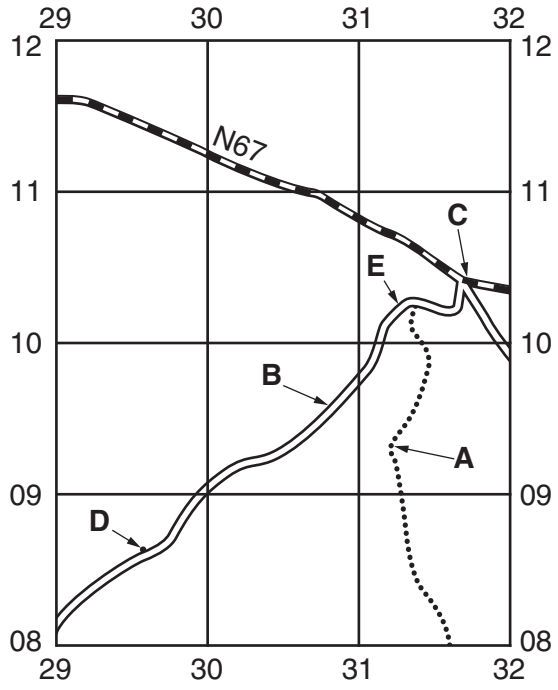

Fig. 1

(i) Identify feature **A**.

.....[1]

(ii) Identify the type of road at **B**.

.....[1]

(iii) Give the six-figure grid reference of the road junction at **C**.

.....[1]

(iv) Give the height above sea level of the spot height at **D**.

.....[1]

(v) Describe the gradient of the road:

between **D** and **E**;

.....[1]

between **E** and **C**.

.....[1]

[Turn over

(d) Fig. 2 shows the location of the coastal settlements at Ballyvaghan and Bealaclugga.

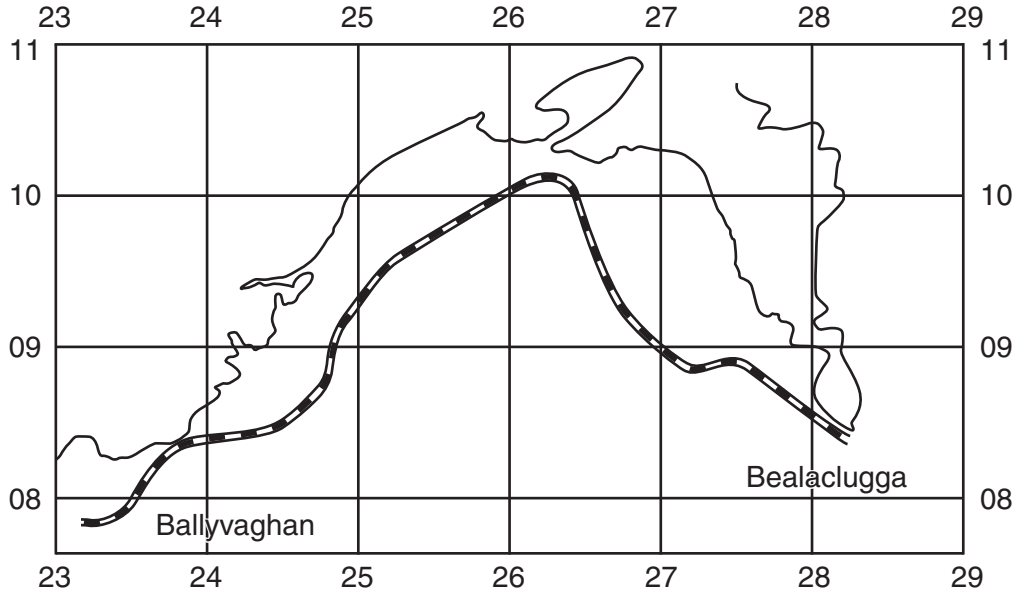

Fig. 2

(i) A person travels along the N67 road from the main road junction at Ballyvaghan to the road junction at Bealaclugga. How far does the person travel? Give your answer in metres.

..... metres [1]

(ii) How much further does the person travel along the N67 road than the straight line distance between the two points? Give your answer in metres.

..... metres [1]

(iii) Which of the following statements describes the directions that the person travels **from** Ballyvaghan **to** Bealaclugga? Tick **one** answer below.

	Tick (✓)
north east then south east	
north east then south west	
north west then south west	
north west then south east	
south east then north east	

[1]

(e) Fig. 3 is a cross section through the summit (top) of Moneen Mountain from 240077 to 290077.

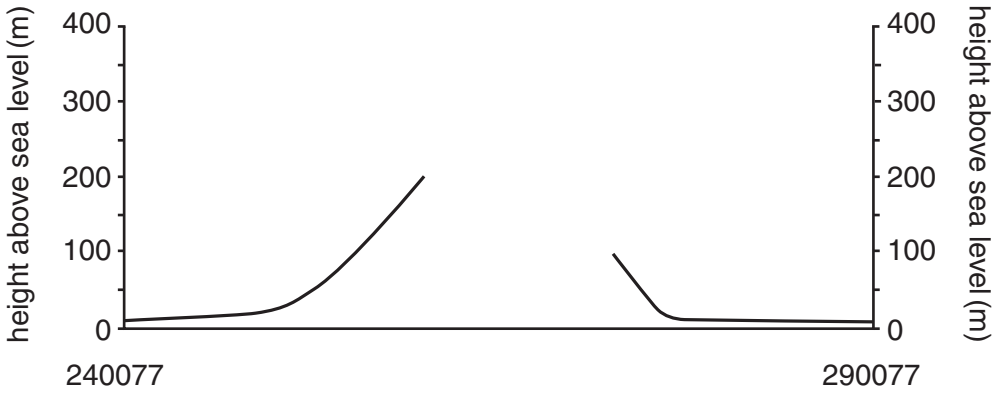

Fig. 3

(i) On Fig. 3, use a labelled arrow to show the position of the lake at Lough Luirk. [1]

(ii) Using the map, complete the cross section on Fig. 3. [2]

(f) Using map evidence, give reasons for the growth of the settlement at Ballyvaghan.

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.....[5]

[Total: 20 marks]

[Turn over

2 Study Fig. 4 and Table 1 (opposite). Fig. 4 shows the population density of the states of India in 2011. Table 1 (opposite) shows the states of India ranked in order of population density in 2011.

The states in Fig. 4 are numbered in the rank order of population density shown in Table 1.

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Fig. 4

(a) Describe the distribution of population shown on Fig. 4.

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.....[4]

(b) Table 1 shows how the population of the states has changed between the 2001 and 2011 censuses. The population change for the whole of India was +18%.

Table 1

State	Rank in 2011	% change since 2001	State	Rank in 2011	% change since 2001
Bihar	1	+25	Gujarat	15	+19
West Bengal	2	+14	Orissa	16	+14
Kerala	3	+5	Madhya Pradesh	17	+20
Uttar Pradesh	4	+20	Rajasthan	18	+22
Haryana	5	+20	Uttarakhand	19	+19
Tamil Nadu	6	+16	Chhattisgarh	20	+23
Punjab	7	+14	Meghalaya	21	+28
Jharkhand	8	+22	Jammu and Kashmir	22	+24
Assam	9	+17	Himachal Pradesh	23	+13
Goa	10	+8	Manipur	24	+18
Maharashtra	11	+16	Nagaland	25	–1
Tripura	12	+15	Sikkim	26	+13
Karnataka	13	+16	Mizoram	27	+24
Andhra Pradesh	14	+11	Arunachal Pradesh	28	+31

(i) Which state had the greatest percentage increase in population?

..... [1]

(ii) Which state had a decrease in population?

..... [1]

(c) Compared to the change for the whole of India of +18%, how has population changed in the states:

(i) in the south;

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.....[1]

(ii) in the north east?

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.....[1]

[Total: 8 marks]

[Turn over

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3 Study Photograph A (Insert), which shows a rural area in South Africa.

(a) Describe how relief has influenced the site of the settlement.

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.....[4]

(b) Describe the land use of the area surrounding the settlement.

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.....[3]

(c) What evidence in the photograph shows that the settlement has a water supply?

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.....[1]

[Total: 8 marks]

[Turn over

4 Study Fig. 5, which shows a student's field sketch of a coastal area.

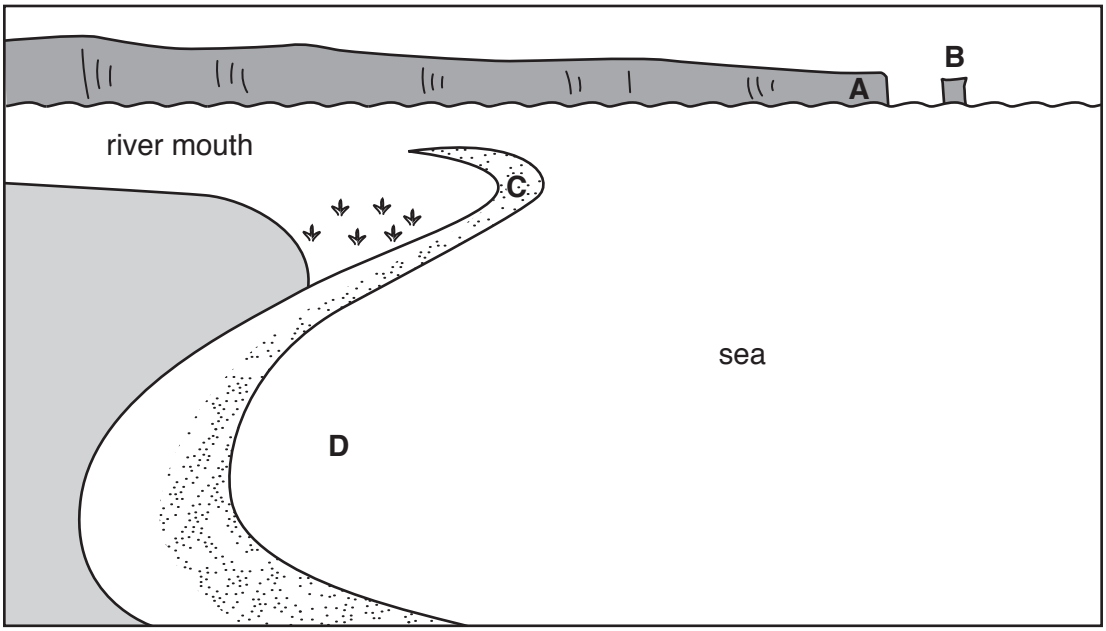

Fig. 5

(a) Identify landforms **A**, **B**, **C** and **D**. Choose your answers from the list below.

arch *bay* *cave* *spit* *dune* *headland* *reef* *stack*

A .....

B .....

C .....

D ..... [4]

(b) Fig. 6 shows a map of the same area.

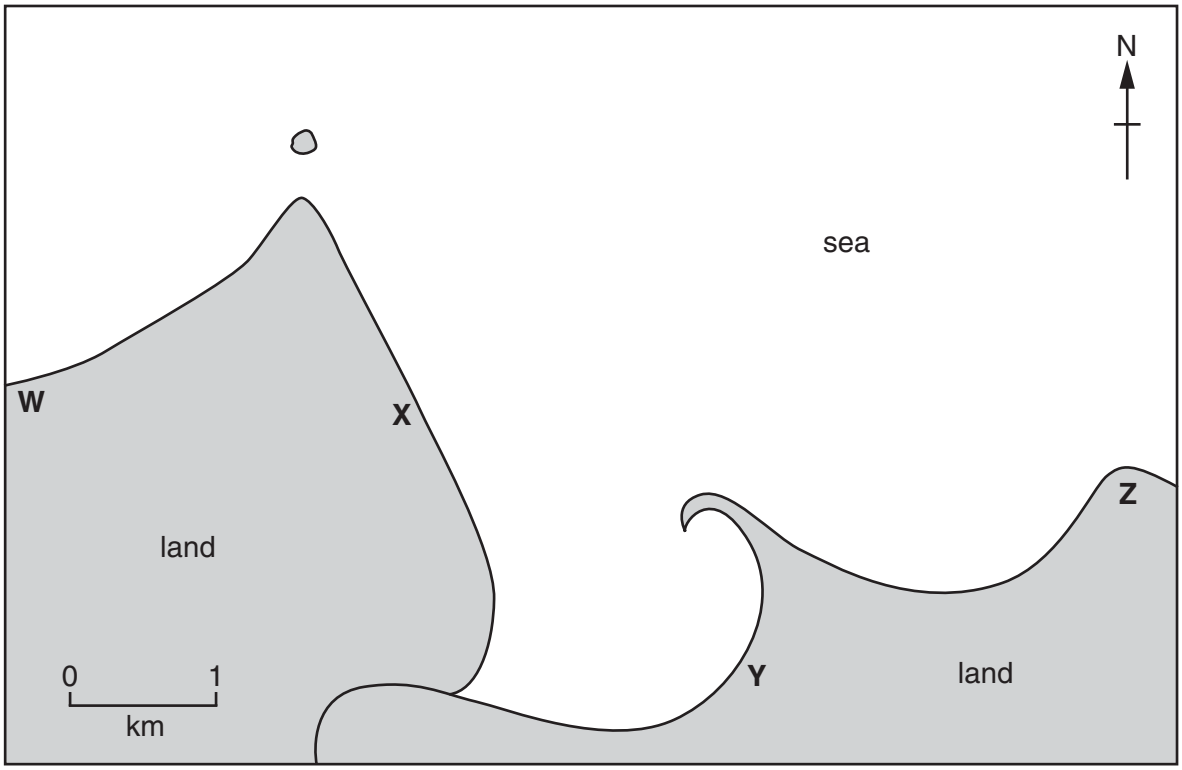

Fig. 6

Which **one** of points **W**, **X**, **Y** and **Z** on Fig. 6 shows the place from which the student drew the field sketch (Fig. 5)?

..... [1]

(c) Describe **three** conditions under which coral reefs develop.

1 .....

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2 .....

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3 .....

.....[3]

[Total: 8 marks]

[Turn over

5 Figs. 7 and 8 show climate information of two places with a hot desert climate.

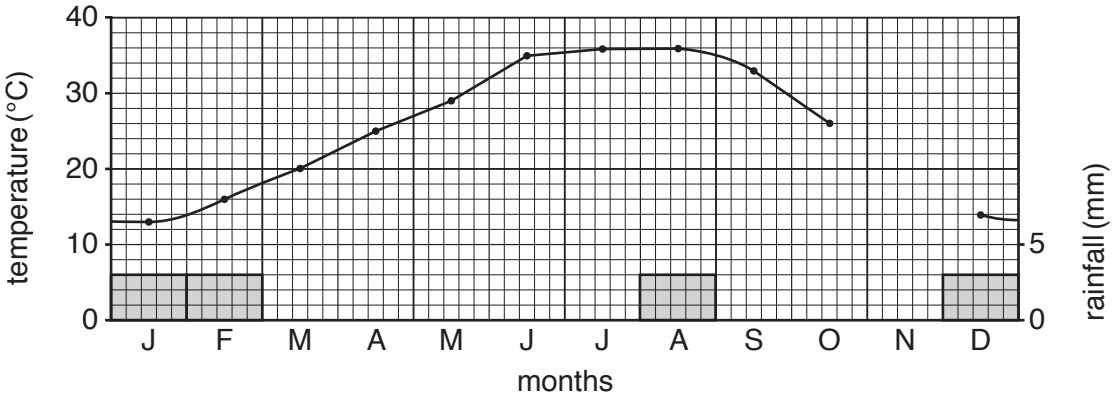

Fig. 7

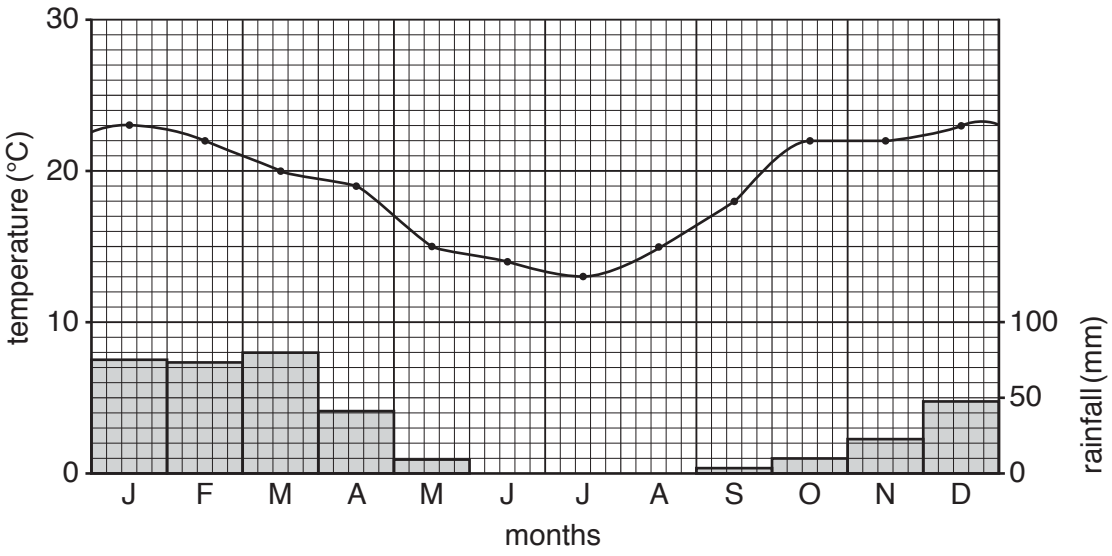

Fig. 8

(a) The place shown on Fig. 7 has 5 mm of rainfall and a temperature of 19 °C in November. **Complete Fig. 7** by adding this information. [2]

(b) Calculate the annual range of temperature at the place shown on Fig. 7.

.....[1]

(c) Which **one** of the two places is in the southern hemisphere?

	Tick (✓)
Place shown in Fig. 7	
Place shown in Fig. 8	

Explain your choice.

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.....[1]

(d) Describe the difference in summer temperatures between the two places.

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.....[1]

(e) Explain why hot deserts, like the places shown in Figs. 7 and 8, have very dry climates.

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.....[3]

[Total: 8 marks]

[Turn over

6 Photographs B and C (Insert) show places where renewable energy sources have been developed.

(a) Identify the renewable energy source in each photograph.

Photograph B .....

Photograph C ..... [2]

(b) Using evidence from the photographs, suggest why some local people might be **for** these developments and other local people might be **against** them.

Suggest why local people might be **for** the developments.

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Suggest why local people might be **against** the developments.

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[Total: 8 marks]

Additional Pages

If you use the following lined pages to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

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