



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination 2021

Geography

Part One and Answerbook

Higher Level

Friday 11 June Morning 9:30 – 12:20

320 marks

Examination Number

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Day and Month of Birth

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For example, 3rd February
is entered as 0302

Centre Stamp

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The 2021 examination papers were adjusted to compensate for disruptions to learning due to COVID-19. This examination paper does not necessarily reflect the same structure and format as the examination papers of past or subsequent years.

Instructions

Write your Examination Number and your Day and Month of Birth in the boxes on the front cover.

Write your answers to all parts of the examination into this answerbook. This answerbook will be scanned and your work will be presented to an examiner on screen. Anything that you write outside of the answer areas may not be seen by the examiner.

Write your answers in blue or black pen. You may use pencil for sketches, graphs and diagrams only.

There are two parts to this examination. Questions for **PART TWO** are supplied separately but your answers must be written in this answerbook.

PART ONE	Short-Answer Questions	80 marks
	Attempt any TEN questions.	
	All questions carry equal marks.	

PART TWO	Structured and Essay Questions	240 marks
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You must attempt **THREE** questions. You are not allowed to choose all three questions from the same section. You may choose two questions from the same section if you wish.

- Section 1 – **Patterns and Processes in the Physical Environment** (Questions 1-3)
- Section 2 – **Regional Geography** (Questions 4-6)
- Section 3 – **Electives** (Questions 7-12)
- Section 4 – **Options** (Questions 13-24)

All questions carry equal marks.

PART ONE – SHORT-ANSWER QUESTIONS – 80 MARKS

Attempt any **TEN** questions.

All questions carry equal marks.

THESE QUESTIONS ARE TO BE ANSWERED IN THE SPACES PROVIDED

1. Landscape Identification

Examine the 1:50 000 Ordnance Survey map and legend accompanying this paper.

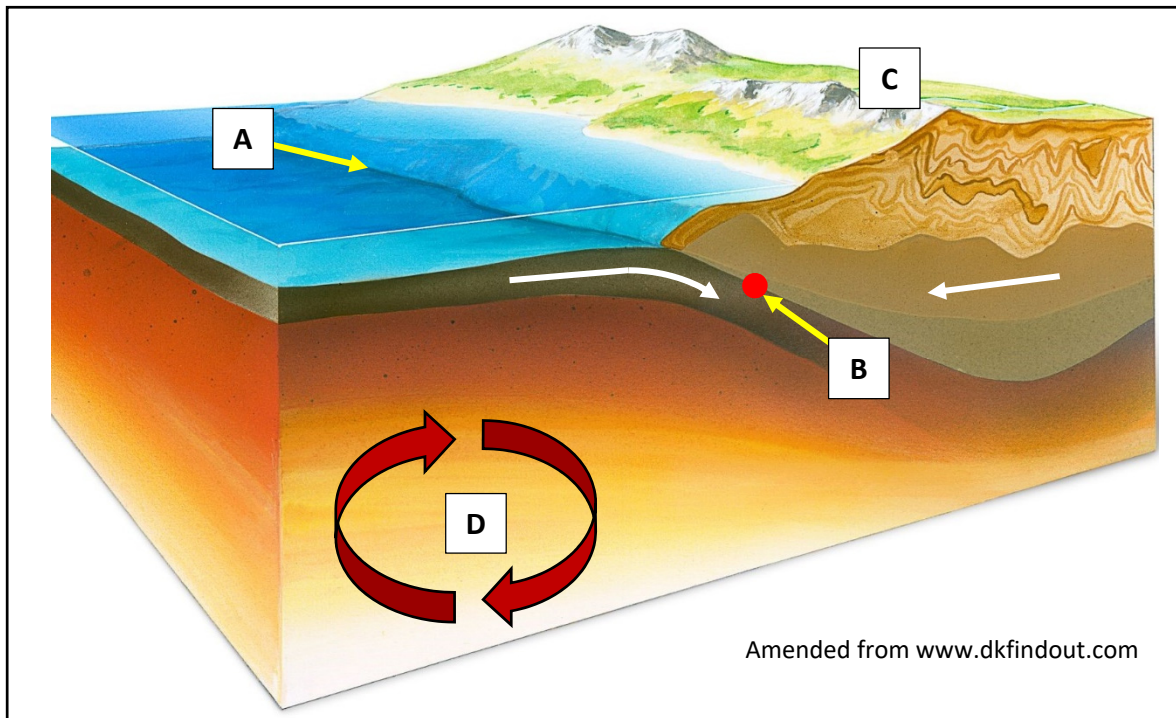
In the table below, match each of the following landscape features with the grid reference that best matches its location on the Ordnance Survey map:

- Oxbow lake formation
- V-shaped valley
- Levees
- River confluence.

Grid Reference	Feature
G 30 08	
M 29 98	
G 26 07	
M 28 99	

[8m]

2. Plate Tectonics



Examine the diagram above and answer each of the following questions.

- (i) Match each of the letters **A**, **B**, **C** and **D** with the term that best matches it in the table below.

Term	Letter
Convection currents	
Ocean trench	
Fold mountains	
Focus of an earthquake	

- (ii) Name **one** example of a mountain range formed by folding found outside of Ireland.

- (iii) Name the type of plate boundary illustrated in the diagram above.

[8m]

3. The Physical Environment



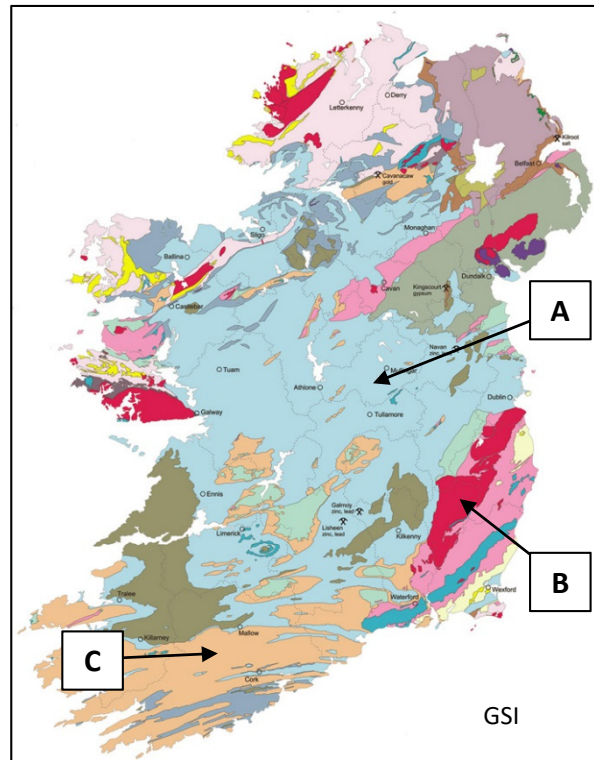
Examine the photographs above and answer each of the following questions.

- (i) Match each of the photographs **A**, **B**, **C** and **D** with the feature that best matches it in the table below.
- (ii) Indicate, by ticking the correct box, whether each of the features in the table below is most associated with the processes of erosion, deposition or weathering.

Q.3 (i)	Feature	Q.3 (ii)		
Letter		Erosion (✓)	Deposition (✓)	Weathering (✓)
	Striations			
	Scree slope			
	Moraines			
	Limestone pavement			

[8m]

4. Rocks



Examine the map above and answer each of the following questions.

- (i) Match each of the locations **A**, **B** and **C** on the map above with the type of rock most associated with this location in the table below.
- (ii) Indicate, by ticking the correct box, whether each of the types of rock named in the table below is an example of an igneous, sedimentary or metamorphic rock.

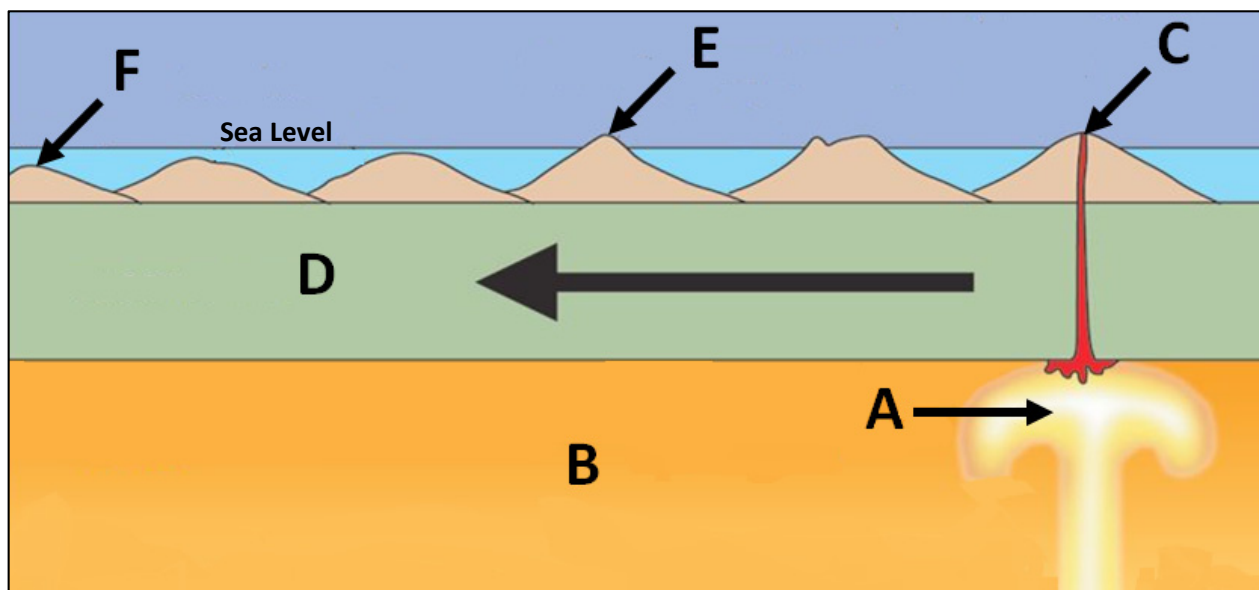
Q.4 (i)		Q.4 (ii)		
Location	Example of Rock	Igneous (✓)	Sedimentary (✓)	Metamorphic (✓)
	Sandstone			
	Limestone			
	Granite			

- (iii) Name the sedimentary rock that each of the following existed as before they were changed by heat and/or pressure.

Marble:
Quartzite:

[8m]

5. Plate Tectonics - Hot Spot Activity



Amended from <https://img.haikudeck.com>

Examine the diagram above which illustrates the development of a volcanic hot spot and answer each of the following questions.

- (i) Match each of the letters **A, B, C, D, E** and **F** on the diagram with the description in the table below that best matches it.

Description	Letter
Oceanic crust	
Extinct volcano visible above water's surface	
Active volcano	
Asthenosphere	
Oldest extinct volcano	
Plume of magma	

- (ii) Name **one** example of a volcanic hot spot that you have studied.

[8m]

6. Concept of a Region

- (i) Complete the table below by matching each of the examples of regions in the list, with the type of region most associated with it in the table.

Examples of Regions:

Munster Ridge and Valley region

Basque Country

Cool Temperate Oceanic region

Milan

Mezzogiorno

Sligo-Leitrim Constituency

Type of Region	Example of Region
Climatic region	
Urban region	
Peripheral region	
Administrative region in Ireland	
Geomorphological region	
Cultural region	

- (ii) Indicate whether each of the following statements is true or false by ticking (✓) the correct box.

- (a) Core regions experience net emigration.

True ☐

False ☐

- (b) High unemployment and abandoned factories are associated with regions of industrial decline.

True ☐

False ☐

[8m]

7. Map Skills

Examine the 1:50 000 Ordnance Survey map and legend accompanying this paper, and answer each of the following questions.

- (i) What is the height, in metres, at the spot height at G 314 083?

- (ii) Measure the length, in kilometres, of the N26 from where it enters the map at G 254 090 to where it meets the R318 at G 268 042.

- (iii) Give a six-figure grid reference for the railway station.

- (iv) Calculate the approximate area of the map extract, in square kilometres, to the west of the railway line.

[8m]

8. Aerial Photograph and Ordnance Survey Map

Examine the aerial photograph of Foxford and the 1:50 000 Ordnance Survey map and legend accompanying this paper and answer each of the following questions.

- (i) Name the road that enters the aerial photograph in the left foreground.

- (ii) Give a six-figure grid reference for the bridge that is located in the centre middleground of the aerial photograph.

- (iii) In what direction was the camera pointed when the aerial photograph was taken?

- (iv) Indicate whether the following statement is true or false by ticking (✓) the correct box.

There is a church in the shape of a cross in the left foreground.

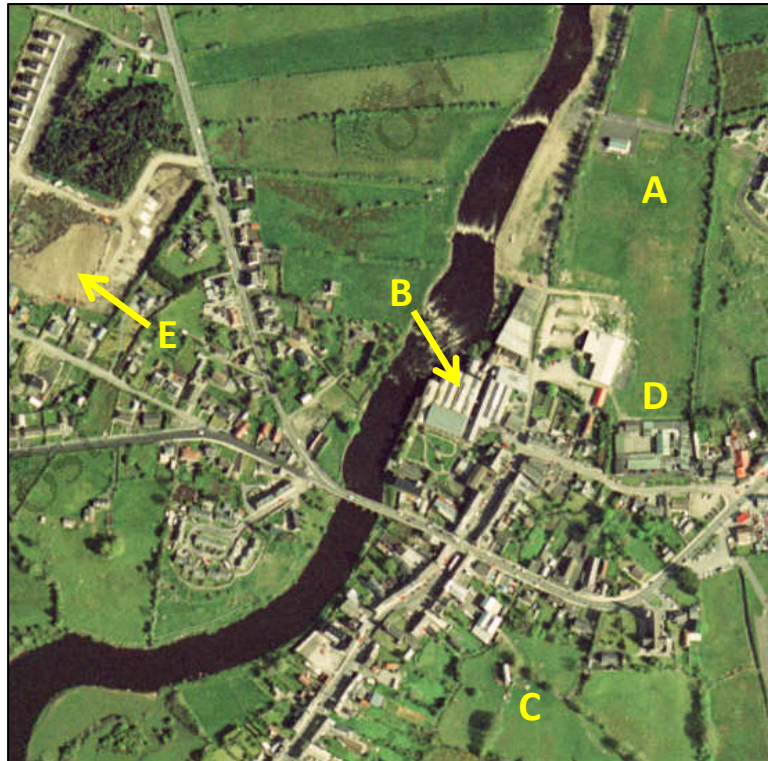
True ☐

False ☐

[8m]

9. Aerial Photographs

Examine the oblique aerial photograph of Foxford accompanying this paper **and** the vertical aerial photograph of Foxford below. The aerial photograph accompanying this paper was taken 14 years after the vertical aerial photograph below.



www.geohive.ie

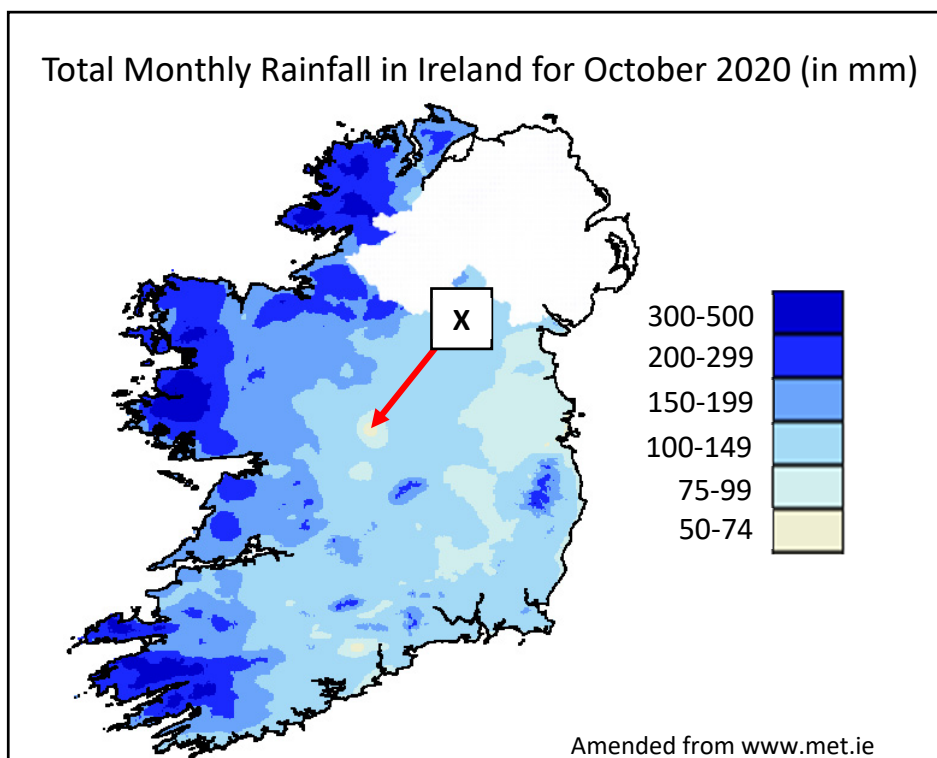
Find each of the locations **A**, **B**, **C**, **D** and **E** on the aerial photograph accompanying this paper.

Indicate which of the land-use changes in the table below are most associated with each of the locations **A**, **B**, **C**, **D** and **E**. One has been completed for you.

Change in Land-use	Letter
From green space to wasteland	
From green space to recreation	
From open space to residential	
From industrial to residential	B
From agriculture to relief road	

[8m]

10. Weather Statistics



Examine the weather map above showing the total monthly rainfall in Ireland for October 2020 and answer each of the following questions.

- (i) How much rain (in mm) fell at the area marked X on the map above?

- (ii) Indicate whether the following statements are true or false by ticking (✓) the correct box.

- (a) In October 2020 more rain fell on the east coast of Ireland than fell on the west coast.

True ☐

False ☐

- (b) In October 2020 relief rain over mountains influenced where most rain fell.

True ☐

False ☐

- (iii) What is the name given to the lines on a weather map that join places of equal rainfall?

- (iv) Is rainfall more likely during an anticyclone or a depression?

[8m]

11. Statistical Interpretation

Production of Selected Crops in Ireland (in thousand tonnes), 2014-2019

Type of crop	2014	2015	2016	2017	2018	2019
Wheat	717	697	648	682	507	636
Oats	150	198	183	205	122	203
Barley	1,731	1,739	1,480	1,506	1,225	1,558
Beans and peas	20	69	71	90	23	44
Potatoes	383	360	352	412	273	382

Amended from CSO

Examine the table above showing information on the production of selected crops in Ireland between 2014 and 2019 and answer each of the following questions.

- (i) How many thousand tonnes of potatoes were produced in Ireland in 2018?

- (ii) In which year listed in the table was the production of oats the highest?

- (iii) Calculate the decrease in production of barley (in thousand tonnes) between 2014 and 2019.

- (iv) Indicate whether the following statement is true or false by ticking (✓) the correct box.

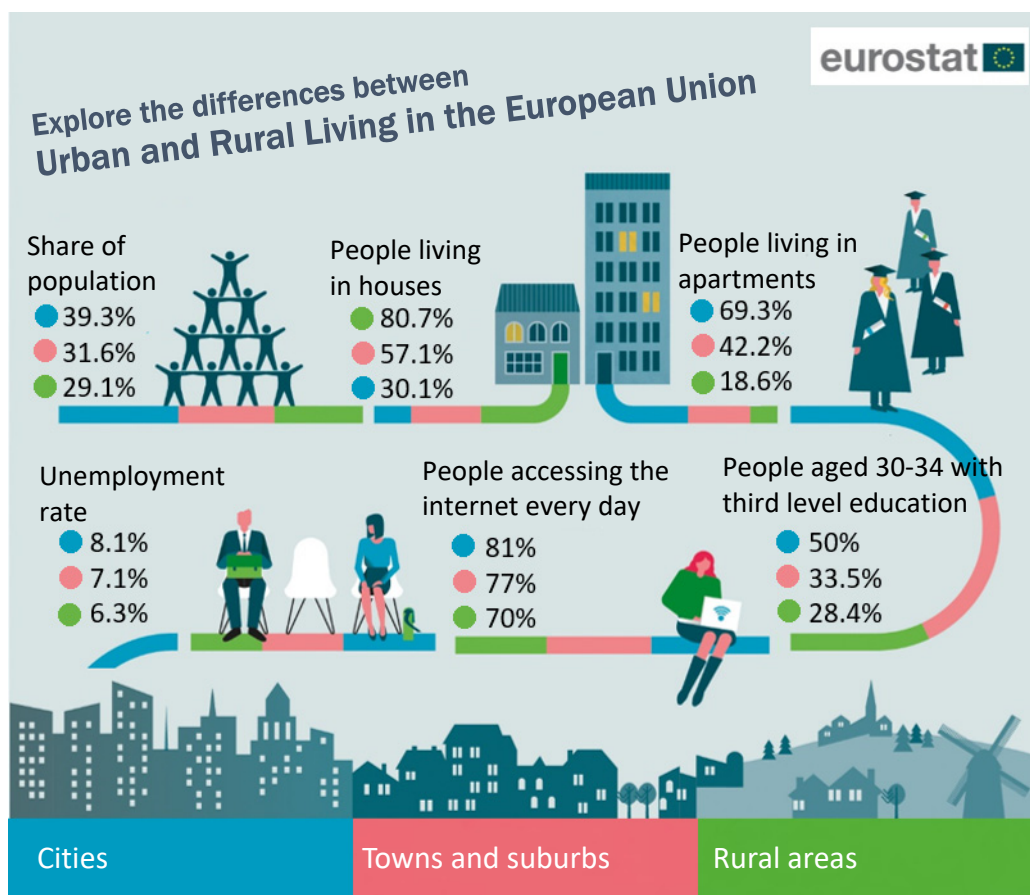
Pastoral farming involves growing crops, such as wheat and barley.

True ☐

False ☐

[8m]

12. Graphical Interpretation



Examine the infographic above on the differences between urban and rural living in the European Union and answer each of the following questions.

- (i) According to the infographic, which of the following has the highest percentage share of population in the EU? Tick (✓) the correct box.

Cities ☐ Towns and suburbs ☐ Rural areas ☐

- (ii) What percentage of the EU population in rural areas access the internet on a daily basis?

- (iii) What percentage of the EU population living in towns and suburbs are unemployed?

- (iv) Briefly explain **one** reason why more people live in urban areas than live in rural areas.

[8m]

Answerbook for PART TWO

Instructions

Questions for **PART TWO** are supplied separately.

Start each question on a new page. Write the question number in the box at the top of each page.

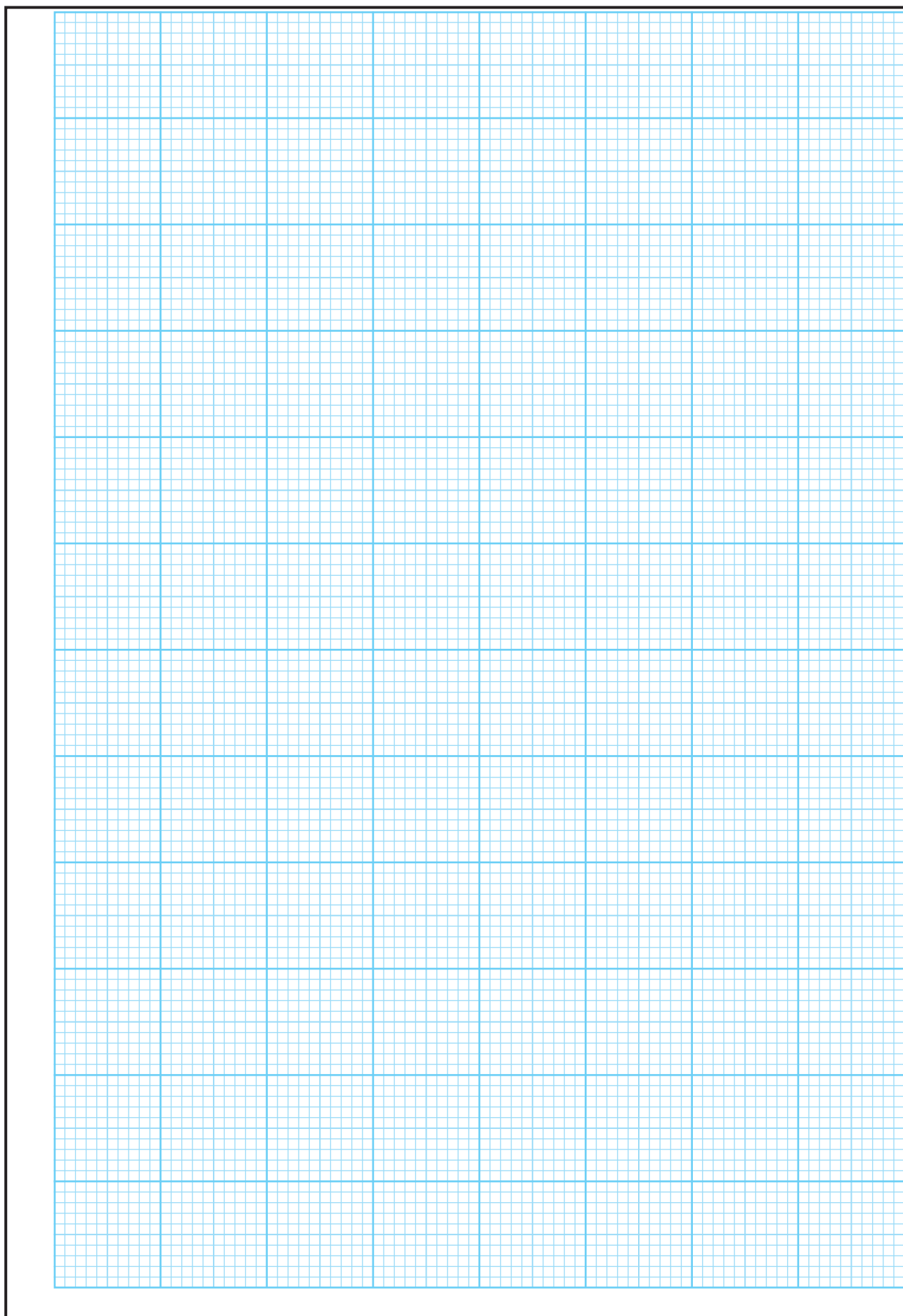
Use the left-hand column to label each part, as shown below.

Part <i>Cuid</i>	Question <i>Ceist</i>
(a)	
(b)(i)	
(b)(ii)	

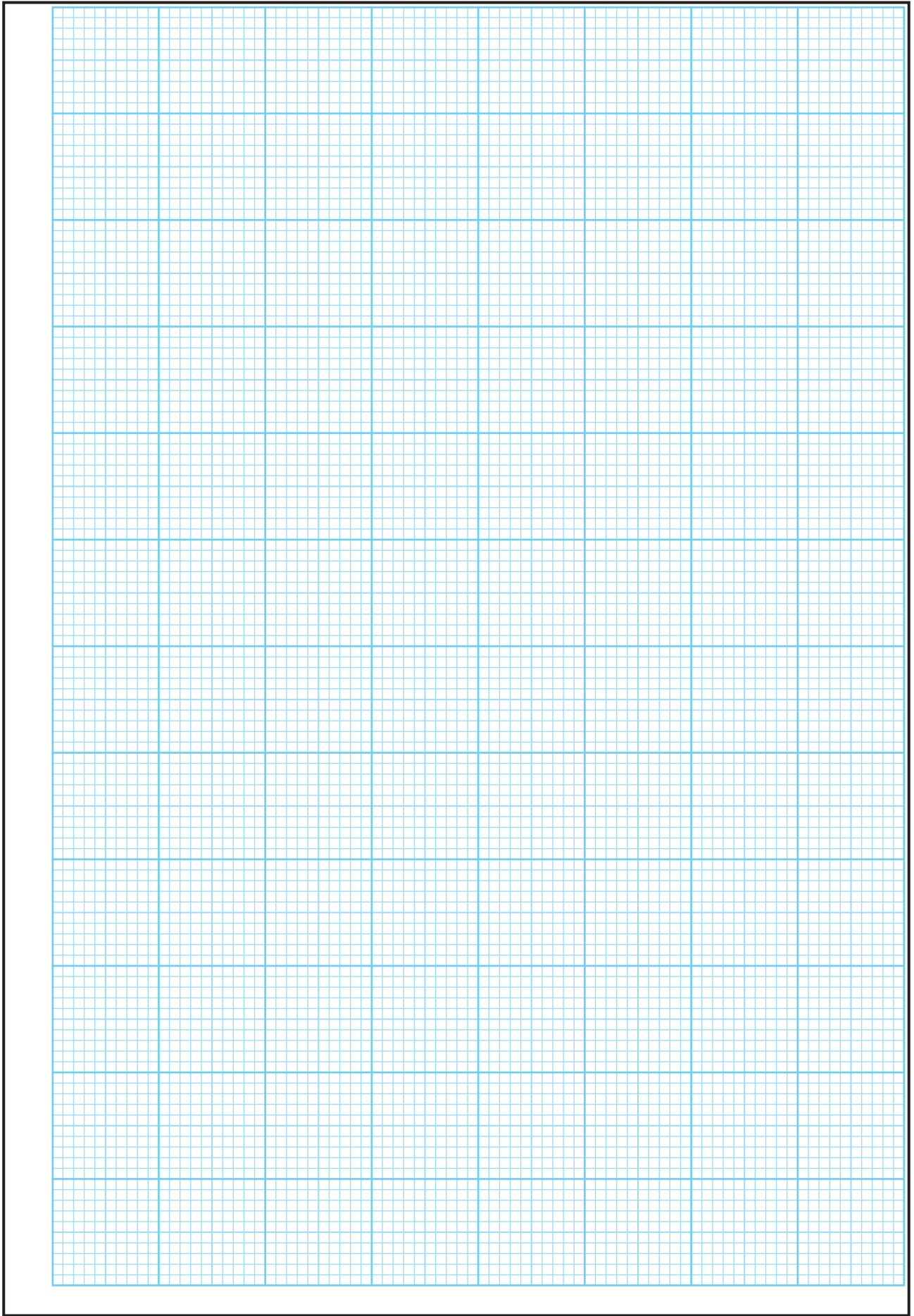
Four pages of graph paper are provided on the next four pages of this answerbook. On pages with graph paper, the box for the question number is at the bottom of the page.

You do not need to use all of the pages in this answerbook. If you run out of space in this answerbook, you may ask the superintendent for more paper or graph paper.

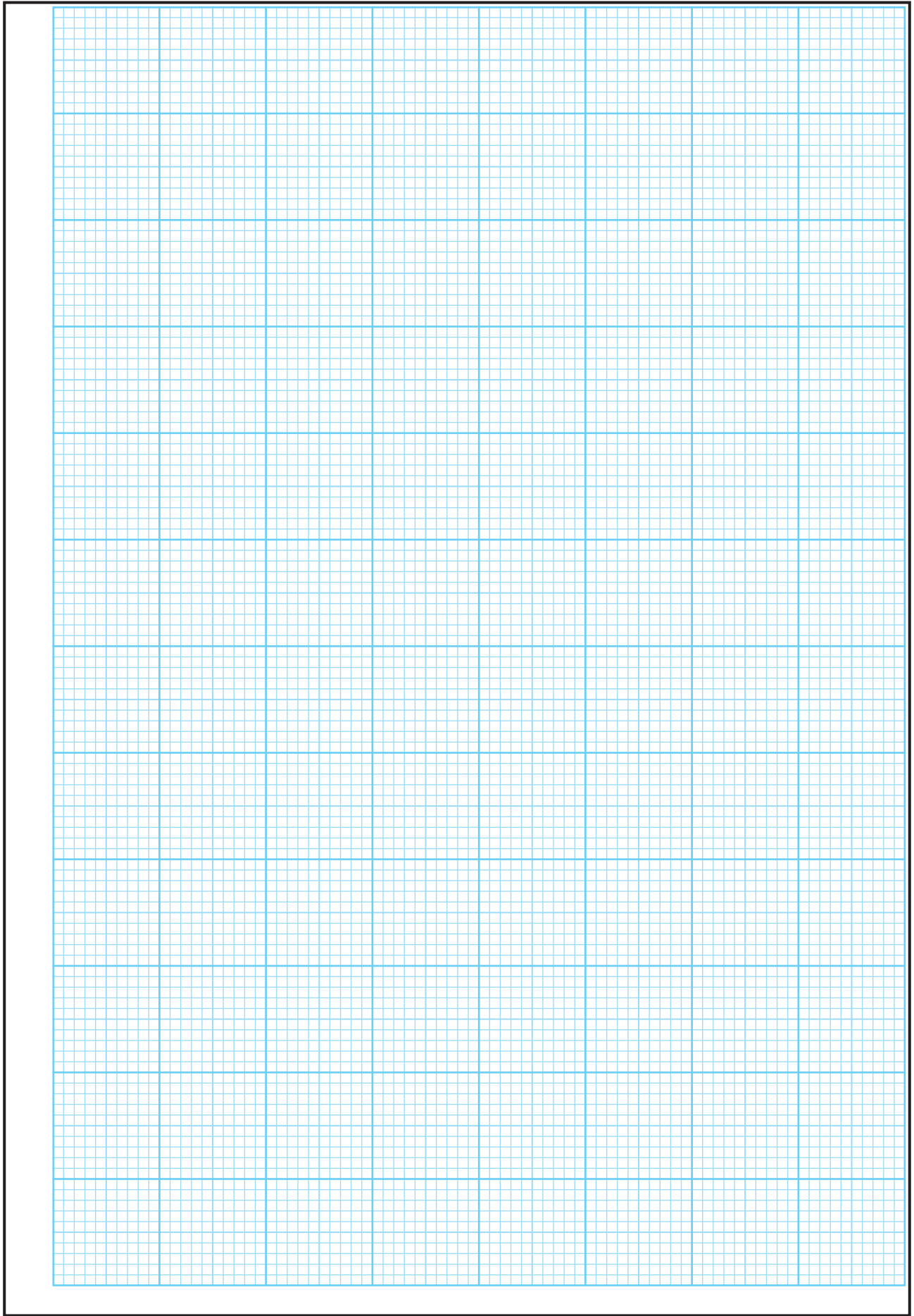
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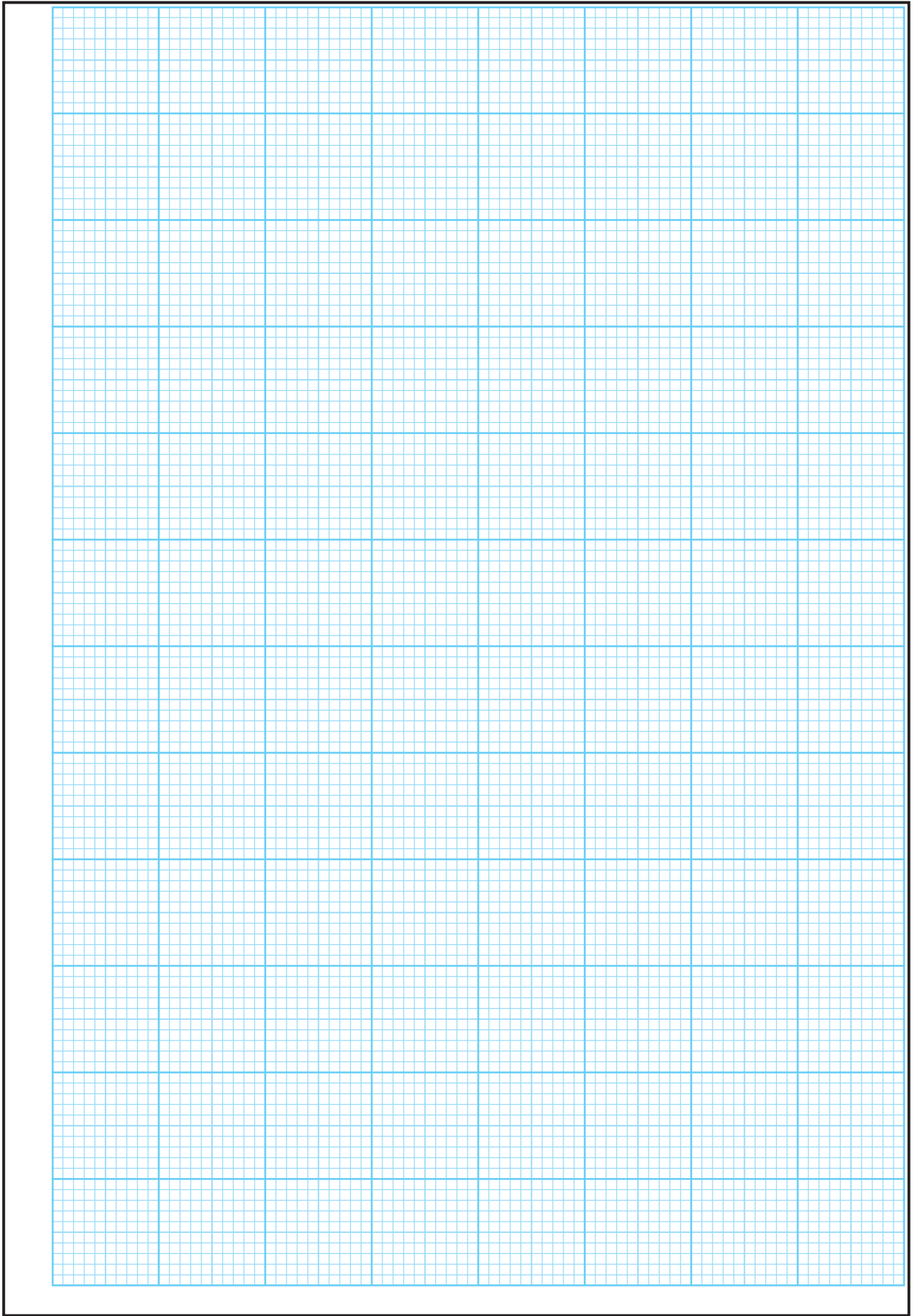
Question



Question



Question



Question

Part

[illegible]

Part

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Leaving Certificate – Higher Level

Geography Part One and Answerbook

Friday 11 June

Morning 9:30 – 12:20